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EXPLORATION OF THE STRESS PHENOMENA WITHIN PUBLIC HEALTH

Parmpreet K. Kalsi

Portfolio submitted in fulfilment of the requirements for the degree of Doctor of

Health Psychology

Department of Psychology, City University, London

December, 2012

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This thesis is dedicated to Karam Kaur Marway and Bhagat Singh Marway

This achievement is in honour of the sacrifices you made for your family.

This thesis is also dedicated to Inderjit Singh Marway and Baldev Kaur Marway...

My dearest parents.

You told me to aim for the stars and embrace the quest for knowledge.

This simply would not have been possible without your love and support.

Section A: Preface

Section A: Preface

This Doctorate in Health Psychology portfolio was completed whilst working as a Trainee Health Psychologist within the NHS. The portfolio documents evidence and the process of attaining competence in research, teaching and training, consultancy, promoting health psychology services and practices, directing behaviour change interventions and contributing to the evolution of legal, ethical and professional standards in health and applied psychology.

The majority of the work has been carried out within public health commissioning and health improvement services such as smoking cessation, placing a strong emphasis on stress management service provision and design. As a Trainee Health Psychologist I had the opportunity to work within public health commissioning, conducting research and service evaluations to inform service design and also as a provider of the service.

Public health initiatives have received immense funding over the years in the quest to reduce the prevalence of preventable illnesses, such as cardiovascular disease, type 2 diabetes, and cancer. Hence the emergence of smoking cessations programmes, healthy eating interventions, and physical activity programmes, to name but a few. For example smoking is the single cause for most preventable illnesses and premature death in the UK, thus the Department of Health (DoH) and the National Health Service (NHS) has placed great focus on smoking cessation services and campaigns (Smoking Kills, A White Paper on Tobacco, 1998).

However studies have highlighted that stress is often a precursor for maladaptive health behaviours, and a key factor in behavioural relapse (Ng & Jeffery, 2003; Heslop, Smith, Carroll, Macleod, Hyland, & Hart, 2001; Metcalf, Smith, & Wadsworth, 2003). Hence stress plays an instrumental role in health related behaviour, via this indirect pathway. Despite this, the direct effects of stress also impacts upon health (Selye, 1956), whether it be though the increased demands on the cardiovascular system (Tuomisto, Jousilahti, Sundvall, Pajunen, & Salomaa, 2006), altered immune functioning (Segerstrom & Miller, 2004; Goldman-Mellor, Brydon, & Steptoe, 2010; Miller, Chen, & Parker, 2011), or increasing ones vulnerability to psychological illnesses such as depression (Brown & Harris, 1989; Post, 1992; Kendler, Karkowski, & Prescott, 1999; Paykel, 2003; Hammen, 2005; Stroud, Davila, & Moyer, 2008). Therefore it is no

surprise that stress features heavily in patient-healthcare professional (HCP) consultations.

Despite the role of stress in public health, the provision of holistic health improvement services which incorporate stress management is minimal (Ali, 2010). In spite of the government's efforts in tackling health inequalities and reducing the prevalence of preventable illnesses, the need to acknowledge stress and stress management service provision is one of great importance, especially in the quest of promoting wellbeing.

The following sections reflect my development as a researcher and as an applied Health Psychologist.

Section B: Research

The research comprises of two studies which both utilised a qualitative methodology. The aim of study one was to (a) gain insight into participants' experiences of stress and their coping strategies and, (b) explore participants' views on stress and coping, in light of their personal experiences. Six mini-focus groups were conducted with 16 participants who rated themselves to be highly stressed. The participants were divided by age and gender from deprived areas of Essex. The data generated from the mini-focus groups was analysed through a thematic phenomenological analysis.

The results highlighted that perceived stress increased maladaptive health behaviours such as increased smoking (both tobacco and cannabis), consumption of sugary and fatty foods, and increased alcohol consumption. The participants associated stress with changes in psychological, behavioural, and cognitive states. The phenomenological perspective exemplified the battle participants often faced in managing their stress, whilst the segmentation of the participants exemplified differences in coping strategies based on age and gender. However, the analysis highlighted a novel theme, which provided insight into patient-healthcare professional (HCP) consultations regarding stress, and as a result the rationale for study two emerged.

The aim of study two was to (a) gain insight into healthcare professionals' experiences of working with patients reporting stress, (b) explore healthcare professionals'

perceptions of stress management and their narrative accounts concerning stress management advice in their consultations with their patients, (c) explore how the experiences of dealing with reported stress from patients has an impact on healthcare professionals stress levels and their experience of that. Four mini-focus groups and two one-to-one interviews were conducted with general practitioners, community pharmacists, smoking cessation advisors, weight management advisors, and cardiovascular (CVD) rehabilitation advisors. The data generated was also analysed through a thematic phenomenological analysis.

Study two highlighted that patient-reported stress featured heavily in the patient-HCP consultation, regardless of the various HCP groups. Most of the HCPs felt uncertain and ill-equipped in (a) talking about stress, (b) assessing stress levels, (c) making the distinction between depression and stress, (d) and advising patients about stress management.

The findings from study one and two informed recommendations for an integrated stress management service, and the provision of training programmes for HCPs on patient-reported stress. Consequently the design of a holistic stress management service within health improvement services is presented. Alongside a training plan for HCPs, focusing on the areas that would facilitate a supportive and informative stress-discourse between patients and HCPs. The implications of service and training provision are explored, attenuating to the wider contextual issues associated with stress and mental illness (i.e. taboo and stigma), and the need to challenge the negative conations associated with stress and stress management, in order to promote a more open and transparent platform for stress-related discourse.

Section C: Professional Practice

Consultancy

The consultancy case study was within the field of positive psychology. The aims of the consultancy were to (a) complete a service evaluation of the two positive psychology interventions (PACTWIN and WhyTry) aimed at children with learning and behavioural difficulties and their families, (b) devise evidence based recommendations for the two

interventions to inform future commissioning and service provision, and (c) disseminate findings to key stakeholders. The consultancy used a mixed methodological design to explore the effectiveness of the service. Thus quantitative measures were used to assess if changes in behaviour and psychological outcomes (i.e. self-esteem, hope, and aggression) had occurred as a result of the intervention. Whereas the qualitative methodology explored the service users and the facilitators views on the two interventions, through a series of focus groups, which were analysed by thematic analysis.

The results revealed that the service users developed enhanced behavioural and social skills. The family-based intervention (PACTWIN) led to improved parenting skills, greater compliance, and increased confidence. In addition, for the school-based intervention (WhyTry), facilitators noticed increased concentration levels, academic achievement and increased attendance rates in the children. Thus the consultancy highlighted that such interventions provide a medium for preventative mental and physical health; which have the potential to elicit long-lasting beneficial effects on individuals and their families, such as better parent-child interactions and increased self-esteem (Huppert 2004).

However, the evaluation highlighted areas for further development (i.e. evaluation tools and training), thus recommendations were presented to stakeholders, regarding service and training development and evaluation design.

Teaching and Training

The first case study is of the training delivered to healthcare professionals in the NHS on 'Research Methods' during my placement at NHS South West Essex. This case study documents the development of a pilot workshop which later was developed into a series of workshops. Emphasis has been placed on evidence-based practice within the NHS and there has been growing pressure on service managers to demonstrate effectiveness of health interventions and cost effectiveness. Thus the aim of the training programme was to provide an overview for HCPs on qualitative and quantitative research methods and how these could be applied within their practice, raising awareness on pre and post measures, outcome measures, questionnaire design, etc. The evaluations revealed a great appreciation for such training, and HCPs were

motivated and empowered to undertake research. Success of this training programme meant that the training package developed and became more tailored.

The second case study documents my experience of delivering a lecture to MSc students at a university on 'Stress and Health'. The aim of the lecture was to highlight the connection between stress and health, the impact stress poses within public health, and how health psychology can be applied within public health service design. The evaluation feedback highlighted that the students found the lecture interactive and insightful; illustrating how health psychology can be applied with a public health setting.

Optional Units

The first case study describes the dissemination of consultancy outcomes to a multidisciplinary team within a public health commissioning directorate. As a result of the consultancy project, which evaluated two positive psychology intervention several recommendations were generated for service development, marketing, training and most importantly the need for a more sensitive and robust evaluation tool. Consequently, the dissemination of these findings had wider implications for service provision and the service users' experience of the service.

Thus the aims of communicating the outcomes of the consultancy project were to:

1. Prepare and organise dissemination actions
2. Devise an action plan for the recommendations identified
3. Support the team in the action stages

The outcome of this communication was effective as several points were actioned, which led to the development of a new evaluation package tailored for children with learning and behavioural difficulties and their families, and the development of a marketing strategy, which included evaluation summary sheets for the National Parenting Programme (NPP).

The second case study describes a range of activities undertaken to promote how psychological principles, practices, and services can benefit health improvement initiatives such as Heath Trainer (HT) services. For example, the findings from a HT

training evaluation were presented at the International Critical Health Psychology (ICHP) conference in 2009. However, alternative promotional platforms were actively sought and utilised in order to:

- Introduce, describe and explore the Health Trainer (HT) health promotion model and the common evaluation models adopted for this service, and review their efficacy.
- Highlight common downfalls for health promotion evaluation within the NHS.
- Highlight issues with dissemination of past evaluation findings.
- Highlight how health psychology can benefit such health promotion models.

Section D: Systematic Review

In the United Kingdom the number of people with diabetes is rising rapidly. Since 2006 the number of people diagnosed with diabetes in England has increased from 1.9 million to 2.5 million (QOF diabetes prevalence, 2010). Without careful and sustained self-management of the condition, a person with diabetes faces a reduced life expectancy of between six to twenty years (Seshasai et al., 2011) as the burden of illness significantly increases (e.g. diabetes related complications: neuropathy, retinopathy, coronary artery disease). In addition, a considerable proportion of diabetic patients (20-40%) experience emotional problems (van Son, Nyklicek, Pop, & Pouwer, 2011), such as anxiety, depression and stress. Studies have exemplified that distress in diabetic patients is associated with a reduction in quality of life (Egede, 2005), poor diabetes control (Diabetes UK, 2008), such as poor self-care behaviours, and reduced glycaemic control (Lustman & Clouse 2005).

Mindfulness-based interventions (MBIs) have been used extensively for a range of psychological (Klainin-Yobas et al., 2012) and physiological disorders (Merkes, 2010; Niazi & Niazi, 2011). However, a review exploring the efficacy of MBIs for specifically diabetic patients had not yet been conducted.

Thus, a review was conducted. A total of eight studies were selected; four studies had utilised mindfulness-based stress reduction (MBSR), two studies had used acceptance commitment therapy (ACT) and the remainder had used mindfulness meditation (MM). The review highlighted that the various MBIs are effective across a range of measures

for diabetic patients (i.e. reducing HbA1C and stress levels, promoting adaptive coping, and increased diabetes-related acceptance). However, further research is needed in this field to explore the effectiveness of MBIs in diabetes employing more stringent methodologies, such as randomised controlled trials, utilising a range of outcome measures (e.g. both psychological and physiological measures), and have longer follow up periods in order to explore the long-term effects of MBIs for diabetes.

Section B: Research

Declaration

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Abstract

Background: The connection between stress and health is one that has been documented extensively. In recent years, significant investments have been made into health improvement and public health initiatives across the NHS (e.g. preventing cardiovascular disease). However, studies have exemplified that stress is often a barrier for health-related behaviour change (e.g. smoking cessation, physical activity) (Ali, 2010; Heslop et al., 2001; Louis et al., 2009; Kalsi, 2012, 2013; Ng & Jeffery, 2003), an increased levels of stress can impact upon health outcomes. Despite this connection, minimal support is currently offered, in terms of stress management within public health services, failing to address the holistic health needs of patients (Goodrick et al., 2005).

Aims: Two studies were undertaken to (1) explore the lived experience of stress, and (2) to explore healthcare professionals (HCPs) experiences of patient reported stress.

The aims of study 1 were to (a) gain insight into participants' experiences of stress and their coping strategies, and (b) explore participants' views on stress and coping, in light of their personal experiences. The aims of study 2 were to (a) gain insight into HCPs' experiences of working with patients reporting stress, (b) explore HCPs' perceptions of stress management and their narrative accounts concerning stress management advice in their consultations with their patients, and (c) explore how the experiences of dealing with patient reported stress has an impact on HCPs stress levels and their experience of that.

Methodology: A qualitative methodology was employed for both studies due to the explorative nature of the study aims. A combination of mini-focus groups and one-to-one interviews were conducted with individuals who self-reported themselves to be highly stressed, and HCPs (e.g. G.P.s, pharmacists, and health improvement practitioners). A total of sixteen participants took part in the six mini-focus groups conducted. Ten HCPs took part in the four mini-focus and two of the one-to-one interviews. The data generated from both studies was analysed by thematic phenomenological analysis.

Results: Study one exemplified the subjectivity associated with stress. Various stress definitions and coping strategies were used by the participants (e.g. increased smoking, aggressive behaviours, increased acceptance and tolerance). Segmentation highlighted differences between the age and gender groups (i.e. coping styles). Study two revealed that patient-reported stress was a common feature in all the HCPs patient consultations (Goodrick et al., 2005; Verhaak et al., 2005); often eliciting feelings of anxiety and uncertainty as they felt ill-equipped in, (a) talking about stress, (b) assessing stress levels, (c) making the distinction between depression and stress, (d) and advising patients about stress management. Issues surrounding professional remit and management of stress disclosure were identified. Inclusion of various HCP groups exemplified variances in the patient reported stress experiences.

Stress appears to pose a fundamental concern for public health, as it not only influences patients' wellbeing; it also places additional demands on frontline healthcare providers (Goodrick et al., 2005). There is a need for greater stress management services, and the provision of HCP training on patient reported stress.

Recommendations: The author proposes a series of tailored training programmes and presents a holistic model of health improvement, which centres around integrated stress management services.

CHAPTER ONE:

INTRODUCTION TO STRESS & HEALTH

1.0 Introduction

The term 'stress' has become a common feature in 21st century discourse (Pollock, 1988). The definition of stress has varied over the last few hundred years. In the 17th century stress was often used as a term to denote 'hardship, adversity or affliction' (Hinkle, 1977); and that the use of this term has evolved to encapsulate new connotations amongst lay persons and diverse academic perspectives (Kinman & Jones, 2005), thus the concept of 'stress' has become absorbed into the realms of common culture, science (i.e. biology, physics and psychology) and sociology (Bartlett, 1998).

The earliest appreciation for psychological factors having an effect on the heart can be attributed to Celsus (Buell & Elliot, 1979). Celsus claimed that 'fear and anger and any other state of mind may often be apt to excite the pulse'. In William Harvey's (1628) description of the cardiovascular system, the link between the heart and the mind was further reaffirmed; 'for every affection of the mind that is attended with either pain or pleasure, hope or fear, is the cause of an agitation whose influence extends to the heart'.

Theories proposed by Canon (1914) and Hans Selye (1956) further exemplified the link between stress and physical health. By 1960 the term 'stress', as a concept had become firmly rooted in the field of psychology (Haward, 1960). The ongoing concerns related to stress and health provided the impetus for continued and sustained research in this field. There has been increasing focus and interest in the subject, which has

been evidenced by the proliferation of research exploring the connection between stress and health (Pollock, 1988; Aldwin, 2007).

> 'It appears that the notions that 'stress' is inescapably a part of the everyday experience of modern living, and that it can have serious consequences for the individual's health are by now familiar to a public besieged by a multitude of messages to this effect throughout the media – from television, radio, magazines, self-help literature, pharmaceutical advertisements, newspapers, as well as in encounters with their doctors and other members of the medical profession."
>
> (Pollock, 1988: page 381)

1.1 An Example of 21st Stress Research: Occupational Stress

Occupational stress is one area that has received immense attention in recent years (Kinman & Jones, 2005). In 2009/10 an estimated 1.3 million people who had worked in the last 12 months, suffered from ill health, which they thought was work related, in the United Kingdom. Musculoskeletal disorders and stress were the most commonly reported illness types (HSE – Health & Safety Executive, 2010); however mental ill health accounted for a greater number of working days lost (HSE, 2010). Other disorders such as coronary heart disease - CHD, have also been associated with occupational stress, due to the direct and indirect effects of stress (Marmot, Smith, Stansfeld, Patel, North, Head, & White, 1991; Marmot, Siegrist, & Theorell, 2005), which will be discussed in greater depth in this chapter.

An estimated 442,000 individuals in Britain, who worked in 2007/08, believed that they were experiencing work-related stress at a level that was making them ill (HSE, 2009). It was estimated by a Labour Force Survey, that 13.5 million lost working days in Britain

in 2007/08, were accounted by self-reported work-related stress, depression or anxiety (HSE, 2008b). Research has found that individuals are more likely to attenuate to occupational stress (McCormick, 1997), as individuals' lives are extrinsically (i.e. financial dependence – payment of bills, mortgages, etc.) and intrinsically (i.e. social support and self-esteem) connected to their occupations. However, work stress can also affect other domains such as relationships, further increasing stress and the wider social costs (Dewe & Kompier, 2008).

The number of working days lost to self-reported occupational stress, depression or anxiety, add to the mounting monetary costs for businesses and organisations, as a result of lost productivity caused by sickness absence, early retirement, increased staff turnover, and presenteeism (Centre for Mental Health – CMH, 2007). Consequently some organisations are making greater monetary investments in their attempts to promote positive wellbeing in their employees (CIPD, 2010: page 6), and government agencies have published guidelines on promoting positive wellbeing amongst employees (HSE, 2008b, 2009; NICE, 2008b, 2009). In order to ensure that employees who are experiencing stress can be identified early and offered support (i.e. counselling or stress management training). The NICE reports acknowledge the growing risk of work-related illness within a public health framework.

Macro-economic changes have meant that work practices and structures continue to change. This has been evident during times of economic instability. In recent times it appears that employees and employers are consequently being exposed to greater pressures in the workplace, such as increasing workloads, less control, and changing roles. For example, as part of the Mind (2011) campaign called 'Taking Care of Business' a survey of over 2000 employees in England and Wales, revealed that that two thirds of the sample 'felt under pressure due to the financial downturn'.

The evidence presented in this section for occupational stress provides one example for the proliferation of stress research. Other areas examining the physiological (i.e. psychoneuroimmunology – PNI), psychological (i.e. depression) and the behavioural (i.e. cigarette smoking) stress response shall also be presented to the reader. This evidence will further reinforce the impact of stress on health and the economy, and advocate greater focus on stress management interventions.

However, it is vital to explore the various definitions that have been applied to stress. The attempt to define stress has been problematic (Bartlett, 1998; Emulti, Kathawala, & Chawla 1991). Stress research has been labelled as a contentious area, as there is much variance in the assigned definitions of stress (Bartlett, 1998; Briner, 1996; Briner, Harris, & Daniels, 2004; Kinman & Jones, 2005). Jex and colleagues (1992) reviewed 51 articles appearing in six major journals of organizational behaviour, and found that 'stress' was defined in several ways, and in some cases there was no conceptual definition applied. In the following section the definitions of stress shall be discussed.

1.2 Definitions of Stress

Various definitions and models have been applied in the attempt to define stress and its impact on coping behaviours. 'Stimulus-based' definitions have placed emphasis on defining the types of stressors, whereas 'response-based' definitions have attempted to explore the physical, psychological, and behavioural stress response experienced when an individual is stressed. These definitions have stimulated thought and discussion, which led to the introduction of 'interactional- based' definitions of stress; which focus on the interaction of the environment and the individual (Bartlett, 1998: page 7). These definitions will be presented and discussed in the following sections of this chapter.

1.2a Stimulus Definition of Stress

The stimulus definitions identify stress as an aspect of one's environment (i.e. environmental demands – such as occupational stress) which causes strain. This definition has been compared to an engineering perspective, whereby stress can be referred to as a load applied to an object/structure, resulting in a force, known as strain. This perspective acknowledges that this strain can cause damage once the elastic limit is exceeded. This analogy has been applied to humans. Therefore assuming that individuals have a certain tolerance to stress, but will become ill when stress is too great. This definition asserts a link between stress and health, but focuses on identifying stimuli that can elicit stress, as postulated by Symonds (1947) "stress is that which happens to man, not that which happens in him; it is a set of causes, not a set of symptoms". Thus stress is viewed in terms of the demands placed upon the person in respect to the intensity of the stimuli. The two main stimulus definitions which dominant stress literature are the life events approach, and the daily hassles approach. These shall be discussed as follows.

The Life Events Approach

An example of a stimulus based definition is the life-events framework that was proposed by Holmes and Rahe (1967). This framework assumes that particular life events act as stressful stimuli which lead to ill health. The Social Readjustment Rating Scale (SRRS) was consequently developed by Holmes and Rahe. The SRRS consists of 43 items which are deemed as stressful life events (e.g. death of spouse, divorce, marital separation, jail term, etc.), which are rated on a scale of stressfulness from 1-100. Thus the number and type of stressful life events experienced are used to calculate a stress level (i.e. high, moderate, low) that a person has been subjected to over a given period of time.

Despite some studies finding the SRRS scores being related to subsequent occurrences of illness and psychological distress (Gunderson & Rahe, 1974; Paykel, 1974; Dohrenwend & Dohrenwend, 1979), and it being one of the most widely cited measurement instruments in stress literature (Scully, Tosi, & Banning, 2000), this approach has been strongly criticised on its theoretical underpinnings. Delongis and colleagues (1982) identified the lack of representativeness of the sampled events among varying socio-demographic groups. The majority of empirical studies failed to identify a significant correlation between major life events and health outcomes (Rabkin & Struening, 1976; Nesteruk & Garrison, 2005).

In addition, using the life events as a tool to assess stress ignores the role of subjective appraisal, and that there may be varying meanings and levels of significance attached to the event by individuals (Delongis et al., 1982; Blonna, 1996; Lazarus, 1999); assuming that all people respond to the stressful life events in the SRRS in the same way (Nesteruk & Garrison, 2005). Studies have shown that age and gender can play a significant role in moderating the effects of life events on perceived stress levels and negative impact on psychological well-being (Seematter-Bagnoud, Karmaniola, & Santos-Eggimann, 2010).

The SRRS also assumes that any change is deemed as stressful, regardless of whether it is perceived as positive (e.g. marriage, retirement, or pregnancy) or negative (e.g. death of a spouse). Davison and Neale (1994) propose that whether an event is undesirable or not, will determine whether or not they affect one's life. Furthermore, the extent to whether a life event was unexpected or uncontrollable has a certain degree of influence on the effect the given life event may have on one's stress levels. For example, an individual could have been aware of organisational change and redundancy in their workplace, which could potentially mediate the effect of 'being

fired at work'. Most importantly critics of the life-events approach argue that many of the events listed in the SRRS are likely to occur very rarely in one's life, and that this approach fails to account for the daily stresses or alternatively 'common annoyances' (Cason, 1930), that individuals are exposed to through their lives, which may have a significant impact on stress. Lastly, the list of life events is incomplete, as it does not include or account for other major life events, such as 'death of a child', 'natural' or 'man-made' disasters (Lazarus, 1999).

The Daily Hassles Approach

Alternative stimulus definitions have emerged over the last few decades. Kanner et al., (1981) proposed 'daily hassles' as an alternative tool to assess the impact of everyday minor stressors, which are deemed as 'irritating, frustrating demands which occur as a result of everyday transactions' (Holm & Holroyd, 1992: page 465). Examples of daily hassles could be losing items, being stuck in traffic jams and family concerns (Bartlett, 1998). Kanner and colleagues (1981) found a significant association between a broad range of daily hassles and psychological symptomatology, over a period of nine months.

Delongis and colleagues (1982) proposed that daily hassles compared to life event scores could be a better predictor of health related outcomes in the stress and health paradigm, as the 'endorsement of a hassle item is a more immediate indication of the person's perception and appraisal and the personal distress and disruption connected with them' (page 121). In contrast, life events can be considered as being distal, failing to describe the ongoing pressures they create and the coping processes they require; affecting the impact they have on outcome measures. Consequently the impact of hassles is expected to exemplify a more direct and significant effect on health. In fact Delongis and colleagues found that hassles had a significant effect on health compared

to life events. Regression analysis indicated that hassles frequency accounted for a significant proportion of the variance in health, and life events failed to add to this. However hassles added significantly to the relationship of life events and somatic illness. Chamberlain and Zika (1990) also found daily hassles, rather than major life events to be more strongly related to physical and psychological health in adults.

Recent studies have extended the focus of daily hassles to other health related behaviours such as binge eating. Crowther et al., (2001) conducted a study to explore if the frequent and chronic nature of daily hassles may predict the occurrence of binge episodes. Hawkins and Clement (1984) suggested that daily hassles may precipitate binge episodes in individuals who already engage in binge eating. Crowther and colleagues (2001) found that the binge eating females were significantly more likely to perceive daily hassles as more stressful compared to controls, supporting Hansel and Wittrock (1997) findings. The results also highlighted that on those days characterised by higher levels of stress, women who engaged in binge eating consumed significantly more calories, compared to those days deemed as less stressful.

The daily hassles approach has however also received criticism. Similar to the life events approach, the daily hassles approach fails to account for the significance that individuals attach to the hassle items. Bartlett (1998: page 59) states 'the salience of particular hassles is determined by 'person factors', a major one of which is the personal agenda the person brings with them to an encounter'. Many of the items used in the stimulus based approaches (i.e. life events and daily hassles) tend to be arbitrary and vague. For instance one of the daily hassle items, 'health of a family member' may have a range of stressful impacts on different people due to the length and quality of relationship, and whether the illness was expected or unexpected, and the illness severity (Marks Murray, Evans, Willig, Woodall, & Sykes, 2005). The distinction

between some of the items are vague and fail to acknowledge the varied interpretations that can be attributed. In addition, both measures rely on retrospective accounts, as individuals are asked to recall certain events within a given timeframe, which is likely to generate unreliable data. This could explain why these scales are prone to poor test-retest outcomes (Raphael, Cloitre, & Dohrenwood, 1991).

Taking the Daily Hassles and Life Events Approach Forward

Despite the criticisms of the daily hassles and life events approaches, the respective stress scales have exemplified that certain items are related to issues surrounding 'control' and 'change' which seem to be common stressors in the stress field. In fact some of the items in the SRRS seem to represent those concerns which are prevalent in today's economic and political climate. Extending upon the concept of 'centrality' which Gruen and colleagues (1988) applied to daily hassles, it could be suggested that some of the items in both the daily hassles and life events scales, could be relevant depending on their importance and impact that they have on ones' agenda, as well as within the broader domains of economic and political affairs. For example the SRRS includes items such as 'change in working hours or conditions' and 'change in financial state', both of which have been evidenced in recent years as significant stressors (Dewe & Kompier, 2008; Mind, 2010, 2011) in light of the economic recession and job-cuts.

Research shows that individuals are more likely to attenuate to occupational stress, rather than stress in other life domains (McCormick, 1997). This could be due to the fact that other life domains are dependent on work (e.g. payment of mortgages, household bills, etc.), and on average a significant amount of peoples' lives are spent working. In light of the decreased job security caused by the economic recession, occupational stress could be more prevalent due to the unstable job market (Dewe &

Kompier, 2008; Mind, 2010, 2011). Recent statistics have exemplified the significant impact of occupational stress in the 21st century, with an estimated 442,000 individuals in Britain believing that they were experiencing work-related stress at a level that was making them ill (HSE, 2009), highlighting the significance of work stress.

Bailey et al., (1998) claim that financial stress is one of the most influential sources of psycho-social stress as many basic activities of daily life are associated with personal financial resources (i.e. payment for housing, bills, food, etc.). Evidence has shown chronic financial stress can be linked to a range of psychological, behavioural and physiological changes (Bailey et al., 1998) such as changes in work productivity and personal relationships (Williams, Haldeman, & Cramer, 1996). Prevalence of certain stress related physiological illnesses (e.g. ulcers) and psychological disorders (e.g. anxiety, depression) have been reported to be higher during recent economic instability (Weisman, 2002).

In summary, the evidence presented in this section shows that the daily hassles and life events approaches do include constructs (i.e. work-stress, financial concerns) which currently have increased significance, in light of the recent macro-economic changes. However the following section shall propose and explore the utility of employing broader concepts in the study of stress.

Broader Definitions of Stressors

In light of the methodological and conceptual limitations of previous stimulus definitions, some researchers have used broader definitions of stressors such as 'control' or 'demands'. This is further supported by the HSE guide on managing occupational stressors, where demand, control, support, relationship, role, and change management are identified as the major areas for stress to occur within the workplace.

Hence these six criterions are identified as the main areas for occupational stress management strategies/policies.

The broader application of these stress stimulus concepts, provide scope for them to account for some subjectivity and increase generalisabilty. In stress research perceptions of subjective and objective control have become a common feature. The role of perceived control and stress is discussed.

Control

Control beliefs have been shown to play an important role with adjustment and well-being (Bandura, 1997; Lachman & Firth, 2004). One of the psychological models of health decision making; the Theory of Planed Behaviour – TPB (Ajzen, 1985; Ajzen & Madden; 1986, Ajzen, 1988) places importance on the role of perceived behavioural control in predicting intentions and behaviour (Crescioni, Ehrlinger, Alquist, Conlon, Baumeister, Schatschneider, & Dutton, 2011; Junger & Kampen, 2010). Studies have demonstrated that perceptions of personal control are associated with a variety of outcomes, such as better physical and mental health, and reduced mortality rates (Bandura, 1997; Eizenman, Nesselroade, Featherman, & Rowe, 1997; Skinner, 1995).

High levels of personal control have been associated with lower reactivity to stressors in daily life (Hahn, 2000; Neupert, Almeida, & Charles, 2007; Ong, Bergeman, & Bisconti, 2005; Diehl & Hay, 2010). Neupert and colleagues (2007) reported lower levels of perceived control to be related with greater emotional and physical reactivity to stressors, in both the interpersonal and work domain (Steptoe & Willemsen, 2004). In addition, Ong and colleagues showed that the stress-anxiety association was significantly reduced on days of greater perceived control.

These studies reinforce the role of perceived control within the stress domain, in that control acts a buffer on the effect and experience of stress (Diehl & Hay, 2010). The connection between control and stress shall be discussed in following sections within this chapter (e.g. perceived control within the stress and health paradigm).

1.2b The Interactional Model of Stress: An Alternative to Stimulus Definitions of Stress

An alternative approach to the stimulus model of stress is the interactional model of stress. In light of the limitations presented so far for the quest to define stress in psychometric scales, within the stimulus framework; the interactional model offers room to account for the subjectivity associated with stress (Gruen, Folkman, & Lazarus, 1988). However, Bartlett (1998) proposed that an interactional approach applied to stimulus definitions could be more fruitful in understanding and accounting for the variance in how stressors such as daily hassles are perceived. He suggested that the salience of particular stressors (i.e. hassles) is determined by 'person factors' which one brings to an encounter; thus accounting for the variance in the perception and experience of stress.

The Second World War also provided impetus for the theorisation of stress. Individual differences in the vulnerability to stress were acknowledged. There was large variance in the performance of troops under combat stress (Harris, Mackie, & Wilson, 1956). Furthermore, technological advances in the tools used to study the physiological stress response (i.e. measurement of cortisol – stress hormone) led to increased efforts in stress research, exploring the effects it had on performance. It was as a result of this research that the role of individual perception and appraisal of potentially stressful events was identified as a determining factor for the physiological stress response (Rose, 1984; Bartlett, 1998).

In 1966, Lazarus proposed that individual differences in performance under stress were mediated by the appraisal process of the potential stressor and the coping resources an individual has to deal with the perceived stressor. Therefore stress is dependent on the transaction between the person and the environment, which is further mediated by the appraisal of whether the environmental or internal demands tax or exceed the individual's resources.

The Transactional Model of Stress and Coping was introduced (Lazarus, 1966; Lazarus & Folkman, 1984). This model places a strong emphasis on the cognitive appraisal and the meaning individuals attach to potentially stressful events/stimuli. This primary appraisal stage acknowledges and accounts for the variance amongst individuals, with respect to how they consequently perceive certain stimuli, and whether or not the second appraisal stage would be initiated. The model proposes that in the event that a stimulus is appraised as a threat or a challenge in the primary appraisal stage, an assessment or evaluation of resources is conducted in the secondary appraisal stage, which will consequently prompt the selection and employment of either a singular or multiple coping strategies. Stress is therefore experienced if an individual judges a stimulus or event as stressful, and that they feel they are unable to cope with the perceived stressor.

The model introduced the concept of coping within the field of stress, extending the stimulus definitions of stress. The appraisal stages of the model account for the reappraisal of events, thus allowing for altered or learned coping strategies. Therefore this model is less static compared to the stimulus definitions of stress, as it does not assume a linear or fixed response to potential stressors. Stress is a relational concept within the transactional framework, as separate variables associated with the person (e.g. personality, age, gender) and the environment (e.g. new location, accessibility to

resources - social support) are combined into a higher level of cognitive analysis (Bartlett, 1998; Lazarus & Launier, 1978).

Coping

Based on the stress and coping paradigm, it is assumed that stress can be understood if there is a focus on a person's ability to cope with potential stressors (Bartlett, 1998). According to Lazarus and Folkman (1984) coping can be defined as the process of managing external and/or internal demands, which are deemed as 'taxing' or 'exceeding' of the individuals resources.

There are various forms of coping that can be found within the stress and coping literature. They range from engagement and disengagement coping (Perczek, Burke, Carver, Krongrad, & Terris, 2002; Roesch, Adams, & Hines, 2005), problem-focused and emotion-focused coping (Lazarus & Folkman, 1984), control and escape (Latack & Havlovic, 1992), as well as anticipatory/prospective coping. Bartlett (1998) states that the chosen coping strategy is determined by the appraisal of the potential stressor, and that coping efforts result in transformation of the stressful situation either objectively or subjectively, which in turn can initiate subsequent appraisals. Coping is therefore interdependent with the appraisal process (Barlett, 1998).

Lazarus and Folkman, (1984: page 150) described problem-focused coping as strategies that are 'aimed at managing or altering the problem causing the distress', whereas and emotion-focused coping are strategies that 'attempt to regulate the emotional responses to the problem'. Lazarus and colleagues identified various examples for the two coping types. For example, confrontive coping (e.g. standing up and fighting) and planful problem solving have been identified as problem-focused coping strategies. Whereas other researchers have classed these coping strategies as examples of

'engagement' coping, as they involve effortful behaviour or change in thoughts and emotions to reduce the stressor. Upon review, it is evident that there are varying classification systems for coping. This is further reinforced as some of the examples of emotion-focused coping strategies (e.g. distancing psychologically from the situation, escape or avoidance from the stressor, exercising self-control, accepting responsibility for the events that led to the stress, positive reappraisal of the event) could belong to either the 'engagement' or 'disengagement' categories.

Despite the difficulty in defining the various modes of coping, researchers argue that the coping strategies used for stress can reduce or amplify the effects of adverse life events and conditions, not just on short-term functioning and emotional distress, but also long-term, on the development of physical and mental disorder (Skinner, Edge, Altman, & Sherwood, 2003). Studies have found that engagement coping have been associated with a higher quality of life (Ransom, Jacobsen, Schmidt, & Andrykowski, 2005) and reduction in psychological distress (Cohen, 2002; Carver, Pozo, & Harris, 1993; Cordova, Giese-Davis, & Golant, 2003).

Coping and Age

Stress and coping are universal phenomena, which are experienced by individuals regardless of age, gender, and culture. Interactional definitions of stress such as the transactional stress and coping model recognise that there are mediating factors which can affect the stress and coping paradigm. Studies have also shown that cultural factors (Bustamante, Nelson, Henriksen, & Monakes, 2011; Joseph & Kuo, 2009; Kuo, 2011; Utsey Adams, & Bolden, 2000; Utsey, Brown, & Bolden, 2004), gender (Iwasaki, MacKay, & Ristock, 2004) and age (Aldwin, 2007; Sollar & Sollarova, 2009), can affect the coping strategies employed. There is a significant amount of literature exploring the effects of age on coping. This shall be explored in this section.

The transactional model of stress and coping acknowledges that the perception of stressors and the coping strategies used can alter due to past experience, as they can play an influential role in the re-appraisal processes for both stress perception and coping. Consequently coping research has explored the role of age and how this may affect coping, (Diehl, Coyle, & Labouvie-Vief, 1996), as stages of life could influence the exposure to stressors, the development and employment of coping strategies (Zimmer-Gembeck & Skinner, 2011). For example, studies have found that the rate of exposure to daily stressors tends to decline with age (Almeida & Horn, 2004; Stawski, Sliwinski, Almeida, & Smyth, 2008); however this could also be a result of a more advanced coping repertoire and advanced coping skills.

Studies have explored the role of 'control' with respect to age (Aldwin, 1991; Aldwin 2007; Neupert, Almeida, & Charles, 2007; Diehl & Hay, 2010). Evidence has shown that control is a central component in the stress experience; affecting health outcome (Diehl & Hay, 2010). Control can impact the mode of coping (e.g. avoidance, confrontive, prospective), and as control can vary with age, the relationship between age and coping can be examined via the construct of control.

Diehl and Hay (2010) conducted a study with 239 participants, with an age range of 18-89 years, for 30 consecutive days. The results indicated that younger individuals and individuals with a more incoherent self-concept showed higher average negative affect for daily stress. Individuals also reported higher negative affect for those days where they reported less control, and this association was found to be more pronounced among younger adults. This study asserts that age and perceived control are associated with stress perception.

Zimmer-Gembeck and Skinner (2011) reviewed 58 studies and found that there were developmental patterns in coping (e.g. problem-solving, distraction, support-seeking, escape) with respect to age shifts. The review detected two kinds of age trends. There were improvements in the 'deployment of different coping strategies' according to which ones are most effective for specific kinds of stressors; supporting Lazarus and Folkman's concept of appraisal and re-appraisal for coping. There were also 'increases in coping capacities', as seen in support-seeking (i.e. reliance on adults to more self-reliance), and problem-solving (i.e. from instrumental action to planful problem-solving), and distraction (i.e. adding cognitive strategies to behavioural ones). Similarly, McCrea (1982) found that middle-aged and older persons were less inclined to rely on hostile reactions and escapism coping, regardless of the stressors; compared to the younger sample.

The findings support previous hypotheses, whereby age can affect the coping strategies employed; potentially mediating the effects of stress. Consequently researchers have highlighted the efficacy of empowering the young with positive forms of coping. Huppert (2004) advocates the employment of school-based (population-based) psycho-educational interventions, as offer the opportunity to equip children and adolescents with better coping skills, reduced stress, increase self-esteem and hope.

Coping Strategies and Psychological Intervention

Anticipatory or prospective coping strategies suggest that there is scope for psychological intervention, whereby individuals can be equipped with effective coping strategies when exposed to stressors, potentially minimising the impact they may have on the psychological, physical, and behavioural response to stress. Building upon the transactional model of coping and the coping literature, NICE recommend that

'cognitive-behavioural therapy' and therapeutic approaches such as 'stress-inoculation training', should be employed as part of stress management interventions, to challenge maladaptive appraisals and, or maladaptive coping. This has clinical implications for stress management, which shall be explored in following chapters.

1.2c Response Model of Stress

The previous section has briefly highlighted the connection between stress and coping responses. This section aims to explore the varying responses associated with stress (i.e. psychological, physical, and behavioural responses) and how these affect health directly and indirectly.

The idea of a connection between mental and emotional factors and physical health is an age-old question, regarding how the body and mind relate, and how 'humankind's subjective and objective natures' can be integrated (Anderson, 1988). The Biopsychosocial Model proposed by Engel (1977) exemplifies and acknowledges that psychological, social and biological factors interact with one another, to influence both our physical and mental health. This approach builds upon the foundations of 'systems theory' (von Bertalanffy, 1968); which acknowledges reciprocal and dynamic interactions between various levels of the human system from the biochemistry to socio-cultural factors.

Traditional response models of stress focus on the 'response' stimulated by stressors, such as the physiological, psychological consequences and behavioural consequences of stress; rather than the stimulus that prompts the response. There is significant research which has focused on the physiological response. Canon (1914) acknowledged that when exposed to stress the bodily functions become activated and aroused. He proposed that this occurred in order for the body to deal with the 'fight or flight' (F &

F) syndrome, whereby the individual is equipped with physiological resources to either stay and 'fight' the stressor, or 'flee' from it.

Hans Selye (1956) extended this concept and proposed a generalised physiological response to stress, known as the General Adaptation Syndrome (GAS) framework. The GAS model proposes three distinct stages that occur as a response to stress. In the initial 'alarm stage', automatic physiological changes occur so that the individual has physical resources to deal with the stressor, whereas a slower, but longer lasting response occurs in the 'resistance stage', enabling the body to deal with prolonged exposure to stressors.

Selye postulated that excessive and chronic stress could lead to a third and potentially fatal stage in the GAS model, which is known as the stage of 'exhaustion'. The model asserts that the rate of recovery may vary amongst individuals increasing their susceptibility to stress-related illness. This concept has been extended by McEwan and Stellar (1993) to the idea of 'allostatic load', which refers to the 'wear and tear' caused by stress and the rate of physiological recovery, whereby a high allostatic load can increase one's vulnerability to illness when exposed to new stressors.

The GAS model places emphasis on the physiological impact of stress, proposing that stress can lead to 'diseases of adaptation', which include ulcers and cardiovascular disease; caused by the bodily response to stress over a given period of time and frequency. Although the GAS model has received criticism over the years for its assumption that the body reacts to stress in a uniform manner, it has had an influential role in stimulating further thought, research and discussion in the field of stress.

Miller and collegues (2011) review exemplified that individuals exposed to major psychological stressors in early life, display elevated rates of morbidity and mortality from chronic diseases. Miller and colleagues postulate that studies of children raised in poverty or who have been maltreated seem to show heightened vulnerability to vascular disease, autoimmune disorders, and premature mortality. Behavioural and biological mechanisms have been implicated. Consequently the following sections shall explore evidence for the direct and indirect pathways for the stress-health connection, via the physical, behavioural and psychological responses.

1.3 Stress and Health

1.3a The Physiological Stress Response

The biological causal pathways which have been connected in the stress and health paradigm shall be explored in this section (the neuro-endocrine system). Bartlett (1998) states that the biological pathways in which stress affects the body can be divided into three types (e.g. neural, hormonal and psychoneuroimmunology). These shall be reviewed below respectively.

Neural Pathways

The nervous system consists of the brain and the spinal cord which form the central nervous system (CNS); both the CNS and the peripheral nervous system (PNS) play a fundamental role in the control of behaviour.

The peripheral nervous system consists of the somatic nervous system and the autonomic nervous system (ANS). The automatic nervous system serves internal organs and involuntary muscle, and can be separated into the sympathetic and

parasympathetic divisions. The two divisions of the automatic nervous system serve certain functions. The sympathetic division is implicated with the expenditure of energy and bodily arousal, whereas the parasympathetic division is involved with restoring energy and reducing bodily activity (Bartlett, 1998).

Activation of the sympathetic division is one of the biological mechanisms implicated with the physiological stress response, and consequent effects on health (Bartlett, 1998). It has been proposed that the sympathetic division of the autonomic nervous system, is activated when individuals are exposed to stress, as described in both of Canon's 'fight or flight' (F & F) syndrome, and Selye's 'alarm stage' of the General Adaptation Syndrome (GAS) framework, to facilitate the expenditure of energy in order to fight or flee the stressor. Sympathetic activation causes the adrenal medulla to initiate release of catecholamines; epinephrine (adrenaline), and norepinephrine (noradrenaline), which mobilise the body's resources. For example the converting of glycogen to glucose, increasing cardiac output and blood pressure, to pump oxygenated blood and vital nutrients to organs, to ensure that the individual is equipped with physical resources to either stay and 'fight' the stressor, or to 'flee' from the stressor (Cannon, 1914).

There is particular pressure on the cardiac system during this stage of the stress response. Cardiac output is increased by increased heart rate and blood pressure. This ensures that there is an adequate flow of oxygenated haemoglobin to the active body; deflecting the flow of haemoglobin away from the non-essential functions (i.e. digestive system) towards the essential functions (i.e. muscles being used to fight or flee); and increased breathing rates increasing the volume of air inhaled into the lungs, oxygenating the haemoglobin pumped to muscles. The body will undergo a serious of other changes such as pupil dilation, to aid vision; altering the blood clotting processes

by promoting the blood to coagulate, thus reducing the loss of blood in the case of injury.

Repeated occurrences of stress can consequently have an effect on the autonomic nervous system (ANS), and as a result stress can exert a negative impact upon health; by making one either vulnerable to disease development (pathogenesis), or worsen existing health conditions (i.e. coronary heart disease - CHD), increasing allostatic load (McEwan & Stellar, 1993). The repeated cardiovascular activation caused by the neural response to stress could lead to permanent damage to the cardiovascular system (Selye, 1956; Baum, 1994; Glaser, 2007). For example, arteries and veins are prone to damage by chronically elevated blood pressure (Bartlett, 1998).

Neurological studies have in fact evidenced the increased risk of cardiac arrhythmia and sudden death via the centrally driven autonomic nervous system activation. Critchley and colleagues, (2005) postulate that patients with specific neurological (e.g. epilepsy), psychiatric (e.g. schizophrenia) or cardiovascular conditions are at an increased risk (Oppenheimer, Cechetto, & Hachinski, 1990; Oppenheimer, 1994), from stress exposure.

Critchley and colleagues (2005) employed positron emission tomography (PET) to exemplify an association between stress and cardiac arrhythmia (measured by ECG). The study revealed increased activation in the right lateral midbrain and pro-arrhythmic abnormalities (apparent in two independent ECG measures) during induced stress. Hence the researchers postulate that this is a mechanism for stress-induced sudden death, whereby a central automatic drive during stress causes activation in the sympathetic nervous system, resulting in this cardiac arrhythmia. Oppenheimer and

colleagues (1990; 1994) further exemplified this association, through demonstrating pathological ECG changes elicited by stimulation of specific stress-related brain regions.

A Closer Inspection of the Neuropsychology of Stress

The evidence reviewed reinforces the dominant role of the automatic nervous system in the neural response to stress. However closer inspection of the brains neuro-circuitry asserts how top-down processes play a crucial role in the neurological response to stressful stimuli, which can affect the role of the automatic nervous system.

The limbic system projects to the hypothalamus, which governs the automatic nervous system. The limbic system is heavily connected to various parts of the brain such as the prefrontal cortex, which is involved in planning. It also consists of the amygdala (involved in the perception of fear and reward), the hippocampus (involved in the formation of long-term memories), the mammillary body (involved in the formation of memory) and the septal nuclei (provides critical interconnections). The intricate neural connections via the limbic system mean that the hypothalamus is subject to top down processes. Consequently, this asserts the role of psychological processes such as perception and cognition, which can mediate the neurological responses; fundamentally influencing the physiological and behavioural stress response.

Hormonal Pathways

The hormonal pathways involved in the stress-health link have also received a significant amount of review. During the stress response the endocrine system secretes hormones. This response is slower than the nervous system, but more long lasting. Thus this response is pronounced for chronic stressors. The hypothalamus which is also connected to the autonomic nervous system is also involved in the hormonal stress

response via the pituitary gland. Therefore connecting the neural and hormonal pathways, reinforcing the complexity of the neuro-endocrinological response, as well as highlighting how top-down, psychosocial processes could exert an influence upon health (Bartlett, 1998).

The adrenocorticotropic hormone (ACHT) is one of the major hormonal pathways in which stress influences health. ACHT is released from the anterior pituitary when stimulated by the hypothalamus into the blood stream, which then stimulates the adrenal gland to produce a group of hormones called corticosteroids (i.e. glucocorticoids and mineralcorticoids).

Glucocorticoids are responsible for regulating blood sugar levels. Cortisol is one of the most important glucocorticoids, as it produces a rapid release of glucose from the liver, as well as regulating blood pressure and suppressing the non-essential functions such as immune functioning. Whereas mineralcorticoids, such as aldosterone regulate the concentration of sodium, which in turn affects blood pressure. The hormonal response to stress can therefore also increase the risk of cardiovascular disease (Bartlett, 1998), as the hormonal changes elicited by stress can increase the likelihood of hypertension and high levels of cholesterol (Steptoe & Brydon, 2005).

Steptoe and Brydon (2005) suggested several pathways in which the hormonal response to stress could affect cholesterol levels, as outlined as follows. The stress response encourages the body to produce more energy in the form of metabolic fuels (i.e. fatty acids and glucose). These substances require the liver to produce and secrete more LDL, which is the principal carrier of cholesterol in the blood, which in turn triggers greater levels of cholesterol via stress exposure. Steptoe and Brydon suggested that stress could also interfere with lipid clearance, consequently affecting cholesterol

levels. Lastly, stress increases production of several inflammatory processes (i.e. interleukin 6, tumor necrosis factor and C-Reactive protein), which can also increase lipid production. These inflammatory processes play an important role in the pathogenesis of CVD (Tuomisto, Jousilahti, Sundvall, Pajunen, & Salomaa, 2006).

In summary, the hormonal response to stress affects many physiological markers, such as blood sugar levels, immunity, hypertension, and cholesterol. It is apparent that the neural and hormonal pathways are complex, and that many of the processes are interlinked. Steptoe and Brydon (2005) exemplify that cholesterol could be affected by several biological pathways, which in turn could exacerbate the risk of cardiovascular disease development (Tuomisto et al., 2006).

However, it must be acknowledged that the top-down influence of cognitive processes in the perception of stressors, are mediated by the limbic systems and the hypothalamus, which in turn can lead to varied endocrinological response patterns, coping behaviours and varied health outcomes (Steptoe & Brydon, 2009). Thus, stress management could play a pivotal role in disease prevention, as well as for those patients with an increased risk of cardiovascular disease, as it could minimise the physiological stress responses which are implicated in generating vulnerability to these diseases. Furthermore, variation in allostatic load could also mediate the stress and health relationship. This shall be explored via psychoneuroimmunological research in the following section.

Psychoneuroimmunology (PNI)

There is a significant amount of evidence that implicates psychological distress with deregulated immune responses (Segerstrom & Miller, 2004; Goldman-Mellor, Brydon, & Steptoe, 2010; Miller, Chen, & Parker, 2011). Immune functioning is integral to

general wellbeing. The immune system is responsible for partly protecting humans from infection and illness, by identifying foreign bodies or materials. However if the body mistakes itself for an invader autoimmune disorders can form. Hence there has been significant interest in exploring the role of top-down cognitive processes, such as stress on immunity mechanisms (Bartlett, 1998); stimulating psycho-neuroimmunological research.

As mentioned in the previous section, the neuroendocrinological response alters immune functioning. Hormones such as cortisol are released, suppressing the immune system when exposed to stress. Studies have consequently found perceived stress to increase susceptibility to infection, impair antibody responses to vaccination (Kiecolt-Glaser, Glaser, Gravenstein, Malarkey, & Sheridan, 1996; Vedhara, Bennett, & Clark, 2003), slow wound healing (Weinman, Ebrecht, Scott, Walburn, & Dyson, 2008) and promote inflammation (Doering, Moser, Lemankiewicz, Luper, & Khan, 2005; Pedersen, Bovbjerg, & Zachariae, 2009b; Christian, 2011).

For example, Cohen and colleagues (1991) exposed healthy volunteers to respiratory viruses, and monitored their health whilst they were quarantined. The study displayed that the greater level of baseline stress, the greater the occurrence of clinical colds (p <0.02) and respiratory symptoms (p <0.005). These effects were not altered when age, gender, education, weight, allergic status and the number of participants housed together were controlled for. The findings reinforce the role of stress for infectious diseases.

There is a large body of literature exploring the effects of stress on Human Immunodeficiency Virus (HIV) patients. HIV attacks the immune system, and as a result

these individuals are exposed to the risk of developing a serious infection or disease. Hence HIV populations have featured heavily in psychoneuroimmunological research.

Studies have shown that psychological distress has been consistently found to predict HIV symptoms, disease progression, and mortality (Ickovics, Hamburger, & Vlahov, 2001; Ironson, O'Cleirigh, & Fletcher, 2005). For example HIV symptomatology has been found to be significantly increased during periods of psychological distress (Pakenham, Dadds, & Terry, 1995b; van Servellen Sarna, Nyamathi, Padilla, Brecht, & Jablonski, 1998). Antoni and colleagues (2006) evidenced significant increases in viral load for in HIV sufferers under psychological distress. Researchers therefore strongly advocate the importance of treating psychological distress in HIV patients.

Stress has also been implicated in the development of autoimmune disease (Miller, Chen, & Parker, 2011). Numerous animal and human studies demonstrated the effect of various stressors on immune function. Many retrospective studies found that a high proportion of patients reported emotional stress before disease onset (Stojanovich & Marisavljevich, 2008), as a result it has been suggested that the treatment of autoimmune disease should include stress management interventions to prevent the stress-related immune imbalance (Stojanovich & Marisavljevich, 2008).

In summary, the neuroendocrine responses to stress have been implicated in the pathogenesis of cardiovascular disease, autoimmune disorders, and respiratory infections. Neurological evidence has elucidated the connections between the mind and the body, illustrating the role of stress on physical and psychological health. Stress has been implicated in the development of psychosis such as depression, via biological and psychological pathways, which shall be discussed in greater depth below.

1.3b The Psychological Stress Response

Stress has also been recognised as an important contributor to the development and progression of psychopathology. Stress 'vulnerability' (Zubin & Spring, 1977) or 'diathesis-stress' models suggest that a predisposition, or set of factors, in combination with certain kinds of environmental stress, can increase ones susceptibility to experience a disordered state, such as psychosis. These models are similar to the concept of allostatic load, in that certain individuals might be at a higher risk of developing stress-related illnesses. The 'vulnerability' or 'diathesis-stress' models have been applied specifically to psychological illnesses (i.e. schizophrenia, depression and anxiety disorders) within the stress-health paradigm.

For example, evidence suggests that stress exposure affects neurotransmitter systems and brain regions that have been implicated in psychosis (Walker & Diforio, 1997; Corcoran, Walker, Hust, Mittal, Tessner, Kestler, & Malaspina, 2003). In addition, Lewis and Lieberman (2000) suggest that stress, exposure to infections, or traumatic insults during gestation or childhood, may play a role in the pathogenesis of schizophrenia, due to subtle alterations of neurodevelopment. The following section shall focus on the stress-depression and depression-stress connections.

Depression

Depression is one of the most disabling chronic illnesses (Moussavi, Chatterji, Verdes, Tandon, Patel, & Ustun, 2007) as there is a high likelihood that depression will occur repeatedly over a life course (Hammen, 2005; Monroe, Slavich, Torres, & Gotlib, 2007). Moussavi et al., (2007) stipulate that depression produces the greatest decrement in health compared with the chronic diseases, such as angina, arthritis, asthma, and diabetes. The comorbid form of depression has been shown to incrementally worsen

health, compared with depression alone, with any of the chronic diseases alone, as well as with any combination of chronic diseases without depression (Moussavi et al., 2007). These results reinforce the negative impact of depression on health, especially for those depressed individuals with existing illnesses.

Stressful life events are associated with increased risk for the development of depression (Hammen, 2005; Mazure, 1998; Paykel, 2003), and this association has appeared consistently across the various stressors – acute or episodic, chronic, and for both early and recent negative life events (see Liu & Alloy, 2010 review). Lui and Alloy present evidence, which implicates life stress in the first onset of depression (Kendler, Karkowski, & Prescott, 1999), depressive relapse (Swindle, Cronkite, & Moos, 1989), recurrence of depression (Burcusa & Iacono, 2007). However a significant number of studies have found that major life stressors are more strongly associated with the first one or two depressive episodes than with later ones (Brown & Harris, 1989; Post, 1992; Paykel, 2003; Hammen, 2005; Stroud, Davila, & Moyer, 2008), and that chronic difficulties were related to more episodes (Monroe et al., 2007). The reoccurring nature of chronic difficulties has been suggested to predict more depressive episodes, as was evidenced earlier for binge eating episodes (Crowther, Sanftner, Bonifazi, & Shepard, 2001).

Some of these findings can be explained by the two stress-depression models. Firstly 'stress exposure' models imply that exposure to negative or stressful life events precede and increases the risk for depression. This has been evidenced whereby life stress and major life stressors have been associated with the first onset of depression (Brown & Harris, 1989; Post, 1992; Kendler, Karkowski, & Prescott, 1999; Paykel, 2003; Hammen, 2005; Stroud, Davila, & Moyer, 2008). Whereas 'stress generation' models propose that depression precedes and increases the likelihood of negative life events,

through negative appraisal. This is similar to Post's (1992) ' kindling hypothesis', which assumes that repeated experiences of stress and depression, render an individual more sensitised to the effects of stress and progressively susceptible to depression reoccurrence.

The evidence presented highlights that the stress-depression (stress exposure) and depression-stress (stress generation) relationships are complex and dynamic. Liu and Alloy propose that biological (Zubin & Spring, 1977), cognitive (Abramson, Metalsky, & Alloy, 1989; Beck, 1987), and cognitive-developmental (Cole, 1991) factors all play an influential role in how stress could affect depression, and how depression could affect stress perception. For example, negative cognitions could influence stress perception, which could alter the likelihood of depression. However, depression could elicit negative cognitions, which could influence stress perception. In fact, this connection has been found in schizophrenic patients, as they responded with increased negative emotions to everyday stressors, compared to controls; suggesting that stress vulnerability is affected in schizophrenia (Myin-Germeys, van Os, Schwartz, Stone, & Delespaul, 2001), as well as in depression.

Lui and Allow (2010) state that the focus of depression research has shifted towards a greater awareness of the complex and reciprocal relation between stress and depression, whereby depression, or depressogenic vulnerability factors, play a role in generating the very stresses that increase susceptibility for future depression and psychoses; acknowledging the stress generation effect.

Thus, stress can play a pivotal role in the development, maintenance and potential relapse in psychological conditions, such as depression. This is of particular concern for those with depression, and especially for those with the comorbid form of depression,

as they are more likely to have poorer health outcomes (Moussavi et al., 2007), and poorer health behaviours (smoking - Degenhardt & Hall, 2003). Stress management should therefore be targeted towards those individuals with a history of psychosis and depression, as a preventative measure.

1.3c The Behavioural Stress Response

Stress has been linked to poor behavioural health choices (Louis, Chan, & Greenbaum, 2009). Increased levels of stress have been associated with a significant increase in the amount of risky behaviours (i.e. excessive smoking and changes in diet) which individuals' undertook compared to controls (Marmot et al., 1991; Baer, Garmezy, McLaughlin, Pokorny, & Wernick, 1987). Self-regulatory models link stress to unhealthy behaviours, whereby individuals attempt to restore hedonic balance by engaging in unhealthy behaviours (i.e. binge eating on sugary and fatty foods, smoking). Ng and Jeffery (2003: page 638) postulate that 'unhealthy behaviours are rewarding thus stress relieving'. The following sections shall review the role of stress for smoking, diet and exercise, and alcohol consumption, with a stress and coping paradigm.

Smoking

Smoking has been associated with an increased risk of developing cancer, heart disease, cerebrovascular disease, and respiratory diseases (Centres for Disease Control and Prevention). The World Health Organisation estimates that tobacco use causes more than five million deaths per year worldwide, and projections for 2030 suggest that smoking tobacco will cause more than eight million deaths annually (WHO, 2009).

Research suggests a link between smoking behaviour (e.g. initiation, relapse, and the amount smoked) and stress. Crittenden and colleagues (2006) found perceived stress

to be associated with poorer smoking outcomes. Smoking has also been associated with inflated odds for those with mental disorders (Degenhardt & Hall, 2003). Ng and Jeffery (2003) found high levels of stress, in both men and women to be associated with increased cigarette smoking (Heslop, Smith, Carroll, Macleod, Hyland, & Hart, 2001; Metcalf, Smith, & Wadsworth, 2003), and reduced self-efficacy for smoking cessation, as well for smoking abstinence under stress.

Self-efficacy, a social learning theory construct (Bandura, 1977) has been implicated with behaviour change, and has been found to play a pivotal role in smoking relapse and cessation (Guilliver, Hughes, Solomon, & Dey, 1995). Baer and colleagues (1987) reported high self-efficacy to be correlated with a reduction in smoking rates, and low self-efficacy to be a predictor of relapse. Increased levels of perceived stress have been associated with smoking and poorer self-efficacy; suggesting that smoking is used as a coping mechanism for stress (Crittenden, Manfredi, Cho, & Dolecek, 2007). Thus the role of stress in self-efficacy mediation could affect smoking behaviour (Gwaltney, Metrik, Kahler, & Shiffman, 2009), reinforcing the inclusion for stress management interventions to aid smoking cessation (Ali, 2010).

Studies suggest that stress plays an instrumental role in smoking cessation relapse, whereby individuals who have managed to quit smoking for a period of time, initiate smoking behaviours under higher levels of stress (Carey, Kalra, Carey, Halperin, & Richards, 1993). Smokers often report that smoking promotes relaxation and reduces tension (Pomerleau, Adkins, & Pertschuk, 1978), and it is often perceived as a way to manage stress (Shadel & Mermelstein, 1993). Thus when smokers experience the effects of abstinence, such as symptoms of anxiety, depression, restlessness, irritability, and physical symptoms (Hughes, 1992; Pritchard, Robinson, & Guy, 1992; American Psychiatric Association, 1994), they may revert to smoking due to the

maladaptive coping expectancies associated with smoking. Despite this, Shadel and Mermelstein (1993) found that engagement in structured smoking cessation programmes could alter these coping expectancies associated with smoking (i.e. minimising the positive expectancies associated with smoking), exemplifying the role of coping perceptions in the stress experience and the behavioural stress response.

However, the symptoms of smoking withdrawal could amplify and augment stressors (Koval & Pederson, 1999), which could contribute to early relapse (Carey et al., 1993). Thus the cognitive and physiological changes elicited by smoking cessation could mediate stress-related vulnerability to smoking relapse (al'Absi, Amunrud, & Wittmers, 2002).

The literature reviewed in this section reinforces that smoking behaviours and stress are strongly associated. Ali (2010) argues that smoking cessation interventions often fail to offer adequate stress management support. Hence smoking cessation interventions should include stress management interventions (e.g. providing alternative coping mechanisms and increasing perceived behavioural control), to minimise the risk of relapse and promote smoking abstinence.

Diet and Exercise

The benefits of exercise and a balanced diet are well documented (Blair, Paffenbarger, Clark, Cooper, & Gibbons, 1989; Louis, Chan, & Greenbaum, 2009). For example, prospective population studies have evidenced that increased physical activity leads to a reduced risk of coronary heart disease in adults (Berlin & Colditz, 1990). Furthermore, the World Health Organisation (2003) has found poor nutrition to be linked with earlier mortality, retarded development and chronic diseases, such as cancer and heart disease.

Stress has been linked to reduced exercise, and changes in dietary patterns (Weidner, Boughal, Connor, Pieper, & Mendell, 1997; Heslop et al., 2001; Metcalf et al., 2003; Ng & Jeffery, 2003). Studies have shown that some individuals consume less calories (Ogden & Mitandabari, 1997), or over eat when stressed (Ng & Jeffery, 2003). Louis and colleagues (2009, page 474) state that 'stress alters the type of food to which people are attracted, i.e. high-density foods' which are high in sugar and fats; which extends the self-regulatory explanation of stress and unhealthy behaviours.

Payne, Jones and Harris, (2002) explored the effects of occupational stress on exercise and diet. Results implicated occupational stress to be associated with exercise behaviours and on healthy eating patterns (Payne, Jones, & Harris, 2005). Occupational stress appeared to decrease 'perceived control' with respect to exercise, and reduce healthy 'intentions' for eating and exercise. In addition, healthier intentions were less likely to be carried out by those under high occupational stress, thus stress moderated the intention–behaviour relationship for healthy intentions.

Control has been implicated within the stimulus definitions for stress, as previously discussed. For example, the stress-anxiety association was significantly reduced on days of greater perceived control (Ong, Bergeman, & Bisconti, 2005). Payne and colleagues (2005) findings suggests that stress can also alter perceptions of control, highlighting a bidirectional relationship between stress and perceived control.

Based on the 'theory of planned behaviour', 'perceived behavioural control' is deemed to play an influential role in predicting behavioural intentions and behaviours directly. Crescioni et al., (2011) exemplified high self-control as a predictor for positive health behaviours and weight loss. In addition, Junger and Van Kampen (2010) found that people with high self-control engaged in exercise more often than those with less self-

control. However the findings from Payne and colleagues (2002, 2005), suggest that stress can impact 'perceived behavioural control', as well as health related intentions and behaviour.

Alcohol Consumption

Stress has been linked to increased alcohol consumption (Heslop et al., 2001; Metcalf et al., 2003). Cappell and Greeley (1987) suggest that the 'tension reduction theory' could explain patterns of increased alcohol consumption under stress, as alcohol has tension reducing properties. However, some studies have shown that alcohol consumption under stress is strongly dependant on the coping styles employed. For example, men who relied on 'avoidant' forms of 'emotion coping' to stress, or held strong positive expectancies for alcohol's effects were more likely to consume alcohol when stressed (Cooper, Russell, Skinner, Frone, & Mudar, 1992).

In contrast, Steptoe and colleagues (1996) found a decrease in alcohol consumption of 17.5% in students with high social support between exam sessions, while those with low social support showed an average increase of 18.5%. This study supports the concept of social support as a 'buffer' for stress and stress-related behaviours such as alcohol consumption.

Stress therefore can affect a range of behaviours, as evidenced in this section. The behavioural response to stress can potentially affect health outcomes via an indirect route, compared to the direct route of stress on health (e.g. the neuroendocrine response). However the evidence presented has shown that the types of stressors (i.e. major life events or daily hassles), coping-expectancies, and perceived control can play a mediating role in the behavioural responses to stress.

1.3d Joining the Dots – The Stress and Health Connection

In the previous sections, the various biological, psychological, and behavioural responses to stress have been explored. Interactional models such as the transactional model of stress and coping acknowledge that the perception and experience of stress are subjective, due to cognitive appraisals involved in stress perception and the assessment of coping resources.

The neuroendocrine responses have highlighted the neural pathways associated with stress perception (i.e. limbic system and the autonomic nervous system), and the physiological responses which are elicited (i.e. increased cardiac output). These responses to stress can alter physical outcomes such as cholesterol, hypertension, immune functioning, all of which have been associated with the pathogenesis of cardiovascular disease and autoimmune disorders.

The stress responses can also augment health related behaviours (i.e. increased smoking, excessive food and alcohol consumption) all of which have been associated with increased odds of heart disease, cancers and respiratory diseases. Some of these diseases have also been implicated with those diseases associated with the neuroendocrine response.

Consequently the direct and indirect pathways which have been implicated in the stress and health paradigm are of great importance within health psychology, as both the direct and indirect effects of stress can increase the likelihood of ill-health. The following section shall present studies on occupational stress, which assert the role of stress both directly and indirectly on health outcomes.

Occupational Stress and Health Outcomes

In the earlier sections of this chapter, statistics highlighted the prevalence of stress-related disorders associated with the workplace. Studies exploring the effects of occupational stress on health have provided further evidence for the direct and indirect pathways in which stress could influence health.

Studies have associated occupational stress with hypertension (Cobb & Rose, 1973) and increased risk of coronary heart disease – CHD (Lynch, Krause, Kaplan, Tuomilehto, & Salonen, 1997; Kivimaki, Leino-Arjas, & Luukkonem, 2002). Chandola and colleagues (2008) conducted a large scale study consisting of 10,308 London based male and female civil servants aged 35–55 years. The results revealed that chronic work stress was associated with CHD, especially among participants aged less than 50 years. Higher levels of morning cortisol (stress hormone) readings were associated with CHD. Thus Chandola et al., deem occupational stress as an important determinant of CHD among working-age populations, which is mediated through indirect effects on health behaviours (Baer et al., 1987) and direct effects on neuroendocrine stress pathways.

Furthermore, Steptoe and Willemsen (2004) reported work stress as a significant contributor for an increased risk of CHD and hypertension, especially amongst those participants who reported low job control. Both systolic and diastolic blood pressure readings were greater in participants reporting low job control (means 125.7/81.5 versus 122.4/78.6 mmHg, $p < 0.05$), regardless of gender, employment grade, body mass index - BMI, age, smoking status, and physical activity levels, reinforcing the direct effects of the neuroendocrine pathway on health outcomes. This study emphasises the role of 'control' within the stress and health relationship, whereby job control plays an important role in modulating the risk of cardiovascular disease.

A meta-analysis conducted by Faragher, Cass, and Cooper, (2005), further exemplified this association, and highlighted the need for organisations to develop and adopt stress management policies. The findings reviewed in this section support the HSE and NICE (2008b; 2009) guidelines on stress management for occupational stress.

1.4 Stress and Health – A Public Health Concern

Despite the focus on occupational stress, this chapter has shown that stress is a very subjective term. Stimulus definitions for stress have been useful in permitting further research in the stress field, however they have shown that the there is still no consensus on stress measures or definitions. In light of the physiological, behavioural and psychological responses to stress, it could be argued that focus from occupational stress, should shift to a more global focus, as stress is not limited to within the workplace, nor are the responses to stress.

Stress-related behaviours (i.e. smoking, food and alcohol consumption) and diseases which have been linked to the direct and indirect pathways of stress (i.e. CVD, cancers, and depression); are all central to public health agendas. These behaviours and diseases are prevalent throughout society, and cost the National Health Service significant amounts of money to treat, manage, and prevent. As postulated by Ali (2010), efforts to aid smoking cessation can and should not ignore the role of stress within smoking behaviours; as perceived stress is associated with poorer smoking behaviours (Crittenden, Manfredi, Cho, & Dolecek, 2007). The transactional model of stress and coping provides a framework for practitioners to challenge maladaptive stress and coping appraisals, which in turn could mediate the role of stress and its effects on health.

Anderson (1988) states that to accept the idea of stress as an important aspect of healthcare is to embrace a holistic concept of healthcare, rather than one which is dualistic; acknowledging the indirect and direct effects of stress, and the increased risk of pathogenesis associated with increased levels of stress.

Despite the supporting evidence highlighting the clinical implications of stress, the issues surrounding the conceptual and theoretical definition of stress cannot be ignored. The final sections of this chapter shall present an alternative approach for exploring the perception and experience of stress, as well as presenting the aim for study 1.

1.5 A Critical Review of the Stress Theories

Upon review of the theoretical models of stress (i.e. stimulus, response, and interactional models) the difficulty in defining stress is exemplified (Bartlett, 1998). However, the various models and definitions have allowed the reader to explore the conceptual issues surrounding stress and range of areas that appear to be affected by stress, such as behaviour (i.e. maladaptive health patterns) and health (i.e. reduced immunity).

Interactional models of stress (Lazarus, 1966) have highlighted the subjectivity associated with stress (Gruen et al., 1988), as well as accounting for the variance amongst stressors and coping styles (Lazarus & Folkman, 1984). Despite the criticisms of stimulus models (i.e. classification of stressors), such models have allowed stress research to flourish, stimulating debate and providing further impetus to question the conceptual features of stress, and the methodological issues associated with the

measurement of this term (Bartlett, 1998). Initial attempts to measure stress led to various scales being developed, enabling researchers to explore the effect of psychological, pharmaceutical and behavioural interventions upon quantifiable and measurable stress items.

Response models (Selye, 1956, 1976) have highlighted the connection between stress and behavioural, psychological, and physiological outcomes. Technological advances have enabled researchers to explore the intricate nature between cognition and physiology, through more sensitive measures such as neuroimaging tools and bio-chemical markers.

Therefore, it is apparent that the various models of stress have added much value collaboratively to stress research. However, the growing positivistic approach to stress has meant that response and stimulus models have been emphasised within stress literature, compared to the lived experience of stress, which has received little attention (Guimond-Plourde, 2009; Bartlett, 1998). Interactional models of stress seem to offer scope; returning to the meaning associated with stress and exploration of the lived experience of this phenomenon. This cognitive model asserts the importance of psychological processes as mediators in the stress response, which in turn accounts for the variance associated with the stress experience (Lazarus and Folkman's (1984).

However, upon review of the stress theories and the literature, minimal focus has been given to stress within public health, despite its impact on health and health behaviours. The interactional model of stress provides a framework for further investigation and discussion for the lived experience of patient-reported stress. In order to learn and expand our knowledge base in this novel area, a flexible and open approach, which does not attempt to pre-define the stress experience, is needed. Hence, stimulus and

response models of stress fail to provide the flexibility needed for this nature of enquiry. As the interactional model of stress acknowledges the importance of cognition and accepts that there are varying meanings and levels of significance attached to stressors (Delongis et al., 1982; Blona, 1996; Lazarus, 1999), this model shall be used to inform the theoretical and methodological perspective for the proposed study. The following sections review this connection in greater detail.

1.6 A Social Constructionist Approach to Stress

This chapter so far has reviewed the various definitions of stress, and evidence exploring the connection between stress, health and behaviours.

The review of stimulus, response and interactional definitions has exemplified the conceptual difficulties in defining stress (Buell & Eliot, 1979). Despite this the application of 'stress' and 'stress management' as terms, are often employed in a generic manner. The subjective meaning of stress is often ignored or simplified, as evidenced by stress scales (i.e. SRRS). The study of stress has placed great emphasis on conceptualising and defining stress; promoting a positivistic framework for stress assessment and stress management.

This approach does have utility within the scientific exploration of stress, in that it has enabled researchers to investigate the connections between stress, behaviour, and physical and psychological outcomes. Despite this, there is often inconsistent definitions or measures applied within the literature (Kinman & Jones, 2005), and some have argued that this makes stress a worthless concept (Ader, 1980: page 312).

Stress is now a term that has become integrated within 21st century discourse (Pollock, 1988), and has sometimes been defined as a 'buzz-word'. Its attributional power has meant that it is has become integrated within our schemas (Ursin & Murison, 1984), and our discourses (Briner, 1994). Therefore it appears that the ambiguous nature of 'stress' fulfils the need for describing a range of physical, biological, psychological and behavioural demands or strains, which may not be adequately covered by other terms (Bartlett, 1988), or alternatively is deemed more socially acceptable.

In light of this evidence, it appears that stress is socially constructed, and that it acts as an umbrella term. Qualitative studies have exemplified the salience of stress as a perceived pathogenesis for stroke, and heart disease (Blaxter, 1997; Ali, Kanapathy, & Kalsi, 2008; Ali, Kanapathy, & Kalsi, 2009); altering behaviours, such as seeking medical advice, or not engaging in health lifestyles.

The proliferation of media messages associated with stress (e.g. self-help books, stress balls, pharmaceutical aids), have meant that the stress phenomenon is often associated with negative outcomes (Harkness, Long, Bermbach, Patterson, Jordan, & Kahn, 2005; Kinman & Jones, 2005). Some have argued that stress can often be used as an excuse for ill-health or negative behaviours, for example, stress could be used as an excuse for smoking relapse, rather than the lack of personal resources, such as time or effort.

These socially constructed negative connotations associated with stress have generated stereotypical views regarding stress, influencing how people behave. MIND (2010) stated that 'millions of British workers feel forced to lie to their bosses about having to take stress-induced sick leave', and that one in five (n= 2000) stated that 'they felt mentioning stress would increase their risk of being made redundant', as

workplace stress remains a huge taboo. Employees citied everything from stomach upsets (36%), a cold (13%), a headache (12%) to housing problems, and the illness of a loved one, as reasons for their absence rather than stress.

The evidence shows that the term stress is used as an umbrella concept; hindering the efforts to define stress. The social constructivist approach and interactional models of stress have highlighted that a flexible framework is required to study the meaning and lived experience of stress. A phenomenological perspective lends itself very well, as it seeks the psychological meanings that are attributed to the phenomena under observation. This is discussed in greater depth the following section.

1.7 A Phenomenological Approach to Stress

Phenomenology is the study of phenomena, and a particular focus to the nature and meanings attributed to the lived experiences associated with these phenomena, is a central component to this philosophical approach.

A review of the stress literature has exemplified that the phenomenology of stress has been often ignored (Bartlett, 1998: page 101), despite emphasis being placed on the subjectivity associated with stress, as highlighted by the interactional model of stress. The substantive amount of research and literature that has been produced in the field of 'stress' relies heavily on a range of quantitative, and reductionist methodologies. Stress scales are a prime example of where meanings and levels of significance are often ascribed to a pre-determined list of stressors. This approach has allowed stringent testing of stress management interventions, as there are quantifiable markers to test and monitor against, adding value to the field of stress research and knowledge. However, the exploration of stress as a social construct and the

interactional definitions of stress, have highlighted the significance of meaning attached to the experience of stress and coping, elucidating the subjective nature of the stress experience.

Phenomenology focuses on the way objects or events appear to the consciousness, thus this approach seeks the psychological meanings, which shape and form the phenomenon, through exploration of the lived experience (Giorgi & Giorgi, 2003). Guimond-Plourde (2009) postulates that 'moving from the empirical to the phenomenal makes it possible to evoke a return to dimensions of meaning which have been set aside or forgotten in the lived experience of stress and coping'. A phenomenological perspective could move stress and coping into a 'new focus'; with the potential to reveal 'what we have not yet appreciated' (Guimond-Plourde, 2009).

The explorative nature of a qualitative methodology therefore provides a tool to examine how individuals comprehend and make sense of the stress and coping experience, rather than defining it for them, via the deployment of stress scales. This alternative approach to studying stress provides a window of opportunity to understand how different factors such as age, gender, and social representations may account for variability in individuals' responses to stressful events and their coping strategies (Diehl & Hay, 2010; Lazarus & Folkman, 1984). This perspective enables the audience to learn more about how stress and stress management is perceived, and consequently how this can impact one's identity, and the types of stress management or coping styles used.

1.8 Summary & Purpose of the Study

This chapter has evidenced that stress is a major component of our lives. We are surrounded by messages and images of stress, which have become integrated in our

everyday discourses. Stimulus, response, and interactional definitions of stress have reinforced the connections between stress and health, whilst reinforcing the mediating roles of stress perception and coping appraisals.

Over the years the growing impact of stress has meant that attention has been focused primarily on workplace stress interventions. Government guidelines and polices have been targeted towards organisational managers; prompting greater awareness for stress assessments, prevention and management techniques. Despite the significant amount of evidence on the indirect and direct pathways in which stress can affect health, the role of stress and stress management interventions within public health has often been ignored.

In addition, the phenomenological perspective to stress has been minimal. The domination of stress definitions, theories and stress scales, has meant that the meaning and the lived experience of stress is often ignored or generalised. Consequently, the purpose of the study is to explore the lived experience of stress, explore the implications for public health services, and the utility of moving towards a more integrated and holistic health service.

Aims and Objectives

The aims of this study are:

1. Gain insight into participants' experiences of stress and their coping strategies.
2. Explore participants' views on stress and coping, in light of their personal experiences.

CHAPTER TWO: STUDY 1

A Qualitative Exploration of the Lived Experience of Stress

2.0 Methodology

2.1 Ethics

The British Psychological Society - BPS (2009) Code of Ethics and Conduct was abided by, and the study was granted City University Ethical Approval in 2009. Information sheets (appendix 1), consent forms (appendix 2) and debriefing sheets (appendix 3) were used to ensure that informed consent was obtained from the participants that they were aware of the study aims.

2.2 Design

As the aim of this study is to explore the lived experiences of stress, a qualitative approach was utilised. Qualitative methodologies permit in-depth exploration of phenomena (Holloway & Todres, 2003), and the subjective meanings ascribed by participants, as appose to the pre-defined meanings and descriptions which are grounded in quantitative approaches (Chamberlain, 2004).

2.3 Mode of Data Collection

Focus groups were used as the qualitative data collection method. They can consist of six to eight participants, or two to four participants, constituting as a mini focus group (Wilkinson, 2003). The group setting can facilitate disclosure as participants share and discuss their experiences, which can increase a shared understanding. Hence participants' can elicit, and inspire discussion in the group, permitting more in-depth information on perceptions, attitudes, and experiences, compared to one-to-one

interviews (Kitzinge, 1995). As the aim of the study was to explore the lived experience of stress amongst men and women, aged 18+ years, focus groups were selected as the mode of data collection as multiple participants could be included.

2.4 Question List

A semi-structured question list was employed (appendix 4). Willig (2008) postulates that this method is ideal when the aim of the study is to explore individuals' lived experiences, as it permits freedom to explore the psychological and social world of the participant/s. Consequently, participants can guide the direction of enquiry and focus, which is particularly useful when a topic that may have not been considered by the researcher emerges. Hence a semi-structured question list promotes greater flexibility for exploring and covering the topic under review (Smith, 2003), granting access to explore novel experiences, enabling richer and detailed data. It also facilitates greater rapport between the researcher and the participants, as there is joint ownership over the discussion.

Participants were asked questions on their views and experiences of stress (i.e. Can you recall how you felt when you were last stressed? Did you experience any physical changes in your body?), stress management (i.e. Do you think stress can be managed? If yes how?), and their perceptions of stress and stress management.

2.5 Procedure

Participant Recruitment

Participants were screened prior to selection. Those who met the inclusion criteria (appendix 5) were then divided into segments. The segmentation variables were demographics and geographic location.

Basildon and Thurrock have significantly higher levels of deprivation, and higher rates of depression, smoking and poor diet (NHS South West Essex: Commissioning to reduce Health Inequalities, 2007). Hence these two locations were identified for the geographic segmentation variables. The demographic segmentation variables were gender (e.g. male and female) and age (e.g. 18-29, 30-49, and 50+ years), as studies have found age and gender to be associated with different coping styles (Aldwin, 2007; Sollar & Sollarova, 2009; Iwasaki, MacKay, & Ristock, 2004).

Participants were recruited from a research database, established by the Health Psychology Team. Participants received an invitation email/letter/phone call (appendix 6), and were screened by the researcher (appendix 5). Once the participants had been selected in accordance to the inclusion criteria, they were given participant information hand-outs (appendix 1), outlining the purpose and requirements of the study, any potential risks associated with their participation, remuneration details, and the researchers contact details.

Participants were given £20.00 voucher for their time, and travel reimbursement. Central locations in Basildon and Thurrock with good transport links were identified as data collection venues, in order to minimise inconvenience to participants.

Data Collection

The six focus groups were scheduled and conducted in February 2010. Wilkinson (2003) states that extra participants should be recruited for focus group studies, as participants can drop-out, and that issuing reminders to participants in advance is crucial to prompt attendance. Despite taking these measures and offering a monetary reimbursement for the participants' time and travel, there was an unexpected low

response rate. As groups ranged from two to four participants the data collection method constituted itself as mini-focus groups.

Participants were given information sheets (appendix 1), outlining the purpose of the study, the use of audiotape recorders, confidentiality, and withdrawal from the study. This was then followed by consent forms (appendix 2) which were signed, thus informed consent was obtained from participants. Demographic information was also obtained from participants (appendix 7).

Participants were assigned numbers to maximise confidentiality and anonymity. The mini-focus groups were on average 45-55 minutes long. Debriefing sheets (appendix 3) were then disseminated to participants; providing further information on the study, sources of information, and the researcher's contact details. The mini-focus group recordings were transcribed verbatim to permit analysis.

2.6 Methods of Analysis

Phenomenology is concerned with the diversity and variability of human experience (Spinelli, 1989). The aim of phenomenological research is to elucidate and describe the lived world, expanding our understanding of the lived experience (Dahlberg, Dahlberg, & Nystrom, 2008), rejecting all pre-defined and positivistic perspectives.

Husserl (1913/1931) postulates that phenomenology aims to 'return to things themselves', attenuating to the texture of the lived experience, setting aside any presuppositions and assumptions related to the phenomena under investigation. Hence such an approach permits and facilitates an appreciation for how a certain event is experienced in its totality (Willig, 2008). Thus this methodology compliments the

study's aims, as it intends to explore the lived experience of stress, attenuating to the subjective meanings ascribed to the perception and the lived experience of stress.

Phenomenological research can vary based on the contrasting philosophical values and the methodological procedures employed (Willig, 2008). The form of phenomenological analysis is dependent on the type of phenomenon under investigation and the scope of enquiry. For example, interpretative phenomenological analysis - IPA (Smith, 1996) has tended to focus on the exploration of participants' experience, understandings, and perceptions for specific health-related phenomena and specific patient-groups (i.e. dialysis patients, cancer patients, etc.) (Brocki & Wearden, 2006).

However, phenomenological approaches are dynamic and undergoing constant development (Garza, 2007). For example, Johnson et al (2004) combined aspects of both IPA and Foucauldian discourse analysis. They postulated that 'the choice of approach should be based upon the goals of the research' (page 364). In addition Garza (2007, page 338) states that the phenomenological approach offers insight within an adaptable framework, permitting such combined forms of analysis.

This study used thematic analysis (Wilkinson, 1998) to identify themes within the datasets generated from the mini focus groups, whilst combining the phenomenological perspective, which is central to the exploration of the stress experience. This approach has been used in other qualitative studies, such as Judith Aronson's (2008) study exploring the meaning of praying to adults during the illness experience.

Thematic analysis searches for themes that emerge as being important to the description of the phenomenon under review (Daly, Kellehear, & Gliksman, 1997). The process involves the identification of themes through repeated reading of the data (Rice & Ezzy, 1999). It is a form of pattern recognition, where emerging themes become categories for analysis and further investigation. Hence it lends itself well to larger data sets, such as those generated by multiple focus groups (Wilkinson, 2003; Braun & Clarke, 2006), as it permits recognition of general trends which emerge across the entire data set.

As stress is a broad phenomenon, and the participant criteria for this is study encapsulated a broad demographic (e.g. a variety of age groups, further divided by gender), thematic analysis was selected, in conjunction with a phenomenological perspective (Aronson, 2008). Allowing both general themes to be identified, whilst still attenuating to the texture of the lived stress response and how the participants comprehend this experience; enabling a detailed description of the data set as well as the experience of stress. Thus such a form of analysis lends itself to those studies which aim to explore subjective experiences through (1) larger data sets, (2) a broad participant sample (i.e. varying ages), and (3) exploration of broad topics (Aronson, 2008).

Repeated reading (line by line) of all six transcripts enabled coding of the transcripts. An inductive approach (Boyatzis, 1998) allowed cases to be identified which were grounded in the data and the stress experience (Hayes, 1997; Joffe & Yardley, 2004; Patton, 1990), and novel areas were identified within the data. Fereday and Muir-Cochrane (2006) state that this form coding permits a phenomenological perspective as it attenuates to the subjective experiences reported, excluding any previous

assumptions or knowledge, as it focuses solely on the meanings and constructs of the participants descriptive accounts.

Comparisons were then made between transcripts to identify common themes to form a comprehensive picture of their collective and unique experiences. Some disparate themes or sub-themes were subtracted (Joffe & Yardley, 2004). Hence there was a systematic identification of super-ordinate and subordinate themes within the data, creating a master table (table 1). A second researcher conducted an independent analysis of the data, and a comparison was made between the themes identified. There was a consistent match in the themes identified, evidencing validity and reliability in the identified results.

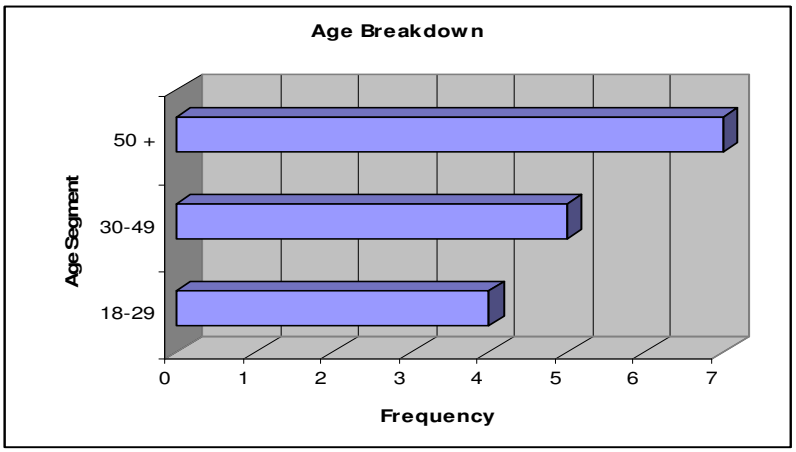
Hence the phenomenological perspective permitted an insightful and detailed exploration of the lived experience, taking into account the participants' life experiences, self-identified roles, and metaphorical descriptions; whereas the thematic analysis allowed a holistic description to be formulated from the reported experiences of stress.

3.0 Results

3.1 Participant Information

A total of sixteen participants (nine males and seven females) attended the focus groups. Nine participants were from Thurrock, and seven were from Basildon. Participants ranged from 18 years to 74 years of age. Chart 1 displays the age dispersion of the sample based on the three age segments used. All of the participants were White British.

Chart 1 – Participant Age Distribution



3.2 Summary Table of Qualitative Findings

Overall five super-ordinate themes were identified within the data. Table 1 outlines the super-ordinate and subordinate themes.

Table 1 – Summary Results Table

Super-ordinate Themes	Subordinate Themes
1. Stressors	Financial matters
	Change
	Control
	Demands
	Major life events
2. Experience of Stress	Physical experience
	Behavioural experience
	Psychological experience
	Life experience – a mediating factor
3. Coping Skills	Maladaptive
	Adaptive
4. Stress Perception	Stigma
	Weakness
	Raise awareness
5. Experience of Talking to Healthcare Professionals (HCPs) About Stress	Screening process
	Pill-culture: the need for alternatives
	The blurred distinction between stress and depression
	Expectations of healthcare providers

3.3 Qualitative Results

The five super-ordinate themes and their corresponding subordinate themes presented in table 1 will evidenced and discussed in this section, as follows.

1. **Stressors**

Multiple definitions were used to describe stress by the participants, exemplifying the subjective interpretation associated with the perception of stress. Some used the terms 'anything' and 'things' to define stress, implying that they have many various stressors, that are not specific to any stimulus, and or that that they may also be struggling to pin-point the specificity of the stressors. P12 a 36 year old mother, outlines how she struggles to identify her stressors. She describes stress as being a state of being, by stating that she 'can just wake up stressed'. She also states that stress 'cannot be put in box' suggesting that she can't label or define it, or alternatively that she is struggling to contain the stress and manage it, and she negatively appraises herself as she cannot 'deal' with her stress.

"I mean, there can be days when you just can't get yourself together…It's not even events that have made you stressed, you can just wake up stressed or you can just become stressed during the day. It's just you've got no reason why. I don't know because there's not an actual reason for it. You can't put it in a box and say this is what's happening and this is why it's happening. You just feel stupid really because you're not dealing with it"

P12 FG5 F30-49

P13, a 65 year old male, used a very contrasting example to define stress compared to the other participants. His reference to a 'game' has metaphorical connotations, whereby stress is perceived as a 'challenge', which can elicit both unpleasant and pleasant emotions. 'Rising to the occasion' suggests that P13 views this challenge

(stress) as a motivating factor that needs to be dealt with, and that his ability to 'surmount' to the challenge is central his masculinity, and successful management of stress offers 'rewards'.

"It is like a challenge …a game of football it appears stressful but you get the rewards during the game ...it is quite enjoyable and the challenge is there and there are moments when you wish you weren't there. Rising to the occasion… If you can surmount the problem"

P13 FG6 M50+

The association of negative and positive connotations with stress was further identified in other participants' accounts. However they defined stress as being both 'good' and 'bad', and that some stress is healthy to a certain degree, and that there is an undefined threshold; that once exceeded stress becomes detrimental to ones wellbeing. P6 defined stress as being a useful tool in evaluating and appraising events and circumstances to assess how much of a threat they pose, reinforcing the importance of thought processes in the evaluation of stress/ors. This further illustrates that stressors vary amongst individuals, and that certain stimuli may present itself as a stressor to some, but not to others. In addition P14 suggests that there are various types of stress which have various degrees of severity.

"I think to a certain degree a certain amount of stress is healthy… like a small amount is healthy. It sort of keeps everything firing in the right kind of way. But when it steps over it, it can be very detrimental in so many ways"

P11 FG5 F30-49

"…the stress that you get, you can get over it is the stress that you can't get over is the bad one"

P14 FG6 M50+

Participants also stipulated that stress was the outcome of multiple, acute stressors which can accumulate over time, and that this accumulation can often result in an 'eruption' where the stress overpowers the individual, as conveyed in the quotes below. 'Stress' and 'pressure' are used interchangeably. Analysis of the data set also identified this pattern in other participants' accounts where stress was defined as 'pressure' or 'worries', shedding light on the participants' discourse of stress. P2 almost describes herself as a 'vessel' which holds or contains stress, thus it appears that she internalises her stress within herself.

"Little bits of stress that add up… there's pressure on you at work, home, and there… the last straw that broke the camel's back is so true… it might be something quite trivial that makes you snap… it's all the little things that needle at you"

P6 FG3 F50+

"I bottle things up now and again because I think it is silly. But its loads of different things that all add up and I keep it all inside me and then I'll just go mad at her. I suppose it doesn't help having them other things inside me. It adds up…"

P2 FG1 F18-29

It was also evident that some participants' struggled to define stress, or used varied selection of words, metaphors (i.e. a lot on your plate) to define their stress. This exemplifies the variance and subjectivity in the participants' definitions of stress, as

evidenced by the quotes, which showcase the discursive tools employed by participants when conveying their interpretation of stress.

However participants also identified concrete and specific stressors and described their experiences of stressors such as financial matters, change, control, demands and major life events. These formed the subordinate themes for the 'stressors' super ordinate theme. These shall be discussed as follows.

Financial Matters

It is evident that stress holds very broad and subjective meanings for participants. However specific instances were provided by participants, in which stress was affiliated to a primary cause (i.e. financial matters). The segmentation of the participants by age and gender exemplified that the type of financial stress was influenced by life stage, the roles and responsibilities the participants outlined for themselves, hence this formed the subordinate theme of 'financial matters'.

P1, an 18 year old single mother, and P10, a 20 year old unemployed male, identify limited financial resources as their main cause of stress. P1 conveys her financial struggles to provide for her child, by stating her feelings of helplessness ('there is no help for us'), which adds to her stress as she feels that she is not adequately providing for her child as a mother.

"I get most stressed out over money because I don't have enough money. I can't live on what I'm living on at the moment. It isn't enough at all, but there is no help for us… I've got a kid and I'm only 18 and I was in a lot of debt through the bank and things."

P1 FG1 F18-29

Whereas P10 goes into further detail to convey the dilemmas he faces as a result of his financial status, and the stress experienced as a result. He communicates his helplessness and frustration due to the choice he had to make between receiving jobseekers allowance which would help pay for his accommodation, or the college course which could offer job opportunities and long-term financial stability. He expressed feelings of hopelessness and loneliness, as those individuals who could have assisted him failed to do so: 'they could see my situation…there wasn't any help… they are just doing their job, they don't care how it affects me', which further exacerbated his stress levels.

"… Its hard living on Jobseeker's… If I paid my bills, I'd be sitting indoors doing nothing… I can't do anything unless I get a job. I'm a half qualified electrician…I can't find any work. I was going to college… I moved into the flat, and they said I either had to quit my course to be entitled to the Jobseekers allowance… or I'd lose my flat… debts are going up and up, which adds to the stress… So what choice do I have?"

P10 FG4 M18-29

Consequently financial stressors affected participants' perception of control, and levels of independence; particularly for those who had limited finances as their primary stressor. Participants often reported a vicious cycle whereby debts accumulated, affecting various domains of their lives, further exacerbating and perpetuating negative emotions and levels of stress. P10's account exemplifies the ongoing turmoil reported by many of the younger or unemployed participants, where they often struggle to manage their financial stress due to the choices they are often confronted with.

Whereas P13, a 65 year old male describes a very different scenario. His concerns are related to financial savings, in contrast to P1 and P10 whose concerns were related to

limited finances. P13's concerns regarding his savings are central to his current life-stage, as he is retired and is reliant on those savings. He conveyed how stressful these concerns are, as his disclosure led to those feelings associated with this stress to be triggered, illustrating the intensity of this financial stress.

"The majority of things revolve around finance. It's not necessarily having no money at all, it could be have you got enough saved up… something to back you up… you don't look forward to sudden surprises that are going to cost you money… or where you were badly advised at the Bank… what you did have you haven't got… I am being to feel stressed out already. That was a lonely and stressful time"

P13 FG6 M50+

Change

Participants identified change as a stressor. Change manifested in various contexts for the participants. For example P6, a 60 year grandmother described how a change in her role as a sister, mother, wife, and grandmother was stressful. As a result she felt responsible for her 'failure to maintain her role', and how she struggled to come to terms with this role change and her battle with feeling hopeless and lost. However it is useful to identify that her remaining social support network was instrumental in prompting re-evaluation, of this stressful transition in her life, highlighting the importance of social support.

"…because my sister, my two brothers, my husband, now my son and the two grandchildren they've all left me ... all abandoned me so I thought its all my fault, but because I have such a wide network of friends, close friends for many years. If they hadn't convinced me… I don't know what would have happened to me"

P6 FG F50+

In contrast, some female participants disclosed hormonal change as a stressor, due to the affects it elicited in their physical and mental states. P6 gives particular reference to menopausal change and that the lack of understanding from others can increase her stress, and feelings of isolation. In the account below she conveys how she no longer feels in control of her body, as she feels that an unknown being is 'taking over her body'. Whereas P12 aged 36 years, reported change in her menstrual cycle as a cause for her reduced tolerance; affecting her ability to cope with stressors, which added to her stress levels.

"Int: Do you think the menopause is a stressful stage or time?

P8: Definitely. People joke about it too... leave her alone it is her hormones...

P6: The menopause and the hormones are so annoying…I have no control over them… you get up one day and you feel down… you know it's hormonal – that annoys me. I hate something taking my body over

P8: Having no control over the change is one of the things that leads to stress"

P6 FG3 F50+

P14, a 58 year old male similarly conveys physiological changes as a form of stress. His inability to function compared to his past experiences as an active builder, causes him great frustration and stress when he struggles to implement certain tasks. This physical change has elicited stress as it has challenged his role as a tradesman and builder which was central to his identity, as well as his ability to provide for his family, as he had to take early retirement due to changes his health. Hence changes to participants' roles/lives, caused by family turmoil, or physical alterations can act as a form of stress.

Control

"Having no control is one of the things that leads to stress."

P6 FG3 F50+

Many identified lack of control as a stressor. The segmentation highlighted that the lack of control translated into unique experiences based on the participants' life stages. P2, an 18 year old female outlined the lack of control over her life as a primary stressor, as she feels dependent on her mother for basic things such as transport and financial support, etc. This dependence is perceived to undermine her independence, causing her stress, as she struggles to exercise control. P2 later disclosed that she struggled to control her obsessive compulsive disorder symptomology under high levels of stress. Control therefore appeared to be a particularly poignant stressor for P2.

"…there are things holding me back… I want to be independent… it's stressful trying to prove that I can do what I want, because I still rely on my mum."

P2 FG1 F18-29

Among the 50+ males, control was a major stressor. They communicated their frustration elicited by their reduced autonomy. P14 often got stressed when others had to do jobs/tasks for him that he would typically do, as it made him feel in less control. Control was very central to the 50+ males' identity; one described his fight to retain his autonomy, by his conscious effort to be 'on the move all the time'. P14 and P15 express their frustration in reference to their inability to complete their typical daily tasks, such as walking the dog. However as their health status has played a central role in dictating this inability, they describe low levels of control and dependence on pharmaceutical aids.

"I can't stand people doing things for me. I gotta do them myself. If someone does something for me it is not right, they don't do it right? If I see someone doing something I have to do it… it's just as hard to see them do it wrong."

P14 FG6 M50+

"P14: The ability to get about and it frustrates you when you can't do things, I can't even take the dog for a walk now its double trouble… I've got no chance I am 58 and I'm diabetic, arthritis got the whole lot I have.

P15: I have the same problem taking me dog out for a walk, my knee is alright since I have had it done but then I suffer with arthritis of the spine and after walking a certain distance, well I'm obviously in terrible pain… It's only the pills that are keeping me going; I take 11 pills a day… The last 15 years have flown, I turned round and I'm 74 it doesn't seem five minutes ago since I was jogging about"

P14 + P15 FG6 M50+

Hence, it appears that 'routine' is a key marker for the 50+ sample, as it signifies maintenance of control and independence, thus when this 'routine' is disturbed to elicit great levels of stress for this sample as it challenges their perceptions of autonomy, freedom and independence.

In contrast, stress was identified as an agent that reduced control, as it can become overpowering and overwhelming, reducing one's ability to cope with stress and demands; suggesting that there is a power struggle between the ability to control stress; in order to prevent 'stress from ruling your life'. The evidence for this subordinate theme further emphasises the central role of 'control' in the lived experience of stress. However it also asserts the debilitating effects of stress, as it can reduce one's actual and perceived ability to control their own stress.

"…it (stress) starts ruling your life, taking control of you rather than you being in control of it."

P11 FG5 F30-49

Demands

A range of contexts in which demands (i.e. daily life, occupational and relationships) led to increased stress levels were identified in the data set. Quite often participants felt that stress could be defined as one's inability to cope with these demands. Creating a mismatch between the resources needed to accommodate for these demands, and the actual resources available to the individual.

P4 uses the term life deadlines loosely in a metaphorical context, and translates this to specific accounts in his life such as payments of bills and occupational deadlines, which can cause stress. He believes that this is a part of reality, and uses a comparative statement to highlight that a non-stressful job is something that could only exist in another world. Hence he perceives stressors such as deadlines/demands as a part of reality; consequently dictating 'acceptance' as his main coping mechanism (discussed in the coping skills theme).

"It's deadlines; there are life deadlines. You get them in work and you get them at home... if you don't pay the phone bill on time, or the credit card bill hasn't been paid ... it's the stress of it's got to be paid... at work it's all the time… if anyone's got a non-stressful job they must be sort of living in a different world"

P4 FG 2 M30-49

Similarly P6 and P12 broadly defined the demands placed on them in their 'daily life'. However they identified demands that were specific to their self-defined roles as 'working mothers', as evidenced by P12's quote below. The broadness of the terms employed (i.e. 'life or daily life') implies a generalisation of stressors/demands within multiple domains of their reality. Both P6 and P12 depict a balancing act of managing multiple demands, resulting in their experience of stress.

"…daily life can be stressful... the daily work, the chores, the children ... everything can just be a daily stressful thing"

P6 FG3 F50+

"I'm 36 and I've got three children and, yes, life can be quite stressful"

P12 FG5 F30-49

As evidenced so far, participants have referred to demands in daily life which encapsulated occupational demands. However some participants were more specific in pin-pointing occupational demands as a singular stressor. For example P9's reflects on his experiences where stress-related absence can affect colleagues within the workplaces, as they are faced with increased demands; creating the 'ripple affect'. His account contains metaphors, which suggest that stress can be 'infectious', in that it can 'rub off' on others, implying transference of stress.

However, the male participants (P4, P9 and P10) believed that occupational stress/demands should be accepted, as it is part of their role and duty, and that they must meet the demands, and cope with stress, as they receive monetary payment to do so. P9's quote asserts this belief through his employment of affirmative statements, such as 'you have to get on with it'.

"I'm a teacher, it's stressful…when a load of reports are due… a lot of people will be off ill … other people try and cover for them, then it rubs off on them…it's a vicious cycle. But it's your job, and it's the thing you have to do to earn money, there's not much you can do about that"

P9 FG4 M18-29

Major Life Events

Participants also gave accounts where major life events had led to increased stress. The accounts were specifically related to: divorce, bullying, bereavement, custody of children, and multiple life events. One of these accounts has been selected and discussed to provide a snap shot into how life events can influence one's experiences of stress.

Battle for Custody – A Fathers Account

On the other hand, P3 conveys his battle for custody, and his desire to play a central role in his children's lives, as a major form of stress. The quote outlines his struggle to win his rights of custody as a father and how this caused a significant amount of stress. However he appears to be affected by the long term consequence of this custody battle whereby his child struggles to bond with him. The fact that he withholds his disclosure due to the feelings elicited when conveying his experience of stress reinforces the emotional intensity associated with his battle to maintain and develop his relationship with his child. The ongoing nature of this stressor illustrates the impact of major-life events as a stressor.

"…it hasn't stopped… she wouldn't let the youngest one come… he saw the other two enjoying a relationship with me which he couldn't do, which was upsetting for me and stressful…I'm getting too deep… I better stop now"

P3 FG2 M30-49

2. Experience of Stress

The participants revealed extremely rich accounts of how they experienced stress; despite the subjectivity associated with the participants perceptions of stress. It became apparent that participants experienced the physical, behavioural and psychological effects of stress, and for some individuals their stress experiences were mediated by their life-experiences. These shall be evidenced and explored further as follows.

Physical Experience

Participants reported many physical changes in their body during and after their experiences of stress. For example participants reported symptoms such headaches, sickness, muscle tension, increased blood pressure, palpitations, sleep disruption, as well as changes in existing conditions (i.e. diabetes – increased blood glucose levels, irritable bowel syndrome - IBS); which is indicative of somatisation.

For example, P14 describes his experience where family stress or concerns have affected his diabetic condition. He experiences increased blood glucose levels, which leave him feeling weak and exhausted when the conflict has dissipated. P14 is clearly struggling to manage his stress levels and his diabetic condition, as he expresses his helplessness in 'I just can't handle it.' This is further reinforced and explored in the

behavioural experience of stress where P14 associates his maladaptive lifestyle patterns with high levels of stress.

"I'm diabetic... my boy has just moved back in with me and he totally winds me up all day long, it stresses me out terrible and my blood sugar has gone up to 17 and I just can't handle it. I think the only way it is going to rectify it is for my boy to sort his life out... I wouldn't be worried about him… I have noticed like lately after the conflict is gone and you've stressed out, you are back to normal I get like a weak feeling…I've gone exhausted. My sugar levels always go up."

P14 FG6 M50+

P14 also communicated that his sleep patterns could be affected when he is 'frayed about something'. He doesn't specify what the stressor may be, generalising this pattern to any form of stress.

"I could go three days without sleep when I'm frayed about something."

P14 FG6 M50+

Hence P14's accounts provide evidence of somatisation as results of his self-reported elevated levels of stress, in light of his existing diabetic condition. Sleep disruption was also identified in other participants' accounts; those of whom were from the younger age category (18-29). P9 goes on to describe how his inability to sleep due to stress, causes him to continue ruminating about the stress, further disrupting his sleep, adding to his fatigue. This highlights the vicious cycle of sleep disruption caused by stress, as it can promote increased psychological rumination about the stressor/s; resulting in increased fatigue, perpetuating a cycle of stress and rumination.

"I've had particularly stressful times… you can't sleep properly… you get very down about things that you can't get away from… you've spent the whole night… not sleeping properly, and it gets to like 5.00 o'clock in the morning and you've got to get up in an hour, to go to work again, so you've got the anxiety"

P9 FG4 M18-29

A number of participants particularly the 50+ males described instances of high blood pressure as a result of stress. P13 describes his experience of high blood pressure as a 'signal' for his stress levels, implying that he places greater focus on his physical symptoms of stress.

"…a number of things happened… and around that time I had the high blood pressure …that blood pressure thing was a signal"

P13 FG6 M50+

P16, a 74 year old male was able to identify that his heart palpitations and his high levels of blood pressure are often connected to specific stressful encounters. For example, he described how he could 'hear' the erratic beating of his heart when he last experienced his heart palpitations. He also associated feelings and imagery of immense heat (e.g. 'hot blood', 'my head goes red', and 'heat in your body') and an accumulation of pressure within his head (e.g. 'my head was going to bust'), with his experience of stress induced hypertension. Despite P16's awareness of how stress affects his health, he expresses helplessness (e.g. 'what I can do about it').

Others described instances of where their breathing patterns changed, and sensations of their heart beating faster or palpitating. P11 compares the intensity of this experience to that of a panic attack symptoms.

"…a faster heartbeat... my breathing can be shallower… It's a real tenseness. It can almost be like a bit panic attacky symptoms"

P11 FG5 F30-49

Whereas P9 and P4 stated muscle tension as a consequence of their stress; recognising that the muscle tension is localised to the shoulder and neck areas. P9 also stated that this muscle tension can translate into headaches and feelings of mounting pressure. Whereas P4 described his feelings of frustration and helplessness, as he can recognise when this muscle tension occurs, but feels powerless to stop it. Muscle tension was such limiting factor for some of the participants, that they articulate their advocacy for massage treatments.

"I get quite tight shoulders… that leads to a headache… you definitely feel it more up in your head, like sinus pressure… a general overall feeling of tightness and being really highly strung"

P9 FG4 M18-29

"Very tense, especially round my neck and my back… when I'm stressed... I'm sitting there and I know ... that's the worst thing."

P4 FG2 M30-49

The vast majority of participants felt that they were more susceptible to contracting illnesses under stress, due to reduced immunity, which was often referred to as 'reduced tolerance' or 'vulnerability'. Interestingly P13 identified that the stress not only affected ones physical immunity, but also their mental immunity to illnesses (i.e. depression), indicative of the stress-vulnerability model. P9 suggests that one's tolerance or ability to deal with 'minor problems' also decreases in this weakened

state, and that there are physical indicators or 'signs' associated with stress altered susceptibility.

"…stress can make you ill… you can get really down and become vulnerable to depression… to all sorts of things, even colds. It is very important not to be (stressed) if you can."

P13 FG6 M50+

"It's definitely during those times when you tend to pick up all the colds and things, and you get really under the weather... your tolerance drops quite a lot… you do notice it, there's lots of little signs… you have a much lower threshold for minor little problems"

P9 FG4 M18-29

Behavioural Experience

It was also identified that stress led to reported changes in behaviour, such as violence, communication style, and concentration levels. These examples shall be evidenced and discussed in this subordinate theme.

Aggressive Behaviour – An Outer Body Experience

Participants described instances of aggressive behaviours that resulted in feelings of guilt as they often took out their anger on those close to them (i.e. family members, partners, etc.). Many described an altered reality through 'an outer-body experience', when they were in this aggressive state caused by stress, as they could not identify with their actions. P2 states that she felt powerless against this unknown force, which

seemed to take control over her actions, and disbelief with how she reacted as it was not her typical behaviour ('I've never done anything like that before'). It could also be argued that stress may act as an agent, which aids the participant's externalisation of blame, acting as a possible denial strategy.

"You just want to rip everyone's heads off… I take it out on everyone and upset the people I love. I've attacked my mum, I punched her and wouldn't stop… I've never done anything like that before. It scared me… I felt I wasn't there, like something else was inside me."

P2 FG1 F18-29

Whereas P3 identified that he adopted a negative communication style, which often caused arguments between him and his partner, as stress often made him less tolerant and 'snappy.' P9 and P5 also identified reduced tolerance as a consequence of stress, thus affecting their behaviour.

"…not anger as such, but you can sort of vent it or get cross and stuff like that, you can get short with people, a bit snappy."

P5 FG2 M30-49

"Your behaviour changes as well, you're more on edge, you're short tempered with people. I can, I can get very short with people when I'm stressed."

P3 FG2 M30-49

P10, a 20 year old male suggests that the anger elicited by stress is best 'vented' out, and that he becomes verbally aggressive with others. He also describes sensations of irritability and agitation, in which he becomes fidgety, and experiences bouts of excessive movement, as does P9 ('I'll sit there tapping away at something'). Despite

P10 recognising that his aggressive response to stress is not suitable, he clearly feels relief from the accumulated anger and stress, by this form of cathartic release or 'venting'.

"P2: I pace a lot when I'm stressed, I can't stop moving… I'm quite an angry person… I shout… I have a temper tantrum, but it goes after a while. It happens; I mean shit happens… I just get angry and I just want to vent it, better to vent it…I'll shout.

Int: Do you feel better after you've shouted? …..P2: Yes."

P2 FG4 M18-29

The Stress-Behaviour State

In contrast, other participants such as P4 and P8 stated that they could not recognise their own stress states and the impact it had on their behaviour. In fact others (i.e. friends and family) could notice changes in their behaviour which they attributed to stress. This highlights participants' inability to identify their own stressed states. P8 suggests that the ability to recognise the stress-behaviour impact was moderated by the stress-context, as removal from the stress-context facilitated her stress perception and altered the stress-behaviour affect.

"I don't think I realised how stressed I was, and the impact on my behaviour until I stepped out of the situation"

P8 FG3 F50+

"Other people end up saying you're working too hard… and your behaviour changes obviously when you're under pressure, under stress… I don't even notice it"

P4 FG2 M30-49

Transient Cognitive Deficits

P7, P11 and P14 all stated that their thinking patterns were altered by increased stress. P7 describes how she goes into an 'automatic pilot' mode, where her thoughts feel disorganised. P11, a 35 year old female, describes a similar experience and states that she 'loses her ability to think logically'. Whereas P14, a 58 year old male depicted a state where his vision almost becomes distorted into 'tunnel vision', which makes him feel blinded and helpless in this lost state of being. In contrast P9 communicated a sense of heightened concentration, in which he can concentrate on multiple factors which surround him, despite focusing on a specific task; further reinforcing the variability in the stress response/experience

"…you worry about something so much your mind goes blank. I get tunnel vision. You can't see nothing…"

P14 FG6 M50+

Psychological Experience

This subordinate theme explores the psychological feelings and responses elicited and experienced by the participants when stressed. Participants described instances which mapped onto the stress-vulnerability model, as they found that stress was associated with feelings of hopelessness, isolation, rumination, reduced motivation and cases where existing anxiety disorders were exacerbated. These are explored as follows.

P2 reports feelings of hopelessness and her strong desire to isolate herself from her family and responsibilities (i.e. occupational and academic), due feelings elicited by stress. Interestingly P2 once again communicates her ongoing turmoil and need to be

heard, as she associates her feelings of hopelessness with the lack of acknowledgment from others in her social world.

"I nearly gave up work and college… why am I going to do all this when no-one cares… I just didn't care; I wanted to be left alone"

P2 FG1 F18-29

Whereas, others reported feelings of isolation, and that just being aware of others with similar concerns and experiences acted as a 'relief'. P9 suggests that the feelings of isolation can facilitate a psychological catastrophisation of the stressful experience, and that normalisation, or shared disclosure with others can prompt re-evaluation of the experience.

"the trouble with stress... you feel that you're the only person who's having this problem, having this amount of stress, who's in this situation, and you're the only one... there's no one else... In reality there are loads of people everywhere... in similar situations... just being able to talk to them... know that they exist and you're not the only one... that's a relief in itself, that you're not perhaps different and you're not on your own."

P9 FG4 M18-29

Furthermore, P11 describes mental illness and stress as 'huge but lonely', suggesting that not only does she feel alone in her experience, but that there is limited resources in terms of care and assistance. P11 appears to be knowledgeable about mental health problems and the prevalence rates and yet expresses feelings of isolation.

Others reported instances of excessive rumination about the stressor/s. P6 reported problems in being able to fall asleep due to rumination of the stressor/s, as well as sleep disruption where she would wake up stressed, eliciting further rumination. P5 stated that his experience of rumination was unbearable, that it exemplified feelings of helplessness due to reduced control in his ability to handle the stressor/s and gain some sort of perspective. The intensity of the psychological response to stress is reinforced in P6's emotional response to her disclosure below.

"worrying about things… you've got things going on in your head, like you're contemplating, and you just don't know how to deal with situations ... sometimes there's situations that you want to do something about but you feel like you've got no control over"

P5 FG2 M30-49

"Waking up early ... Being tearful, feeling shaky ... not being able to stop thinking about the things that are making me stressed… I can feel the emotion in me now because I'm talking about it"

P6 FG3 F50+

In addition, reduced motivation was another consequence of stress, which led to feelings of guilt and low self-esteem to be exaggerated. P12 communicates how reduced motivation prohibits her from exercise which exacerbates her feelings of guilt as she 'knows what she should be doing'. She searches for an external agent to assist her, due to her desperation and psychological turmoil experienced, implying that she is struggling to exercise self-control due to her reduced motivation.

"I know exercise helps with stress... sometimes you get in such a rut that you feel so fed up that you can't be bothered to do anything and you are lazy. I think I really should be

exercising... but you can't be bothered to do it... that's just a vicious circle all the time. You know what you should be doing. You want someone to come and go, right, you're going to do this... and this is how you're going to do it. But when it's just you there's nobody to take control."

P12 FG5 F30-49

Whereas P2 identified that her existing anxiety disorder (obsessive compulsive disorder – OCD), was exacerbated by stress. As previously mentioned P2 struggles with her stress, and her management of both physical and behavioural consequences of stress. Her inability to control her OCD, perpetuates greater stress and frustration for P2, forming a vicious cycle ('it all builds on top'), from which she struggles to escape from ('it's something that you can't stop').

"The more stressed I am the worse it (OCD) gets... It's like something else is controlling me... it really bugs and frustrates me but it's something that you can't stop because you still lose control… I take it out on my siblings… they leave one little thing like their bag on the floor and I go mad about it… it all builds on top."

P2 FG1 F18-29

<u>Life Experience – A Mediating Factor</u>

Despite similarities and contrasts between participants' accounts, for some participants their experiences of stress were strongly mediated by their life experiences. Some had suffered with long-term illnesses, such as cancer, depression, or had acquired insight over the years, which played a mediating role in how they perceived and experienced stress.

For example P11 states that her experience of depression has made her more aware of how stress can be 'triggered' through her self-reflection and analysis. Whereas P2 outlines her experience of being bullied at school, and negatively appraises herself ('I'm weak, couldn't stick up for myself, which is really stupid') in terms of her reactions. In spite of this, she displays signs of resilience in her re-appraisal, where she feels more confident and equipped to deal this past stressor, and as a result has accepted the responsibility to help others as a mentor.

"Suffering with depression has made me look at it. During that period I spent a lot of time trying to figure out how where, why… that made me realise my triggers."

P11 FG5 F30-49

"I'm weak in myself. I could not stick up for myself, which is really stupid... people would talk down to me. I've come out more and these people I just look back on these people and I just think they're nothing, they're childish. I can do what I want now. I haven't got to worry about it. I can guide others now."

P2 FG1 F18-29

Similarly, P7 stipulates how her experience with stomach cancer has prompted changes in her perception of life and stress. Hence she states that she is more concerned about her health, and positively views events in her life. She also communicates higher levels of acceptance, whereby she is less concerned about others' behaviours, which in the past have caused her stress, pain and hurt. This further reinforces the importance of life experience, as a mediator for stress perception and experience; as P7 uses positive and rational forms of thinking to appraise stress where possible. She also appears to assert some degree of perceived control through 'I try not to let things stress me'.

"I had stomach cancer. So to me every day is a bonus... it really brought that home to me… I try to laugh as much as I can… it does you good to laugh, so I try to see the brighter side of life and I have now finally learnt not to try and change things that I can't... I try not to let things stress me. I do have an awful lot of stressful situations that I'm dealing with but I try not to let them get to me. Because I know that 10 years ago I could have been dead"

P7 FG3 F50+

Participants aged 50+ years gave accounts of how their appraisals and reactions to stress have been affected by age and their acquired knowledge from past experiences. P13, a 65 year old male states that his health and wellbeing has become more important over the years. Due to the physiological changes he has experienced as a result of perceived stress, he is more aware that stress could increase the risk of having a 'heart attack' (i.e. high blood pressure levels were perceived as a 'signal'), consequently prompting review of his stress perception, exposure and response. Control over the stress experience also appears to be pertinent in P13's account.

"…when I was younger, I drank and smoked a lot and I don't do either of those things now and it (health) has become a lot more important. You don't even think about getting older when you are young do you? I think experience helps to deal with stress and you know previous experiences and the realisation that you if you don't get some sort of control you certainly could have a heart attack. When your older you certainly realise that will do for me because from previous experience you know that you have got your limitations... things that happened earlier in your life they are not such a problem now are they."

P13 FG6 M50+

Both P3 and P13 stipulate that they have changed their appraisal of stress, and have adopted a 'laid-back attitude to stress'. Consequently what may have stressed them out in the past and elicited certain reactions (i.e. physically, behaviourally, and psychologically) may not necessarily do so now, due to their altered appraisal processes, coping processes, and life stage. This subordinate theme elucidates the central role of cognition in stress perception and management. In addition the following super-ordinate theme shall explore in greater detail how participants utilised various coping strategies, and their motivations behind their actions.

"As I've got older it's become less and less ... you learn to live with it (stress), and you just carry on regardless… I've got this more laid-back attitude towards it (stress). I suppose stress levels have gone down a little bit as you get older as well, but… I've become even more laid-back to stress because of what's happened in the past, and there's not really a lot you can do about things so why start getting worried and making yourself ill over it"

P3 FG2 M30-49

3. <u>Coping Skills</u>

Throughout the dataset, it emerged that participants' were using various coping skills to handle their stress levels. P16 states that the coping skills accessible and utilised by people are variable, and can affect how they experience and cope with stress, which is further mediated by non-stressed and stressed states.

"Some people can't deal with stress but people can handle it very well... but at the time you are stressed it is very hard."

P16 FG6 M50+

Some of the coping skills utilised by the participants were effective and adaptive, compared to others which were maladaptive and posed a long-term risk to the participants' health and wellbeing. These shall be explored in detail below.

Maladaptive

Participants disclosed instances where their lifestyles (i.e. smoking tobacco or cannabis, alcohol consumption and diet) were often affected by perceived stress. For example some may have increased or reduced their food consumption in their attempt to cope with the stressful experience. The following accounts explore participants' maladaptive coping skills which appear to offer stress relief, as well as elucidate the strategies participants used in their attempt to justify their negative coping patterns. Some stated changes in alcohol consumption as a response to stress, in that they increased the rate of their alcohol consumption.

"When I'm more stressed… I do drink perhaps more regularly… If you're in that kind of frame of mind. Not lots, just very small amounts, but on more regular occasions."

P9 FG4 M18-29

As evidenced in P9's quote, participants perceived the amount to not be excessive. However current research (Kanapathy, 2010) has exemplified that residents in South West Essex tend to underestimate their alcohol consumption, suggesting a mismatch in perceived and actual alcohol consumption.

Thus stress can often act as a precursor for increased alcohol consumption and is a maladaptive coping style for stress management (Kanapathy, 2010). However P11's quote exemplifies that alcohol is seen as an agent, which can augment confidence

levels, thus resulting in increased alcohol consumption when she is stressed. It also highlights that P11 associates stress with decreased confidence and feelings of insecurity through her terminology of 'false-confidence' and 'face the world'. Interestingly she seeks confirmation from other participants, possibly as a means to justify her perception and coping response by using the statement 'doesn't it'.

"when you're feeling less confident, that can be something (alcohol) that can increase… it gives you a false sense of confidence, doesn't it? It makes you feel as if you're a bit more able to face the world… stress can affect my alcohol consumption."

P11 FG5 F30-49

Whereas two participants disclosed that they used cannabis as a form of stress management as it acted as a relaxant which provides relief from their stress, as it 'calms everything down', suggesting that their experience of stress is perceived as chaotic or disorganised. P1 states that 'nothing matters any more' suggesting that she uses escapism as a dissociative coping style, and that cannabis provides her with this sensation. Despite P10's awareness regarding the associated risks of mental illness and cannabis smoking, it appears to be a core coping strategy for both P10 and P1, as they use several strategies to validate their employment of this coping method.

Both participants compared alcohol consumption to cannabis smoking, implying that cannabis does not promote violence compared to alcohol. They seem to use this statement as a means to validate their behaviour, as well as illustrating that such myths can drive this maladaptive coping behaviour. P1 even promotes the use of cannabis as a global stress management strategy, as she finds it to be effective for stress management. However this advocacy could also act as a strategy to normalise her maladaptive coping behaviour, and once again serving as a validation tool. This

speculative hypothesis is further reinforced through P1's attempts to underrate and minimise the negative use of cannabis ('not anything like that (class A drugs), just weed').

"…it (cannabis) does calm you down. If I get really stressed and I have a beer… it winds me down, same with a joint… you don't get any violent people smoking weed, they don't get violent. Alcohol causes violence. It's just mental health problems with that (cannabis). When I've been stressed, I have smoked a joint… Because it just calms me down… it mellows you out. You aren't going to get irate so much because you're totally chilled out."

P10 FG4 M18-29

"I manage my stress through drugs… it is the only way I can do it... not anything like that, just weed… if I didn't have that then I think I'd be proper off the rails. That's how I manage my stress. You feel like nothing matters any more… you can't really explain it unless you take it really. It doesn't numb you out; you know what you're doing. It just calms everything down. I actually think that it would be useful for other people as well… but you see drunks going round starting fights, do you see stoners going round doing it?"

P1 FG1 F18-29

Interestingly P10 had previously disclosed that he often become verbally aggressive when he is under high levels of stress. In the quote above P10 states that smoking cannabis prevents this 'irate' stress response. Similarly P1 suggests that without this form of coping that she would 'off the rails'. It is therefore apparent that smoking cannabis is used as a preventative measure to minimise and gain perceived control over the negative stress experience that P10 and P1 undergo.

Smoking tobacco was often reported as a key coping strategy for the majority of participants regardless of age and gender. Stress was identified as precursor for smoking behaviours, in that some reported an increase in the number of cigarettes smoked, as well as a main cause for smoking cessation relapse. P15 had successfully quit smoking for eight months, but relapsed due to a major stressor, where he experienced the loss of his sibling. It appears that the loss of his last surviving sibling signified a loss of control in his ability to deal with this stress, as well as his smoking cessation attempt.

"Get a bit stressed and away I go again and start smoking again… I stopped for eight months… I am the only left out of eight of us my brothers and sisters. After eight months packing in smoking as soon as I lost my last one I started smoking again."

P15 FG6 M50+

P5's reflective and retrospective account validates excessive tobacco smoking and alcohol consumption as a form of coping with stress. However he describes such coping strategies as a means of providing 'comfort' for those under stress.

"I don't smoke anymore but I have done in the past… under stress you do find yourself sometimes smoking or drinking more as a sort of comfort"

P5 FG2 M-30-49

P4 suggests that stress-related smoking is commonplace, by using affirmative statements such 'you know for a fact…' and 'that's the way it is'. He depicts particular situations within the workplace where stress can be generated, and how opportunities are sought in order to have a cigarette. He suggests that there are certain cultures (i.e. with the workplace) where smoking as a coping mechanism is normal, as 'it's the way it

is', generalising and almost attempting to justify such stress-smoking behaviours. It also implies that if smoking is used as a coping mechanism by others, it could be an acquired coping strategy through vicarious learning.

"you know for a fact, especially if you work… you're waiting for the break, you're waiting for lunch, you're waiting for home ... so you can have a quick fag, that's the way it is ... you get a phone call from your boss or someone who's irate… the first thing you do is you put the phone down and then you just light up, you know, people do that, it's the way it is"

P4 FG2 M30-49

A quarter of the sample reported overeating as a consequence of stress. P6 recognised that her stress-related excessive eating patterns had resulted in incremental weight gain, and that this coping mechanism is 'detrimental' to her health. She describes how she feels powerless to alter this coping skill when stressed, as she struggles to exercise self-control. Similarly P12 reflects on her experiences where she uses overeating as a coping strategy. However P12 seems to have a repertoire of coping skills, as she depicts a hierarchy-like structure where she relies on food consumption as a primary coping strategy, in contrast to her alternative subordinate coping strategies (i.e. alcohol consumption).

"I'd eat and eat and eat… when stress starts to have a detrimental effect on me…it shows itself in me that I over eat… I put on an awful lot of weight because I have had an awful lot of stress in the last few years"

P6 FG3 F50+

"under high levels of stress I usually reach for the fridge before I reach for the alcohol."

P12 FG5 F30-49

In contrast to those accounts of over-eating, P7 disclosed that she in fact struggles to eat when stressed. She depicts a struggle to actually 'swallow' her food, rather than a lack of appetite.

"I'd chew it over and over … I couldn't get it passed here… couldn't swallow it."

P7 FG3 F50+

The maladaptive nature of these negative coping behaviours is evidenced in P14's account, as the detrimental nature of these addictive behaviours pose a significant risk to the 58 year old diabetic male. Despite P14's frustration regarding his inability to complete daily tasks due to his health problems, he engages in risky maladaptive coping strategies, such excessive smoking and consumption of sugary and fatty foods, such as chocolate, which pose a greater risk to his health status.

"A certain type of food can relax you. Chocolate for me… but my smoking too goes up… I used to smoke about eight or ten fags a day, it has gone up to 20 or 25 now with the stress."

P14 FG6 M50+

P14 stated that he often experienced fluctuations in his energy levels and his blood glucose levels, when he reflected on his physical experiences of stress. However further exploration, and the evidence provided in the selected quote, implies that his maladaptive coping strategies may play role in his physical experience of stress.

In summary, the evidence reviewed so far in this subordinate theme, has shown that participants use a range of maladaptive coping strategies. However detailed interpretation and exploration has shed light on how participants perceive their engagement with their maladaptive coping. A number of discursive tools or strategies are used to validate their coping behaviours. For example comparative accounts are used, as well as the use of generalised statements. Hence it appears that some participants are aware of the negative impact their maladaptive coping may have on their health and well-being, but yet they continue to employ existing strategies. It may be that these participants have a limited coping repertoire, or that these strategies offer restoration of a hedonic balance.

Adaptive

Participates employed a range of adaptive coping strategies to deal with their stress experiences. For example some used physical activities such as walking and exercise, and some employed cognitive strategies such as acceptance of the stressor. As mentioned in the previous subordinate theme, participants had a number of underlying motivations and subjective connotations attached to the strategies employed.

Exercise and disclosure were often used as forms of cathartic release. For instance, several participants stated that disclosure was an effective way of coping with their stress. P14, P11 and P2 described disclosure as an act of removing the stress from within, and a form of release/outlet. Participants recognised that it is a sensitive matter, and that rapport and trust is integral to facilitate this form of release.

"You have to get it out in the air"

P14 FG6 M50+

"…actually being able to voice it, just put it out there… There's a lot to be said for that, just being able to talk it through with somebody."

P11 FG5 F30-49

P9, a 24 year old male specifies that disclosure is important as it creates shared understanding which facilitates a 'better tolerance', within ones social network. Despite his positive experience of disclosure, he emphasises that the topic or nature of stress and the recipient of the disclosure is paramount to whether this coping strategy is employed. Once again reinforcing that disclosure is a very personal and sensitive act, especially when associated with stress.

"When I talked about it with my partner, she's more understanding… that's not to say if I had stress in the future I wouldn't keep it to myself, depending on what it is. You need people around you to get involved, they can help… they know you better"

P9 FG4 M18-29

Whereas P10, a 20 year old male believes that formal disclosure with an external agent is more beneficial as he perceives it as an 'unbiased' resource. He stipulates that he would definitely use disclosure as stress relief due to its cathartic nature. P10 almost provides a physical embodiment in his description of stress, in that stress has the ability to irritate and seek refuge within one's head.

"…it could be a major stress, or something bugging you…it's just sitting around in your head and you just need to talk to someone about it… it's good to talk to someone else. That you don't know… they can't be biased."

P10 FG4 M18-19

"I relieve my stress through sports… you can tell when I'm playing, if I've had a stressful week… the attacker notices it…I get in the zone, and completely forget about all that's going on around me… you get in a little bubble ."

P9 FG4 M18-29

Exercise appears to provide a medium to vent any stress-related anger or frustration for P9. However it appears that he uses this form of physical activity as a temporary form of escape or dissociation to the stressor, as he 'completely forgets about what is going on around' him. Despite this, he acknowledges that this form of stress management only provides 'short-term' relief, and that disclosure/discussion about the stressor provides 'long-term' relief, as it provides a medium for 'problem solving' rather than escapism.

P13 similarly expresses that walking provides an opportunity for him and his wife to talk about any stress they may have, which allows them to find solutions or strategies to deal with their stress. However it also reinforces the social nature of such activities, hence engagement in exercise or activities can provide a platform for social support, as further asserted by P10.

"I do a lot of walking… I find it is great…depressurising… it is fantastic and luckily for me my wife loves walking, so we can do something together. We sort out problems while

we are walking along… We have full bloody rows but it does clear the air, it is really fantastic."

P13 FG6 M50+

"Physical activities… I think help. It doesn't have to be like major physical activities… Even like darts, pool, anything like that… the social ones…"

P10 FG4 M18-19

Alternatively active coping strategies were found to be efficacious by some as it provided a sense of control over their stress response/experience. P10 a 24 year old male states that being active prohibits reactive responses to stress, as physical activity can act as a distraction, or a preventative mechanism which reduces negative feelings such as helplessness, as he feels that he can exercise control over his stress by 'doing something'.

"…you've got stress that's building up… if you're doing something to help your stress you are less likely to get depressed… you actually feel like you're doing something and you feel like something's happening to get you out of that rut that you're in"

P1 FG4 M18-29

As previously explored the women aged between 30-49 years, often identified excessive demands as their main stressor, as they often had to manage and juggle multiple demands within the workplace and household. P11's account sheds more light on this juggling act, as she has to 'allow' herself 'me' time in order to use exercise as a form of coping. Clearly she benefits from the various exercise activities which she engages in, hence she feels more motivated to accommodate for her 'me' time. She

expresses the specific benefits associated with yoga and kickboxing, with regards to her ability to cope with the different 'loads of stress' (i.e. relaxation and venting of anger).

"…it comes down allowing me time and saying, this is for me and I'm going to do something that benefits me, which is not so easy time wise... But it is one of the things that is pretty important… rather than just getting on and carrying on with doing things, you actually have to give yourself time … So going to yoga… learning how to breathe and relaxation techniques and these kind of things which are just so beneficial when you know that you are prone to getting depressed and getting stressed. So that was a great help.

I also go kickboxing which gets out another load of the stress… you can get out the anger and everything, you've got a bag there and you get out the anger there… A lot of it's trying to find a way out for the stress"

P11 FG5 F30-49

Distance from the stressor was also important for some participants, whether it be by having 'five minutes' away from the stressor. P3 states that distance from the stressor can almost provide a state of relaxation, which can be beneficial when returning to the stress/or, as it can alter concentration levels (previously discussed), which he defines as a 'better frame off mind'. Whereas P11 states that distance permits her to reflect on her altered behaviour, which can be triggered by stress, permitting 'self-analysis'. This increases her awareness regarding her reaction to stress, enabling her to react differently under stress, as she can employ alternative coping styles; reinforcing the behavioural experience of stress, whereby participants described transient cognitive deficits when exposed to stress.

"If I feel stressed I take five minutes… have a walk, take the dog out… go and calm down… or go out for a drive and just try and relax rather than continue on that level… if I'm at work I go off and have a cup of tea or something. It's having a rest from it… you're distancing yourself... you're switching off from what you were doing so you can relax, and then get back to it in a better frame of mind."

P3 FG2 M30-49

"P11: It's learning how to self analyse… keeping an idea of what the triggers…you start to realise, this is what I get like when I'm stressed, this is what happens to me. There's just like lots of little tell tale signs, just take a step back... self analyse.

Int: Do you find when you do that it helps you, when you take a step back?

P11: Definitely. Sometimes it's sort of like if you don't do it in time it can just kind of erupt a little bit.

P12: I don't very often manage to do that. I usually lose it and then worry, and start analysing it afterwards. Quite often I will lose it and then regret it afterwards."

P11+ P12 FG5 F30-49

P12's statement above and P9's quote below emphasise the importance of distance and distraction, in light of their behavioural stress response. P9 uses affirmative statements such as '...if you can't have that moment stress builds up'; once again suggesting that there is a certain threshold or degree of tolerance towards stress.

"It's opportunities to escape from your problems…you have to have things that take your mind off of it. If you can't have that moment stress builds up… it is constant pressure without relief."

P9 FG4 M18-29

Distance acts as a method of coping with stress, whether it is as a form of distraction, escapism, or reflection. In spite of this observation, some participants outlined a contrasting coping mechanism in which they embraced their stress through acceptance.

P6 identifies that in the past she used avoidance strategies, whereby she may have ignored her stresses. She now perceives herself to be stronger, as a result of her past hardships and life-experiences (i.e. family turmoil and her experience of cancer). Consequently she seems to now utilise a very different coping style, where she accepts the existence of the stressor, and is proactive in her response, as must not be defeated by it ('you've got to try').

"I've got to feel that I'm doing everything I can to deal with it… it's no good going in a corner curling up… like I did when I first found out what my husband did… I think you've got to try."

P6 FG3 F50+

P4 outlines a proactive attitude towards his stress, in that he accepts the demands that may be placed on him, and would rather focus on the task and successfully complete it, rather than not dealing with it. However in his attempt to do this he secludes others, and becomes isolated in this 'distraction-free' environment he attempts to create. Thus, he becomes the locus of control in his experience of stress, as he believes that only he can solve the stress as there is no other 'remedy', apart from accepting the stress, and being active in coping with it. It should be noted that this dichotomous thinking pattern could also become maladaptive if P4 was to continue in this isolated state of being. Furthermore, it appears that this form of coping ('you have to do it

yourself') could minimise the potential relief or support that could be retrieved or provided from a social support networks.

"...my attitude changes 'cos I don't want anybody bothering me. I want to be left alone to get on and do what's got to be done…they say 'you sound stressed', they won't give you a remedy, 'cos there is none, you have to do it yourself, get it done... that's the only way to de-stress."

P4 FG2 M30-49

Evidently in the accounts discussed, the participants seem to be proactive in coping with their stress, and accepting the demands associated with their stress. However, P6 also uses acceptance, in a way of acknowledging that she cannot always try and satisfy the demands that can be associated with stress ('I can't change what anybody else is or what anybody else does'). So here she uses acceptance as a form of acknowledgment aiding her re-interpretation, externalising the locus of control, and accepting that she had no control over the events ('that's helped me a lot recently sort of coming to terms with that'), thus employing acceptance as a way of embracing her limited control over the events, and exemplifying psychological resilience and mindfulness.

"I can't change the way anybody else is or what anybody else does, I can only change what I am and what I do if I feel I need to... that's helped me a lot recently sort of coming to terms with that ... but there's no point in trying to get myself ... allowing myself to get wound-up about it because that doesn't help me or anybody else."

P6 FG3 F50+

4. Stress Perception

This theme frequently emerged across the data set, as participants often described instances where their experience of stress was sometimes not noticed or taken seriously by others, which was a either due to ignorance, or skewed beliefs associated with stress. The three subordinate themes of stigma, weakness, and raise awareness were identified. These are evidenced below.

Stigma

Despite the majority of participants stating that stress disclosure was useful, P11 and P12 both described negative experiences as a result of their stress disclosure. They were often made to feel that they should not talk about 'it', or that it is their problem to solve; internalising the locus of control to the individual, and deflecting the responsibility to the individual suffering with stress. This negative attitude experienced by P12, had an overwhelming effect on her confidence, exemplifying the negative affect that stigma can stimulate.

P11 suggests that the negative approach to stress is often associated with stigma, lack of understanding and empathy. Many felt that the signs of stress are not always physically visible, compared to that of a physical wound, which is why some people may not be aware of stress and its symptoms; eliciting skewed views regarding stress. However P11 emphasises that her experiences of stress are extremely 'debilitating', reinforcing the severity the stress experience.

"P11: …you're not allowed to talk about it. We're aware of it but it is taboo.

P12: 'It's not important, get over it. Pull yourself together'… I've been told 'Look at you. You're pathetic. You need to get help' …it was detrimental to my confidence.

P11: It's down to education… people not understanding how debilitating it can be... it's easy to see with a physical illness what is wrong or the symptoms… But when it's mental, stress or depression it is not so apparent. People don't know so much about it all"

P11+P12 FG5 F30-49

In spite of the participants' expressed need for stress management assistance, the stigma of mental illness and stress would be enough to deter their search and uptake for stress management assistance. For example P6, a retired psychiatric nurse openly stated that the location of stress management services would be pivotal in whether she would access stress management services, despite her experience as psychiatric nurse. She communicates that going to the GP would be seen as acceptable, compared to a mental health hospital/unit. This reinforces that mental health and stress is often associated with stigma, and individuals are afraid to be labelled due to the associated negative conations of weakness.

"...somewhere where people wouldn't have to think about a stigma… If you're seen going into the GP centre nobody's going to think anything of it, however if someone sees you walking into the mental health unit at the local hospital or ... you know people…It needs to be a place where people could go that wouldn't have a label, a stigma to it"

P6 FG3 F50+

Whereas some participants suggested that the stigma associated with stress could be attributed to the incorrect use of the term 'stress'. P11 and P7 state that it is used as a scapegoat, or used too readily to label particular events or scenarios; exposing the issues related to the subjective nature of stress. P11 stipulates that stress is hard to quantify and identify, compared to physical illness, making it easier for others to misuse the term stress, as well as making it harder for others to really appreciate the true reality of stress and it's lived experience.

"Stress is talked about more now and I think some people use it wrongly and blame certain things on stress and its not stress at all… the word stress is used too often for too minor things."

P7 FG3 F50+

"You can't prove it in the same way compared to something physical…if it's mental it's not always apparent. I don't know to how much of a degree some people milk (misuse) that, I think that people do that (misuse) a lot more"

P11 FG5 F30-49

Weakness

Participants disclosed that they perceived stress as a weakness, and that other individuals also held this perception; consequently affecting their experience of stress. P2 stated that she became more stressed when her family could identify that she was stressed. The fact that this recognition elicited further unease suggests that she may perceive stress as a form of weakness, and this recognition added to her low self-esteem, which was already a concern for P2; further heightening her stress levels.

Whereas P6 believed that 'society' viewed stress disclosure as a weakness. The 55 year old indicated that she was 'brought up in a society where you don't talk about that'. Hence her role and beliefs as a wife, mother and grandmother, dictated that any form of stress disclosure would be seen as weakness, as it would be perceived as a failure or inability to cope with her duties. Consequently she describes how she was deterred from seeking help and guidance when she suffered with stress, due to these deeply internalised beliefs regarding stress disclosure as a form of weakness.

As previously evidenced, disclosure was an effective form of stress management, but as such an act is also seen as a form of weakness, this negative connation potentially undermines the cathartic value disclosure has to offer.

"…people see it as a weakness if you talk about that… Don't wash your dirty linen in public… people will think that you're weak and feeble… I didn't want to admit it because it seemed like admitting weakness… I was a psychiatric nurse and I should have known better… I can't be suffering from that, I can't be stressed or depressed… within my profession there was a lot of stigma… people see it as a real sign of weakness to admit that they're stressed and that they need time out."

P6 FG3 F50+

In addition, the perception of stress as weakness was identified as another factor which could determine whether one would access services or information on stress management. P11 stated that she may not necessarily seek information (i.e. leaflet on stress) in a public setting, as she would be concerned about others' views or opinions. Despite this P12 asserts that she would not be concerned, regardless of stigma or being labelled as weak, and that she would openly seek advice, as she is obviously struggling with her stress, and management of it.

P12: It wouldn't worry me to pick up a stress leaflet in front of anybody else. I don't care who knows just as long as somebody helps me, to be honest.

P11: …I would stop if I had to pick it up in front of other people.

P11 + P12 FG5 F30-49

Raise Awareness

As discussed so far, participants have experienced stigmatisation as a result of stress disclosure. Evidently participants felt that stigma for stress could be challenged, if stress awareness could be raised, in schools, workplaces, etc. It was also felt that increased awareness may also assist individuals in becoming more aware of their own stress levels; as many struggled to do this.

" people need to be more educated about stress... what it is… I think the first time that I realised that I was stressed... it took me a very long time to realise it and I think other people saw it in me first"

P6 FG3 F50+

It was also suggested that it was important to raise awareness on how stress can impact health, as awareness on this is quite low in some cases. P6 actually suggested that physical health would act as a mechanism, to raise awareness on stress, as people may not attenuate to information on stress/mental health due to their stress perception (i.e. stigma, weakness, etc.); hence she states that they may be more inclined to review material on other physical conditions, which could in fact be affected by stress.

"…people don't realise it is stress but if they had a sign that said 'Do you have hypertension, heart disease and then could stress be a contributory factor?' When people see the sign stress they don't want to look at that but if they see a sign that's got physical conditions people are more willing to look at that…"

P6 FG3 F50+

In fact, it was also suggested that pharmacists could take advantage of this mechanism when conducting medicine reviews for health conditions which can be affected by stress (i.e. hypertension, palpitations, IBS, smoking, alcohol consumption, etc.). As participants felt that the increased awareness on this association could potentially prompt action for stress management. Pharmacists were perceived as a key 'healthcare provider'.

"it would be good for pharmacists to be trained about that (stress) and to talk to people who are coming in who... having medication for physical conditions where stress could be a contributory factor because if people can manage their stress levels better their physical condition might improve and the need for medication might be reduced."

P6 FG3 F50+

5. Experience of Talking to Healthcare Professionals About Stress

A frequently emerging super-ordinate theme was participants' experiences of talking to healthcare professionals about stress, and the stress-depression connection. These experiences were varied and their views on stress management were often influenced as a result. Four subordinate themes were identified: screening process, pill culture: the need for alternatives, the blurred distinction between stress and depression, and expectations of healthcare providers. These are discussed as follows.

Screening Process

For some participants their experience of stress had caused significant differences in their wellbeing (e.g. physiologically or psychologically), prompting assistance from healthcare professionals such as general practitioners (GPs). In some cases participants had experienced the administration of screening tools by GPs, to assess depression or stress, whereas others had not been screened at all.

P6 describes her experience in which her excessive weight gain (caused by her maladaptive coping pattern towards stress - overeating), raised concerns about her mental welfare. Hence she was given a screening questionnaire to assess if she was depressed. However this was not followed up, highlighting her concerns as an individual, as well as a retired psychiatric nurse, regarding the screening process for such mental health issues. In addition, P6 suggests that assistance should be given for completing the screening questionnaires for lay persons, as perceives them to be complicated.

"…I said I'm stressed, she gave me a form assessing if I was depressed… she asked me to fill it in and take it back, I never took it back and nobody's followed that up… what if I had needed help I wouldn't have got it… if I was severely depressed and having suicidal thoughts I could be dead… because nobody's followed it up."

P6 FG3 F50+

P6's account also reinforces that she perceives her GP as the agent of control and authority in her medical assessment, as she believes that it is the GPs responsibility to follow up the assessment and the status of her wellbeing.

In spite of this experience P12, felt that her GP conducted the screening questionnaire in manner that she deemed adequate; exemplifying the variability associated with the screening process. But it also raises concerns as most of the participants reported stress as their primary concern to their GP, but are given screening tools for depression, rather than stress. However it must be acknowledged that generalisations cannot be made from this finding due to the small sample.

Pill-Culture: The Need for Alternatives

It became apparent that participants felt that their GP too readily offered medication as a form stress management, whether it be for depression, anxiety, or other physical health conditions. Participants often reported stress or their inability to cope, as their primary purpose for seeking advice from their GP; and too often they were put on antidepressants, regardless of whether they were depressed or not, as evidenced in P14's following quote.

P14 stressed earlier that he was dependant on a vast number of pharmaceutical medications due to his health status, and that this was a major concern for him as he is 'only 58'. Despite this his GP prescribed him anxiety medication, rather than offering other forms of treatment such as stress management or counselling. The vast majority of the sample reported similar concerns, and desperately wanted their GPs to offer other alternatives (i.e. massage), rather than promoting dependency on medication such as antidepressants.

"I told him I couldn't go to sleep and I was worried about things. The pill was for anxiety. My doctor is a great believer in a pill. I am on 22 tablets a day."

P14 FG6 M50+

P4 believed that GPs too readily 'group' stress and depression together, promoting this pill culture for stress. This accentuates the need for adequate screening procedures. Interestingly P4 does not perceive stress as an illness, therefore he expresses the need for alternative stress management strategies, rather than 'pills'; opposing the bio-medical model promoted by some healthcare professionals such as GPs. Despite this P11 was impressed with her GP, who listened to her needs and suggested alternative methods for stress management.

"Doctors group it into one (depression and stress). You go to the doctor for stress or depression; you know for a fact they'll say 'we can give you some pills'. I'd much rather they say… there's an activity group… Why do you have to go to the doctor because you're stressed? …doctor's is being ill… I don't feel ill, I feel stressed out."

P4 FG2 M30-49

"…too readily I was offered tablets… I'd been on them for a while, I kept going back to the doctor, he was aware that I was trying to find other ways. I was quite impressed with what he suggested which was deep breathing and different things…"

P11 FG5 F30-49

P4 goes on to advocate the use of massage as an alternative treatment for stress management rather than medication. He reflects on his personal experiences, where he often has extreme muscle tension as a result of stress. He describes massage as an

effective medium to release this tension and stress; further reinforcing the participants' perceived need for alternative stress management strategies.

"The next day you feel like you're walking on air. They're sort of killing whatever's in your back… the next day you're brilliant… Its options, and sometimes you don't get that from the doctor. "

P4 FG2 M30-49

It was also felt that the administration of medication for stress was inappropriate, as it was believed to mask the effects of stress, but not necessarily assisting the individual to solve their stress; which would offer long-term and grounded relief. Interestingly participants had earlier contrasted the benefits of disclosure for long-term stress relief, and consequently felt that disclosure would offer better stress relief compared to medication.

"It's not sorting out the problem, is it? It is a matter of sorting out the problem... dealing with the root of the problem... talking to someone, a professional about your stress, rather than there's a pill for that."

P3 FG2 M30-49

Some of the participants felt that both the public and healthcare professionals need to be made aware of the alternative treatments and services available for stress management. P11 believed that an increased awareness of alternative treatments and services could facilitate more referrals to stress management services; potentially reducing the number of antidepressants prescribed by G.P.s for stress. However P13 reinforces the need for stress management benefits to be highlighted, to aid the uptake of alternative treatments by the public. As some individuals may prefer, or only

be familiar with the pill-culture, as some are more inclined to take medication rather than consider alternatives, as stated in P6's quote. She draws on her experience as a psychiatric nurse.

"Well all sorts of methods would be advisable... but it is a matter of people realising the benefits, getting through to them."

P13 FG6 M50+

"Actually having those professionals knowing about the services so they can say we've got this particular whatever that runs..."

P11 FG5 F30-49

"If people are stressed and they start to get problems with their blood pressure or palpitations... they would be more willing to go along and see their GP and get some tablets for their blood pressure than they would to go along for counselling to maybe bring it down naturally."

P6 FG3 F50+

It is evident that the participants desire alternative stress management treatments. But for some participants their inability to cope with stress, and the overwhelming experience of the physical, psychological and behavioural effects of stress, meant that they desperately sought for a 'cure' or an 'answer', exemplifying their quest for effective stress management strategies or solutions.

"Int: Do you think stress can be managed?

I haven't managed to manage mine as yet, despite medication. I would like to think so… there must be an answer somewhere."

P12 FG F30-49

Despite this it should be noted that some participants had successfully managed to independently identify effective stress management strategies, as evidenced in the adaptive coping skills super-ordinate theme. This illuminates the varied lived experience of stress and stress management, as explored in this study.

The blurred distinction between stress and depression

As mentioned in the previous subordinate theme, the distinction between stress and depression were often 'blurred', as the two conditions were 'grouped together' consequently resulting in participants being prescribed antidepressants for stress. However the participants themselves felt that there was a clear distinction between stress and depression. P2 is able recognise the difference between his stress levels, and his friend's depression, and was angered that his GP certified his leave from work with 'stress/depression'; despite communicating stress as his primary concern for the consultation.

"I've been to the doctor's... oh you're a bit stressed, yeah, I'll sign you off, so they give you a certificate. And it's never stress; it's normally stress/depression they sign you off with… I know several people who suffer with chronic clinical depression and actual bipolar disorder, stress is not that. I suppose stress can lead to depression…But I think there is a distinction between the two"

P4 FG2 M30-49

Participants' perceived stress as a precursor for depression, as accumulation of stress, resulting in chronic stress, can increase ones susceptibility for depression. P10's experience of depression enables him to make the distinction between stress and depression, as well as identify the role of stress in the development of depression.

"…a build-up of stress, and you haven't managed to get over it yourself, in your own head… that can cause depression because it's leading on to the next day and the next… you're stuck in a rut… I was having a bad time. It was depression not stress."

P10 FG4 M18-29

Despite the participants' ability to make distinctions between their own states of depression and stress, P12's account below raises some concerns, as she perceives herself to be stressed and not depressed, in spite of the fact that she clearly is reliant on antidepressants. Her non-adherence affects her ability to manage her state of wellbeing and behavioural responses.

"I burst into tears. I had to make the appointment because I was taking it out on the children and I couldn't control it. Every now and again I try to do without tablets… it just all gets on top of me again."

P12 FG5 F30-49

It is therefore evident that there is a distinction between stress and depression, and participants' experiences allow them to make this informed judgement. But clearly for some individuals like P12, there seems to be a biased distinction, causing a mismatch in their perceived and actual state of wellbeing. This increases the potential for participants to incorrectly self-diagnose, reinforcing the importance of appropriate screening.

Expectations of Healthcare Providers

Participants felt that a lot of emphasis was placed on physical health compared to mental health. Often participants described health as a balancing act between mental and physical health, and that ill health in either domain, can potentially affect the other as stipulated in P9's account below. Consequently participants felt that the inclusion of stress management services would be efficacious, in light of the limited resources for mental health (e.g. compared to smoking cessation services), as well playing a preventative role in holistic wellbeing, hence they felt there needed to be greater focus on stress management services.

" poor health in one area can lead to poor health in the other area… around here there's lot of information available for physical health and quitting smoking… you tend not to see as much around in terms of mental health."

P9 FG4 M18-29

"If you've got a problem and you want to give up smoking you can get a number for it…it's all a bit wishy-washy when it comes to stress and depression. I think physical health tends to be more recognised than mental health"

P12 FG5 F30-49

P4 also suggests that stress management services could play a role in preventative health initiatives, as stress can drive smoking behaviour and, or initiate old smoking habits in those that may have ceased smoking, further reinforcing the role of stress management in preventative healthcare.

"…wellbeing is not only just the physical element but also the mental element to that…it's not only the stop smoking but it's also stress. I mean a lot of people who wish to stop smoking may get very stressed out…"

P4 FG2 M30-49

Some participants' had experience of either requesting or being referred to counselling services. However they felt that such requests or allocation to services were dependant on their GPs consultation skills (i.e. listening skills) and consultation time allocation. Many postulated that the process in seeking and receiving advice should be simplified and more direct, as some had experienced long waiting times for counselling services, for example.

"…you get a 10 minute slot (GP appointment), they don't have the time to talk to you, they just refer you… there's a big waiting list… you should be able to refer yourself… depending on the doctor, they don't always listen or understand you."

P2 FG1 F18-29

Therefore participants' proposed that self-referral would be most beneficial, in ensuring quick and tailored assistance for their stress management. As well as asserting the importance of receiving help, at the right time.

CHAPTER THREE: STUDY 2

A QUALITATIVE EXPLORATION OF HEALTHCARE PROFESSIONALS' LIVED EXPERIENCES OF PATIENT REPORTED STRESS

4.0 Introduction

In the previous chapter, the lived experiences of stress and stress management were explored in a sample of sixteen participants, who perceived themselves to be highly stressed. A semi-structured question list was employed as part of a qualitative methodology, and the data generated from the six mini-focus groups was analysed by a thematic phenomenological perspective.

Six super-ordinate themes were identified. These themes highlighted how the participants experienced stress and made sense of their experiences. The accounts revealed that stress affected the participants' behaviour and health outcomes. For example, many of the participants described physiological changes (i.e. heart palpitations, fluctuations in blood glucose levels, muscle tension, etc.), psychological changes (i.e. feelings of anger and rage, increase in OCD symptomology), and behavioural changes (i.e. negative smoking behaviour – increase/cessation relapse, changes in diet, and increased alcohol consumption) (Goodrick, Kneuper, & Steinbauer, 2005).

Due to the varying degrees of stress severity, some participants had sought advice from healthcare professionals and, or engaged in various forms stress management (i.e. exercise, stress disclosure, and addictive behaviours). Further investigation revealed, that the participants had certain expectations from their stress-related consultations,

and that there was a lack of concordance between the participants and their HCPs regarding their stress diagnosis and stress management treatments. This was a novel and unexpected topic, which emerged from the qualitative data set.

With the increasing prevalence of stress-related conditions, HCPs are being exposed to patient reported stress on a frequent basis (Goodrick et al., 2005). The effects of stress on health outcomes and behaviour are well documented and evidenced, as illustrated in chapter one and the results section for study one. Yet very little is known about how patient-reported stress influences HCPs and their professional practice. What are their experiences of patient-reported stress, and their views on stress and stress management?

Thus from a health perspective, stress appears to pose a fundamental concern for both public health and health improvement sectors in the NHS, as it not only influences patients' wellbeing, it also places additional demands on front line healthcare providers in their professional practice (Goodrick et al., 2005). Hence, study two proposes to explore healthcare professionals' experiences of patient reported stress through a qualitative methodology. The following section shall provide an overview of the existing evidence regarding healthcare professionals' experiences of patient consultations and an outline of the research aims for study two.

Literature Review

4.1 Patient-Healthcare Professional Communication

Communication consists of many modes (i.e. verbal and non-verbal) and mediums (i.e. face-to-face, telephone, email, etc.). It is a central component in human interaction. Through communication humans can express their needs, feelings, and dissatisfaction; hence communication is essential and it is one of the most complex activities that humans engage in.

Health communication is one of the most important forms of communication as it concerns issues of crucial importance (Ong, DeHaes, Hoos, & Lammes, 1995), such as expression of discomfort and symptomology. Thus health communication often dictates the diagnosis and treatment options identified by the health care professional.

Over the years, there has been significant interest in the communication processes between healthcare professionals (HCP) and patients. The distinction between patient-centred and doctor-patient centred communication has been explored extensively (Talen, Muller-Held, Eshleman, & Stephens, 2011). Studies have shown that the quality of care often depends on good patient-HCP communication (Bensing, 1991; Flocke, 1997; Campbell, Roland, & Buetow, 2000; Stewart, Brown, Donner, McWhinney, Oates, Weston, & Jordan, 2000).

Health communication which incorporates attentive listening (e.g. summarising and paraphrasing), attentiveness to patient's emotion, nonverbal engagement (Silverman & Kinnersley, 2010), and shared decision making have been identified as key components for best practice in doctor-patient communication (Kaba & Sooriakumaran, 2007; Gao,

Burke, Somkin, & Pasick, 2009). Bensing (2000) states that listening to the patients' stories; learning about patients' needs and preferences is an essential part of patient-centred medicine. In addition, studies have shown affective forms of communication, such as empathy and sensitivity, are useful in facilitating greater rapport and improvements in communication between the patient and the HCP, and patient outcomes (Arora, 2003; Platt & Keating, 2007).

Bartlett and colleagues (1984) found that higher ratings of patient-HCP communication were related to increased patient compliance and greater recall of the doctor's recommendations. Effective HCP–patient communication leads to improved patient outcomes (Mumford, Schlesinger, & Glass, 1982; Greenfield, Kaplan, Ware, Yano, & Frank, 1988) and patient satisfaction (Thompson, Nanni, & Schwankovsky, 1990). Consequently, HCPs are advised to involve patients in treatment-related decisions (Sutton, 2011).

However, some researchers have proposed that greater focus should be placed on patients' communication skills, rather than HCPs, as the success of health communication is heavily dependent on patients' ability to express their concerns and formulate clear agendas in medical consultations (Talen, Muller-Held, Eshleman, & Stephens, 2011).

It should be acknowledged that a number of external issues can impact patient-HCP communication, such as consultation time, competence, monetary factors and increasing workloads. For example Hasnain (2006) postulates that the patient-centred approach can increase the burden of monetary costs on healthcare providers. Studies have shown that on average doctors have a five to eight minute slot per patient, and that doctors feel that that there is not enough time for the increasing number of tasks

involved in routine consultations (Howie, Heaney, Maxwell, Walker, Freeman, & Rai, 1999; Stirling, Wilson, & McConnachie, 2001; Wilson, 1991). Some of these factors have been identified as barriers in patient-HCP communication regarding mental health issues, such as depression, which is further explored in the following section, with reference to specific HCP groups.

4.2 Patient-Healthcare Interaction: Consultations Regarding Depression & Stress

Goodrick and colleagues (2005) conducted a survey with one hundred and three patients and seventeen physicians based in a family medicine clinic. The quantitative findings revealed that approximately 42% of the physicians reported routinely asking patients about stress, and 77% felt that dealing with patient stress was a significant burden on their practice of medicine. Hence, the findings suggested that opportunities for stress management intervention to assist patients were being missed, however the qualitative exploration of HCPs views and experiences of patient reported stress has been limited, further supporting the rationale for study two.

Pollock and colleagues have made significant contributions towards the exploration of HCPs and patients experiences surrounding consultations for mental illnesses such as depression (Pollock & Grime, 2002, 2003; Pollock, Grime, Baker, & Mantala, 2004) through both quantitative and qualitative methodologies. The results from study one revealed that the participants' felt that their HCPs (i.e. GPs) had limited time for consultations, and that they failed to offer a range of stress management services, and readily prescribed antidepressants. Similar issues were identified in Pollock and Grime's (2002) study, where patients expressed 'an intense sense of time pressure and a self-imposed rationing of time' in their consultations (Pollock & Grime, 2002: page 1). Such anxiety related to issues of consultation time appeared to affect patients' 'freedom to

talk about their problems' and patient-HCP communication. However very few studies have explored HCPs views on this matter, based on their experiences of patient reported stress.

Shortage of time is considered a major obstacle for a more patient-centred medical mode of practice (Pollock & Grime, 2002), whereby patients are actively involved in their treatment decisions. Hence it is suggested that HCPs need to have greater awareness of patients' 'time-related' anxieties, by reassuring and reinforcing patients' sense of time entitlement (Pollock & Grime, 2002), to ensure that patients have a platform to openly discuss issues surrounding mental illness. This appears to be relevant to study one, based on the patients' experiences, as some felt rushed in their consultations, inhibiting the extent of their disclosure.

In addition, study one exemplified that issues surrounding stigma and stress disclosure can influence whether stress management advice or help is sought, thus HCPs should not only allocate greater time allowance in their consultations, but display empathy and sensitivity, to facilitate stress disclosure. However it would be worthwhile to further explore HCPs views regarding consultation time particularly for patient reported stress, and how they deal with negative perceptions of stress.

Despite 'user-involvement' being at the centre of government policy for improving access to mental health services (Department of Health, 2001a, 2001b), the experiences explored in study one and the findings from Pollock and colleagues (2002, 2004) imply a great deal of variation in the 'user-involvement' framework. Patients often report a lack of concordance between their treatment goals and what HCPs prescribe (e.g. antidepressants vs. counselling), as evidenced in study one and

supporting literature (Meddings & Perkins, 2002; Townsend & Braithwaite, 2002; Trivedi & Wykes, 2002).

Pollock and colleagues (2004) recommend that there needs to be greater awareness of patients' understanding and experiences of their illnesses and concerns surrounding the choices of treatment for mental illnesses. This is pertinent for patient reported stress; as the stress experience is very subjective, as exemplified in study one. Thus HCP-patient consultations regarding stress require a more patient-centred approach, minimising the risk of bias, exploring the patient's views on stress and stress management, to accordingly inform treatment strategies. Yet despite such a recommendation, are HCPs aware of the various services available, and can they be accessed with ease? Once again, exemplifying the need to explore HPCs views and experiences regarding patient reported stress, reinforcing the rationale for study two.

In light of the evidence reviewed regarding HCP-patient communication, several issues (i.e. consultation time and communication style – patient-centred approach) have been identified as key facilitators and key barriers, which can influence medical consultations surrounding mental health. However most of the literature has focused solely on doctor-patient communication; failing to explore how other front line staff in the health service deal with mental health issues in their patient consultations. Moreover, as evidenced in the previous chapters, patient reported stress features heavily in public health services (i.e. health improvement services and community pharmacies), yet there has been minimal exploration of how other HCPs deal with not only mental health issues, but also patient reported stress. Hence the following section shall review the evidence for a range of HCPs and their experiences of patient reported stress.

4.3 Patient-Healthcare Interaction: Patient Reported Stress

4.3a General Practitioners (GPs)

General practitioners (GPs) are usually the first point of contact for patients suffering with psychological and physical problems (Hanel, Henningsen, Herzog, Sauer, Schaefert, Szecsenyi, & Löwe, 2009). They play a central role in the detection, prevention, and management of mental disorders and other medical conditions. GPs therefore have the authority to issue a range of treatments and 'sick-leave', based on their diagnosis.

On average one to four percent of GP consultations concern stress-related disorders (Harrison & Britt, 2004; van der Linden, Westert, de Bakker, & Schellevis, 2004; Verhaak, Hoeymans, Garssen, & Westert, 2005). Currently mental disorders are the main reason for sick leave (Bakker, van Marwijk, Terluin, Anema, van Mechelen, & Stalman, 2010). Sick leave is an umbrella term which can encapsulate a range of illnesses or disorders such as stress, which result in paid absence for a given period of time. However there are various categories which are used for sick-leave, such as 'stress leave'. Study one exemplified that often stress and other mental illnesses, such as depression are classed together. This pattern can be seen in cases where patients with anxiety disorders, depression, or even bereavement, are signed off with 'stress leave'. Once again demonstrating how the term stress has become integrated within medical discourse and practice, whereby stress is used interchangeably to label a range of conditions.

The incidence of patients with stress-related conditions on sick leave has grown in recent years (Bakker at al., 2010), hence it is not surprising that it is one of the main reasons for GP consultations (Buijs, Anema, Evers, van Dijk, & van der Klink, 2006;

Verhaak, Schellevis, Nuijen, & Volkers, 2006). The Department of Work and Pensions (2007) has not only seen an increase in people claiming incapacity benefits due to mental-health problems (40% of population in 2007); they have also reported that 30% of GP appointments are used to discuss mental health problems (i.e. stress, depression, anxiety disorder). Hanel and colleagues (2009) findings further reinforce this, as they postulate that patients suffering from mental illnesses form a large portion of GPs' workloads due to the high prevalence of mental illnesses (de Waal, Arnold, Eekhof, & van Hemert, 2004; Henningsen, Zimmermann, & Sattel, 2003),

In spite of this trend, some have suggested that adequate detection and management of mental disorders pose a challenge to the health care system (Henningsen, Zipfel, & Herzog, 2007; Aragones, Pinol, & Labad, 2007; deWaal, Arnold, Eekhof, Assendelft, & van Hemert, 2008), and such cases are often difficult to treat (Zantinge, Verhaak, & Bensing, 2005). In addition, there appears to be some discrepancy in the guidelines that GPs use to diagnose and treat specifically stress-related conditions, where there is an absence of co-existing mental health illnesses (Hansel et al., 2009; Bakker et al., 2010).

Hansel and colleagues exemplified variation in the consultation and diagnosis of mental disorders, and found that there were gaps in screening tools and guidance regarding the many mild forms of mental conditions in their study conducted in Germany. However Bakker and colleagues (2010) postulate that GP guidelines are readily available for the diagnosis and treatment of depression and anxiety, but there appears to be insufficient guidelines for addressing primarily stress related dysfunctioning (Goodrick et al., 2005), and the importance for functional recovery as a component for general wellbeing.

Despite the classification between these mental disorders, the evidence presented so far suggests that in practice, it may not be as straightforward to label such conditions. Stress exposure or stress generation models illustrate that stress and various mental illnesses are interconnected, and that the presenting symptomology can be affected by stress or pre-existing mental disorders, highlighting the difficulties associated with the categorisation of conditions. In fact mental comorbidity has been associated with a more difficult patient–doctor relation (Hansel et al., 2009), consequently it would appear that greater exploration of GP's views on stress and mental health could exemplify issues regarding classification and stress diagnosis.

Study one further exemplified variation in the participants' experiences of GP consultations regarding stress-related dysfunctioning, as some were too readily prescribed medication for solely stress-related disorders (i.e. insomnia). There is limited insight into GPs' experiences of patient reported stress, their experiences of tackling this growing area of concern within today's society, and their views on stress-management and various treatment options, where there is an absence of co-existing mental health illnesses (Hansel et al., 2009; Bakker et al., 2010).

In addition, despite the increased prevalence of mental disorders and stress-related conditions, the availability of resources to refer patients too appears to be limited. In a survey conducted by The Royal College of General Practitioners' in the UK (sited in BBC report, 2010), 65%[1] of doctors stated they can "rarely" offer psychological therapy to depression sufferers within two months of referral, as they do not always have the resources to accommodate with the level of need presented, due to the increasing prevalence rates of mental disorders. Additional studies have identified a gap in service provision for stress (Hansel et al., 2009; Bakker et al., 2010). Hence it would useful to

[1] Sample of 590 UK doctors

explore GP's views based on their experiences of patient reported stress, and how they cope with this lack of service provision.

4.3b Community Pharmacists

In light of the evidence reviewed above, it should be acknowledged that GPs are not the only HCPs exposed to patient-reported stress. The role of the community pharmacist has expanded over recent years, and their role in the medical team has consequently changed (Crump, Boo, Liew, Olivier, So, Sung, Wong, Shaw, & Wheeler, 2011).

Patients view their pharmacist as their 'new health care provider'; identified in a series of studies conducted by Ali, Kanapathy and Kalsi (2008, 2009, 2010). Patients often felt like an unnecessary burden upon their GP, and that they would be wasting valuable GP time by seeking medical advice from them (Pollock & Grime, 2002; Ali, Kanapathy, & Kalsi, 2008), especially for those ailments which were perceived as minor or trivial. Hence many patients are more inclined to seek medical advice from their pharmacist, as they perceived them to be suitably qualified, easily accessible, approachable and trustworthy (Ali, Kanapathy, & Kalsi, 2008, 2009, 2010; Crump et al., 2011; de Bittner & Zaghab, 2011).

Due to the platform and the knowledge base pharmacists possess, they are the 'medicine experts' in the health provider team (de Bittner & Zaghab, 2011). But they also often have established rapports and relationships with their patients, due to their patient–centred approach (Kanapathy & Kalsi, 2010; Crump et al., 2011); thus community pharmacists are appropriately placed to offer a range of services, such as smoking cessation, medicine reviews and blood pressure tests (Department of Health, 2003, 2005; de Bittner & Zaghab, 2011). Consequently pharmacists are having more

patient contact, and can in some cases offering longer consultation times depending on patients' needs (Kanapathy & Kalsi, 2010; Crump et al., 2011).

Some pharmacy models have consequently incorporated mental health services. Crump and colleagues (2011), found that community pharmacists who offered services for those patients with mental illness in New Zealand, were able to offer specialised care which was patient-centred due to their ability to form collaborative working relationships. However, the qualitative study exemplified that these pharmacists did face certain challenges, as they felt as though they were 'working at the end of the healthcare chain', as they did not always have the full patient history.

Study one exemplified that stress can impact various factors, such as physiology and behaviour, which can in turn affect medication adherence and, or medication dosage. As many community pharmacists offer additional services, stress can often be an area of discussion in patient-pharmacists consultations (Kanapathy & Kalsi, 2010) due to the 'knock-on' effects it can have on general wellbeing. Even though many pharmacies sell 'over-the-counter' stress relief medications, very little is known about community pharmacists experiences patient reported stress during their consultations, where stress dysfunction may affect other health domains in their patient consultations, such as hypertension or sleep patterns.

Furthermore some studies have found variation in the patient-pharmacist interaction, whereby communication can be descriptive (i.e. information on directions, medicine name, etc) (Puspitasari, Aslani & Krass, 2009). The community pharmacist's consultative role requires further exploration (Pilnick, 2003; Asam, Pollock & Boardman, 2011), and in light of evidence reviewed in the previous chapter; particularly for issues surrounding patient reported stress and the impact it has on

health-related behaviours and outcomes. Hence study two proposes to explore community pharmacists' experiences of patient reported stress.

4.3c Community Health Improvement Practitioners (CHIPs)

As evidenced in the literature review and research findings presented in chapter one, stress can affect health-related behaviours and impede behavioural changes (i.e. smoking cessation, physical activity and diet) (Crittenden et al., 2006; Heslop et al., 2001; Louis et al., 2009; Metcalf et al., 2003; Ng & Jeffery, 2003; Weidner et al., 1997). Community Health Improvement Practitioners (CHIPs) play a key role in providing tailored, one-to-one support to patients undergoing various behavioural changes, such as smoking cessation, weight management, and cardiovascular disease (CVD) management programmes. Hence CHIPs are front-line healthcare providers that are also exposed to patient reported stress (Ali, 2010; Ali, Kanapathy, & Kalsi, 2008).

Typically CHIPs are trained in smoking cessation, nutrition, and in some cases behaviour change principles and therapies such as motivational interviewing (MI). For example, MI (Miller & Rollnick, 2002; Miller, 2004) is one method of working with lifestyle changes in health promotion practice (Brobeck, Bergh, Odencrants, & Hildingh, 2011). NHS budgets often dictate what training CHIPs can receive and request, hence CHIPs often fail to receive training regarding stress and stress management strategies, despite stress being a key feature in their consultations, and in their patients behaviour change experience (Ali, 2010; Ali, Kanapathy, & Kalsi, 2008).

In spite of the substantial body of research exemplifying the role of stress in health related behaviours, CHIPs are often ill-equipped to deal with their patients' stress-related issues which often affect the behaviour change process (Ali, 2010; Ali, Kanapathy, & Kalsi, 2008). In addition CHIPs experiences of patient-reported stress, and

their experiences of dealing with stress as a barrier in their patients' behavioural change process, has received little attention. Hence study two proposes to explore CHIPs' experiences of patient reported stress.

4.4 Summary & Purpose of Study

Little is known about how healthcare professionals' (HCPs) experience and cope with their patients reporting stress or presenting stress-related disorders. Substantive research has been conducted on HCPs' personal stress levels and health outcomes (Firth-Cozens, 1999; Wall, Bolden, Borrill, Carter, Golya, & Hardy, 1997; Weinberg & Creed, 2000). But very little is known about the lived experiences of HCPs' dealing with patients reporting stress, and how these experiences impact on HCPs. These narrative accounts have yet to be explored, to permit detailed insight into the processes of consultation regarding stress and mental health, between HCPs and their patients.

Engagement with HCPs would offer access into their perceptions regarding their clients' reported stress, how they feel about stress management, and their experiences of talking about stress and stress management to their patients, any hurdles they may face when patients report stress. However the involvement with various HCPs will allow the different narratives to be examined and permit identification of similarities and differences in their experiences based on the HCP role (i.e. GPs, Community Pharmacists, and Community Health Improvement Practitioners - CHIPs).

As evidenced, GPs, community pharmacists, and CHIPs are front-line staff who have frequent contact with their patients and are often exposed to patient reported stress. Thus, these three groups of HCPs offer a unique perspective on their experiences of dealing with patient reported stress or stress-related illnesses. For example the GP's

could have experience in patients dealing with stress and hypertension. Whereas the CHIPS (i.e. smoking cessation advisors) may have specific insight into how stress can be a barrier/facilitator in permitting the adoption and, or maintenance of behaviour change. Therefore exploration of how the HCPs cope with patient reported stress could provide a unique opportunity to understand the constructs that form their lived experiences.

Aims and Objectives

Thus the aims and objectives for study two are:

1. Gain insight into healthcare professionals' experiences of working with patients reporting stress.
2. Explore healthcare professionals' perceptions of stress management and their narrative accounts concerning stress management advice in their consultations with their patients.
3. Explore how the experiences of dealing with reported stress from patients has an impact on healthcare professionals stress levels and their experience of that.

5.0 METHODOLOGY

5.1 Ethics

As the study explored healthcare professionals (HCPs) experiences of patient reported stress, NHS ethical approval had to be sought from the Essex 1 Research Ethics Committee. The study was granted both NHS and City University Ethical approval in March 2010, followed by NHS South West Essex Research and Development (R&D) clearance in June 2010. In addition the British Psychological Society - BPS (2009) Code of Ethics and Conduct was abided by.

5.2 Design

Qualitative research focuses on meaning, subjectivity, and experience, and due to the proposed aims of the research, a qualitative methodology was utilised. It permits detailed exploration of the topic under review, within a flexible framework; free from predetermined assumptions (Holloway & Todres, 2003). The qualitative methodology allowed a broader form of investigation, into how and why, rather than a constrained quantitative from of investigation. Therefore attenuating to the quality and texture of the participants' experiences', providing a greater understanding of their behaviour in the given context of patient reported stress.

5.3 Mode of Data Collection

A combination of one-to-one interviews and mini-focus groups were used as the two qualitative mediums of data collection. Studies have shown that research involving HCP participation can be subject to low response rates due to their limited availability (Barclay, Todd, Finlay, Grande, & Wyatt, 2002; Shelton, Wofford, Gosselink, McClatchey, & Brekke, 2002; Hummers-Pradiera, Scheidt-Naveb, Martin, Heinemann, Kochenb, & Himmel, 2008). As many HCPs had expressed limited time or availability

during the organisational stages of the data collection process, a flexible data collection approach was utilised, whereby either one-to-one interviews or mini-focus groups were utilised.

Focus groups were an ideal form of data collection as the group setting facilitates participant disclosure, as they can share and discuss their experiences, which can increase a shared understanding. Participants' can elicit, and inspire discussion in the group, permitting more in-depth information on perceptions, attitudes, and experiences, compared to one-to-one interviews (Kitzinge, 1995). Yet the inclusion of the one-to-one interviews enabled a flexible and pragmatic approach to the data collection process, particularly for the GPs, as they were unable to attend the focus groups. The proposed form of data analysis ensured that the one-to-one interview accounts were combined in the thematic phenomenological analysis.

5.4 Question List

A semi-structured question list was employed (appendix 8), for the reasons stated in the methodology section for study 1. Participants were asked questions on their views of stress and stress management *(i.e. Do you think stress can be managed? Are you aware of any stress management services/tools?),* their experiences of patients reported stress *(i.e. Is it a common area of concern for your patients? How does that affect you? If so how? Do you think stress can be managed? If yes how?),* and their views on stress management training *(i.e. How do you feel when talking about stress with your patients and service users?).*

5.5 Procedure

5.5a Participant Recruitment

The study focused on General Practitioners – GPs, Community Pharmacists, and Community Health Improvement Practitioners - CHIPs (i.e. smoking cessation, weight management, and CVD health improvement advisors). Leads were identified for each of the three groups (i.e. service manager for the CHIPs). An invitation email (appendix 9) stating the relevant details about the study, including the participant information sheet (appendix 10), was then sent to the established leads, to then distribute to their colleagues/staff.

The researchers contact details were provided so that individuals could directly contact the researcher, to minimise inconvenience for team leaders; whilst ensuring confidentiality for the potential participants in this preliminary stage. Therefore, a process of snowball sampling was used to recruit the participants for the study, between May 2010 and August 2010.

As and when the HCPs contacted the researcher; expressing their interest to take part in the study, a secondary email was sent stating the time and location of the focus groups. In some cases this had to be negotiated with the participants, such as the GPs. Once again the participant information sheets were sent with this secondary correspondence, outlining the purpose and requirements of the study, any potential risks associated with their participation, and contact details of the researcher.

5.5b Data Collection

Four mini-focus groups and two one-to-one interviews (GPs) were conducted between June 2010 and August 2010. Participants were given information sheets (appendix 10),

which provided a full explanation on the purpose of the study, the use of audiotape recorders, confidentiality, and withdrawal from the study. This was then followed by consent forms (appendix 11) which were signed, thus informed consent was obtained from participants. Participant demographic information was also obtained (appendix 12).

Numbers were assigned to participants to maximise confidentiality and anonymity. The mini-focus groups and one-to-one interviews were on average 45-55 minutes long in duration. Upon completion of the mini-focus group or the one-to-one interview, participants were given debriefing sheets (appendix 13) with further information on the study, sources of information on stress and contact details of the research team. The recordings of the mini-focus groups and the one-to-one interviews were transcribed verbatim to permit analysis.

5.6 Methods of Analysis

The transcripts were analysed using the same method utilised for study one. The thematic phenomenological analysis allowed exploration of the HCPs' lived experience of patient reported stress.

As outlined in the methodology section for study one, the phenomenological perspective ensured that the HCPs lived experiences and subjective meanings attributed to patient reported stress were explored. It also ensured that the analysis remained grounded in the participants' accounts of their experience, building upon the central tenants of this approach, which are to capture, clarify, and represent the quality and texture of the experiences under review.

Thus giving ‘voice’ and a ‘new focus’ on this lived experience, from a range of professional perspectives (e.g. GP, pharmacists, and community health improvement practitioners), which are not always adequately represented, or analysed by methods which depend on statistical inference; gathered from quantitative methodologies (i.e. randomised control trials or epidemiological surveys) (Chamberlain, Camic, & Yardley, 2003). Yet the thematic perspective was useful in systemically identifying and describing the patterns which emerged in the participants’ accounts, providing a generic overview to their experience, whilst attenuating to the texture and unique differences identified through the phenomenological perspective. This combined form of analysis ensured that there was room to accommodate for the subjectivity associated with the experiences of patient reported stress, embracing and distilling the meaning behind the HCPs accounts, whilst systematically providing an overview of the HCPs experiences to the reader.

Repeated reading (line by line) of all six transcripts enabled the systematic identification of the super-ordinate and subordinate themes within the data. Themes which emerged from the HCPs' accounts were combined together to form a comprehensive picture of their collective and unique experiences, through the thematic analysis, whereas the phenomenological perspective permitted an insightful and detailed exploration of the lived experience. Taking into account the HCPs perceptions of stress and stress management, in light of their stress-related consultations with patients. When each of the transcripts had been coded, comparisons were made between transcripts to identify common themes, formulating a master table (table 3). A second researcher conducted an independent analysis of the data, and a comparison was made between the themes identified. There was a consistent match in the themes identified, evidencing validity and reliability in the identified results.

6.0 RESULTS

6.1 Participant Information

A total of ten HCPs (three males, and seven females) took part in the study. Table 2 provides a participant overview based on the HCPs roles and gender. Participants ranged from 24 years to 49 years of age.

Table 2 – Breakdown of HCPs by Gender

Type of HCP	Male	Female	Total
General Practitioners - GPs	/	2	2
Pharmacists	1	1	2
Smoking Cessation Advisors	1	1	2
Weight Management Advisors	1	1	2
Cardiovascular Disease (CVD) Health Improvement Advisors	/	2	2
Total	3	7	10

6.2 Summary Table of Qualitative Results

Three super-ordinate themes were identified. Table 3 provides an overview of the super-ordinate and subordinate themes.

Table 3 – Results Summary Table

Super-ordinate Themes	Subordinate Themes
1. Healthcare Professionals' (HCPs) Perception of Stress	A Holistic Perspective
	Demands and Availability of Resources
	Stress-Depression Connection
	The Opt-Out Card
2. Experiences of Patient Reported Stress	General Patterns of Patient Reported Stress
	Stress: the Moderating Variable in Patient Health
	Going the Extra Mile
	Professional Boundaries
3. Perception of Stress Management	Experience
	Mind the Gap
	The Missing Link
	Patient as the External Locus of Control

6.3 Qualitative Results

In the following section the three super-ordinate themes and their corresponding subordinate themes shall be evidenced and discussed in detail as follows.

1. Healthcare Professionals' (HCPs) Perception of Stress

This super-ordinate theme explores the HCPs' perceptions of stress through the subordinate themes of: *a holistic perspective*, *demands and availability of resources*, the *stress-depression connection,* and the *opt-out card*. These themes shall be discussed in light of the evidence presented.

A Holistic Perspective

The majority of the HCPs adopted a holistic approach to wellbeing. They placed equal importance on both physical and mental health, and felt that the two domains were intricately related. For example smoking cessation CHIP 1 uses the phrase '*it's all linked*' to describe how mental health can affect diet, and how body image and a poor lifestyle can increase the risk of mental illnesses, such as depression.

> *Someone could have great health physically but then mentally they could be struggling… It's all linked... people can get depressed and it leads them to putting on weight… or people can put on weight and get depressed about it… it's all linked.*
>
> Smoking Cessation CHIP – 1

Whereas the two CVD CHIPs suggested that both positive mental and physical health is dependent on one's ability to exercise self-control, in terms of over moderating and balancing all aspects of life, including adequate stress management. CVD CHIP 2 uses the phrase *'everything that you are'* to encapsulate all aspects of the individual.

Encompassing and acknowledging emotions in her perception of stress and health, from a holistic perceptive. GP1 extends this by including social aspects, which can in turn influence health adopting a systemic approach.

1: I think overall wellbeing is something you can do something about, like keeping active, eating healthily and everything in moderation. Stress as well. Stress management.

2: Yes… it is about everything that you are. So your emotions as well as your physical wellbeing as well.

CVD CHIPs – 1 & 2

A good state of health or mind of the patient as a whole, so a sort of holistic idea with respect to the patient's physical, mental, social health.

GP 1

However some HCPs felt that either physical or mental health played a more dominate role. Interestingly, the extract from smoking cessation CHIP 2 highlights that mental health was viewed as more important, compared to physical health as she perceived mental health disorders as *'long-term'* and *'incurable'*. She also adopts a stress diathesis perspective, whereby the effects of poor mental health can increase ones vulnerability to other illness both physically and mentally.

Mental is more important… I know there's serious physical health problems but mental health problems are more long term and serious… not curable… depression could mean you're housebound which means you don't exercise which can lead to other problems…

Smoking Cessation CHIP – 2

Therefore it appears that this holistic perception of health, acknowledges that mental health problems, such as stress and depression can influence other aspects of health. This perspective is further reinforced through some of the other subordinate themes, such as *'stress: the moderating variable in patient health'.*

Demands and Availability of Resources

The majority of the HCPs described stress as a mismatch of demands and the available resources to manage and deal with the demands placed on individuals. However as the following quote suggests, many HCPs felt that these demands were not localised or limited to particular domains (i.e. work), and demands in one area could *'cross over'* or affect other aspects in one's life. It appears that the HCPs often referred to these demands as *'weights'*, *'pressures'*, or *'loads'*; attaching physical properties or dimensions to them. The subjectivity of the stress definition is acknowledged through the use of open terminology (i.e. *'all kinds of stress'*). Thus it is apparent that the HCPs believe that the availability of resources to manage the demands placed upon the patients is a determining factor in the extent to which patient-reported stress is featured in their patient consultations. This is further explored in the super-ordinate theme of 'perceptions of stress management'.

... too much going on… to what you can cope with... trying to do more than your means… it's not just work stress though you're talking about all kinds of stress… stuff happening in your personal life which crosses over... it's on your mind during your work life...

Smoking Cessation CHIP – 1

When things build up… a bit of anxiety… something happens and you are not prepared it causes you stress and it all spirals out of control.

Weight Management CHIP – 1

Furthermore, it appears that the various forms or *'manifestations'* of stress have certain properties which can affect people in different ways as the following CVD CHIP 2 quote suggests. It also implies that resources or strategies such as disclosure, seeking support or guidance can determine the stress response and experience. In addition, one of the pharmacists states that the stress response is dependent on the perception of stress and the coping resources available, adopting a cognitive perspective of stress. Despite this pharmacist 2 and GP 2 state that stress is a part of everyday life, suggesting that stress is dependent on one's coping repertoire and knowledge of resources, which pharmacist 2 believes is hinged upon one's level of academic attainment.

Depends on how the stress manifests. If people internalise things, it starts affecting their physical and emotional health… it is more debilitating for those who cannot get it off their chest… they cannot talk about it and get it over and done with.

CVD CHIP - 2

…feeling overwhelmed… others might see as normal or others see it as something serious, an event in their life that triggers off that… But I think we all live under stress nowadays anyway I think it depends on how we cope with it…
Our jobs are stressful. We have read a lot of books on stress management, and tried to put what fits into our own lives but we are educated and know where to go for

information… in the poorer communities… they are not as educated… to have gone and sourced the information.

Pharmacist – 2

Leave aside a few people who have chronic problems… most of the patients I think it's due to their lifestyle, the way they live, their childhood, their relationships. Work-related stress. I feel that most of the stress is due to living in the 21st century.

GP 2

It appears that this perception of stress as a balance between demands and coping resources can also foster and perpetuate an unspoken expectation, whereby the inability to cope can signify weakness. Interestingly this finding is validated by the study 1 findings, whereby some felt that stress disclosure was seen as a weakness, inhibiting stress disclosure.

Everyone wants everyone else to think that they are coping, because you always see other people coping better than you are, or you think they are.

Weight Management CHIP – 2

<u>Stress-Depression Connection</u>

In study 1 it was evidenced that patients felt that HCPs, in particular GPs grouped stress and depression together. The findings generated in this study exemplify that HCPs perceive these two conditions in various ways and attach different connotations to them. GP2 perceives the two conditions to be dichotomous however she utilises a stress-vulnerability model to explain how the two conditions can affect another. She perceives duration of symptoms as an indicator for depression.

Stress can lead to depression. Depression is slightly different than stress. Stress is like an anxiety due to a certain situation. Depression is a long-term sort of thing, there is a difference between stress and depression but one leads to the other… I only prescribe antidepressants if I feel that the symptoms are continuing… the person is now depressed not stressed.

GP 2

This dichotomous dissection is further supported by weight management CHIP 1. However others felt that it was difficult to differentiate the two. GP 1 suggests that the two conditions are closely related, and that the presentation of symptoms can be similar, as stress could amplify depressive symptoms.

In fact pharmacist 1 postulates that the point of consultation with HCPs also influences a HCPs judgement between diagnosing patients with depression or stress, as stress often affect the patients mood, emotions and appraisal cognitions. Pharmacist 1 reflects on a past experience to illustrate how blurred the perception between depression and stress can be for both patients and HCPs.

1: There is a difference, people start off being stressed and gradually the more stress they get it will make them feel so low, depression could kick in.

2: No, I think they are similar in way. It's hard really to judge what is depression and what is stress…

Weight Management CHIPs – 1 & 2

There is a thin line between stress and depression and in some cases they could tend to overlap because it's just the question of the chicken and the egg, what came first really. Stress in most cases would tend to exacerbate depressive or anxiety conditions and again, depressed patients could find things more stressful than others.

GP 1

…You're stressed… you're going to the doctors and you're going to be tearful, feeling that you can't cope, and antidepressants seem to be the main choice. But I know somebody who was put on antidepressants, decided to go to Mind and they never took them, Mind helped them cope with their stress.

Pharmacist – 1

Despite the varied opinions between the HCPs, it appears that stress and depression possess different connotations and semantic weightings, as some CHIPs felt that depression was *'more powerful'* compared to a patient reporting stress. It became evident that this was partially due to their remit boundaries and conforming to protocols; escalating cases for concern to line managers. Whereas GP 1 reflects on her experiences whereby patients attach stereotypes to these mental health conditions, and that there appears to be a hierarchy of socially accepted conditions, whereby stress, a *'layman's term'* is more acceptable.

…the word depression is a lot more powerful to me than if someone says I'm a bit stressed… stressed to me means there's a few issues going on which they are worried about, but when they say depression, immediately it a question of have they seen a doctor… have they been diagnosed… stress wouldn't be associated that way.

Weight Management CHIP – 1

Stress is a layman's term and they feel more comfortable with that term… they'll prefer to be diagnosed as having a stress-related disorder rather than being diagnosed as depressed or anxious... it is a term that they are quite comfortable with

GP 1

In light of the evidence discussed so far HCPs appear to generally separate the two terms/conditions, however they express difficulties in differentiating the symptoms as the two conditions appear to be intricately connected. It has also been suggested that patients themselves may also appraise stress and depression in very opposing ways, based on their altered cognitive appraisals during the actual stress or depression phase, or that they may prefer to utilise socially accepted labels due to the stereotypes or stigmas associated with these conditions. The need for effective and adequate screening procedures is further reinforced through this subordinate theme, to ensure that HCPs can confidently diagnose patients. However it should be noted that this would still be influenced by patients' perceptions and cognitive states as the screening tools are often self-reported.

Some people word it differently, one may say they are stressed when they are depressed and the other way around really…

so you just go on what they tell you.

Weight Management CHIP – 1

<u>The Opt-Out Card</u>

Despite the HCPs recognition of stress as an influential factor in their patients' lives and wellbeing, some expressed that stress was often used by patients as an *'opt-out card'* or an *'excuse'*. Whereby they attempt to dissolve their responsibility and potentially

ignore that they may in fact have reduced motivation, or a reduced ability to exercise self-control, during their smoking cessation attempt, for example. As suggested in the following quote, psycho-educational resources could enhance stress perception and knowledge, which could potentially prompt re-appraisal of the perceived stress experience. However both of the smoking cessation CHIPS stipulate that the term stress is a prominent feature in everyday discourse, by using general statements such as *'people'* and *'all over the place'*, implying that it is used readily, and that it facilitates a shared understanding amongst one's social network. This reiterates the subjectivity of stress and the difficulty in assigning definitions for this *'word'*, as '*people see stress differently'.*

Well it's that word that they use when they come in to see us. Why are you smoking? I'm stressed. Why have you gone back to smoking? I'm stressed. Some people say the word when they don't actually know what it means… If we had a stress leaflet or something, it might make them think I'm not actually stressed. People see stress differently.

Smoking Cessation CHIP – 2

1: People do that all over the place.

2: Yeah people don't know what it (stress) means

1: People do it in the office, you just get used to saying, oh I'm stressed.

2: It's a word.

Smoking Cessation CHIPs – 1 & 2

The employment of stress as a term to justify hurdles or failure in a behavioural change process, or the inability to attend work, appears to generate an element of mistrust in the patient-HCP interaction, as the two following quotes suggest. GP 2 believes that

some patients misuse stress as a means to claim disability allowances, and that *'these patients'* tend to be unresponsive to any psychological and, or pharmacological intervention, as they become self-fulfilling to the labels *'stressed'* or *'depressed'*. However the weight management CHIP states one has to be *'open-minded'* when working with such clients as they do not have enough insight regarding the patients' history. Thus such preconceived thoughts have to be disregarded. In spite of this concerted effort, it is important to acknowledge that HCPs can have such concerns regarding the integrity of patient reported stress; which potentially could impact on their consultations or rapport formation.

It's difficult when they say oh well I do it (poor eating habits) because I am stressed… sometimes I think it's a little bit of an excuse, but again you don't know the real situation… so it's opening up my mind to the issues that people may have.

Weight Management CHIP – 1

To some extent... I think stress is something which is misused a lot in medicine with stress people can be off sick… claim whatever in mental disabilities… these patients, whatever you do, at the end of the day will be always depressed… for approaching Social Services and the benefit agencies… somebody is labelled as stressed, even he himself starts believing that he is stressed and is incapable of doing certain things.

GP 2

2. <u>Experiences of Patient Reported Stress</u>

All of the HCPs reported instances where patient reported stress and stress-related disorders were presented by patients during their consultations. The

phenomenological exploration of the HCPs lived experiences of patient reported stress, illuminated the HCPs beliefs and perceptions of stress, and how they feel when dealing with patient reported stress, as well as the perceived and actual barriers associated with patient reported stress. These beliefs and experiences shall be further examined through the following four subordinate themes: *general patterns of patient reported stress, stress: the moderating variable in patient health, duty of care,* and *boundaries.*

General Patterns of Patient Reported Stress

All of the HCPs were able to identify specific instances in their clinical practice where patient reported stress had emerged and the varying degrees of ambivalence amongst some patients regarding stress and its impact on their wellbeing.

GPs, pharmacists and smoking cessation CHIPs were predominantly able to identify trends and prevalence rates, of patient reported stress, due to their professional experiences. For example, the pharmacists and GPs, appear to have a sound understanding of the various stressors that their patients are exposed to within the local community, such as high deprivation and health inequalities. Pharmacist 1 states that she can make this informed judgment, as she clearly appears to have an established understanding of her service users' and their needs, as they feel comfortable to talk about their stresses, which is typically *'hidden'*. This highlights the central role that community pharmacists' play, within such communities which appear to be burdened with inequalities.

2: There are more people stressed nowadays. We've been in the profession for 25 years… the number of people on fluoxetine or Prozac is immense compared to ten years or even 20 years ago.

1: Even younger people are presenting…

Job security is a major issue. Managing finance, mortgages… A lot of mums are struggling to cope with their adolescent children… most of it is hidden, people don't really talk about it.

They only talk with me… because I have known them for years... the majority don't know where to go.

Pharmacists – 1 & 2

…Recently it has become an area of concern, mainly because of the economic situation. People are losing their jobs… or facing some sort of difficulty which they find difficult to deal with. About 50% of the patients are showing as stressed.

GP 1

GP 2 states that the majority of the patients are knowledgeable about their stress levels, and the impact it has on them as they generate a *'specific diagnosis',* which is attributed to messages communicated via media streams. In spite of this general pattern in patient reported stress, GP 2 and the CVD CHIPs stipulate that there are certain *'types'* of patients who may not be aware of their stress, or may misattribute symptoms to physical disorders, or place minimal importance on stress within the health framework. GP 2 appears to deploy specific techniques to elicit reappraisals or assessments of stress, by encouraging patients to reflect on their functioning abilities (i.e. sleep patterns, completion of daily tasks). Whereas the CVD CHIPs utilised stress talks to increase stress awareness amongst patients; using psycho-educational

exercises such as basic biofeedback techniques and providing information on the endocrinological stress response.

A higher number know they're stressed… they form this specific diagnosis that they're stressed. In this age… with mass communication - TV, magazines… they read about stress all the time…

A lesser number, present physical complaints… After investigation you realise their problems are not physical… it's stress-related…

Those who have chronic diseases… diabetes or high blood pressure… it's our task to ask whether they are stressed or not... they often say it's fine… not realising they're stressed… you ask if they are having sleep problems...then there is a realisation they're stressed. It's a brilliant way to diagnose.

50-70% present with knowledge that they're stressed... 30% you have to diagnose stress. There are different types.

GP 2

2: Sometimes they are not aware until the stress talks... we cover symptoms and ways of managing stress… once you cover it they start identifying with it...

1: Once you start a conversation… they feel they are able to talk to you, and you have built a relationship, then they will mention it (stress). It's a big part of their lives

CVD CHIPs - 1 & 2

<u>Stress: the Moderating Variable in Patient Health</u>

As evidenced in the previous subordinate theme, patient reported stress features heavily in the HCP-patient consultations. However this subordinate theme shall present specific instances where stress has played a crucial role in the behaviour change

process, and general wellbeing, and how the HCPs perceive this complex relationship between stress and health-related behaviours. For example GP 2 states that stress is connected to behaviours such as smoking, poor diet, and alcoholism, and that there is a bidirectional connection between stress and these behaviours; illustrating the complex role stress can play in addictive behaviours (i.e. smoking).

Stress and smoking, or bad diet, or alcoholism they're connected to each other. You cannot separate one from each other. Stress can aggravate smoking… Smoking can aggravate stress… One aggravates the other.

GP 2

The analysis revealed that stress played a crucial role in the health-related behaviour change process. For example the CHIPs who deliver tailored and bespoke health improvement interventions, were more likely to identify and report stress as a barrier in their patients' behaviour changes. Smoking cessation CHIPs reported stress as a major area of concern within their consultations, the extract below highlights that patient reported stress is often related to negative smoking behaviours, such as cessation relapse, and the inability initiate smoking cessation activity. Stress appears as precursor and facilitating factor for smoking, which can render some individuals with a limited inability to cease smoking.

However it can also influence the smoking cessation CHIPs perceptions of service users, which can exacerbate feelings of hopelessness (i.e. *'no matter what you say or do'*) and frustration, when their patients fail maintain their behaviour change. In fact CVD CHIP 2 suggested that better awareness on stress and stress management strategies in health improvement, could minimise the role stress plays in the behaviour change process. She clearly has experience in delivering stress management awareness talks to

patients, and is able to identify subsequent changes in the patients' ability to adopt behavioural changes.

2: The reason they smoke... they can't give up is because they're stressed. 90% of the people we see stress comes up.

1: Some don't want to quit because they think it's too stressful.

2: Something stressful happens and it's back to smoking.

1: ...there is a family death… they're stressed... they've gone to smoke… sometimes they won't come back at all... they're going to carry on smoking for the rest of their lives... or they may try again... that's the annoying thing... sometimes no matter what you say or do...

Smoking Cessation CHIPs - 1 & 2

I had a lady who wanted to stop smoking and stress was the biggest thing that was stopping her. She found it really frustrating… but eventually she did... it would have been much quicker if she had just managed to look how she could manage her stress.

CVD CHIP – 2

Pharmacists were also faced with patient reported stress, that affected smoking cessation and other health-related behaviours, physical disorders (i.e. hypertension), and in some cases medication adherence. Pharmacist 1 attributes these negative health-related behaviours to poor coping skills (i.e. *'they just cope with it in their own way'*), and advocates stress management strategies which would be relevant to the stressors faced by patients (i.e. *'financial management'*).

They smoke more, eat the wrong food, they have different coping mechanisms, like comfort eating... sometimes they say that's the only way I get through the day by smoking 20 a day... I have too much going on I can't give up smoking... You want to help them but they need counselling, or finance management.

Pharmacists - 1

Compared to the qualitative accounts reviewed so far, GPs were more likely to report instances where stress affected physical conditions such as hypertension. Once again, GP1 states that the diagnosis of stress-related conditions is dependent on the patient's stress awareness, or the manifestation of somatoform disorder, or altered functioning.

Those under a lot of pressure... with high powered jobs; it tends to affect their blood pressure... They come in feeling stressed out... or complaining of headaches or just feeling tired... or not being able to cope with day to day activities... incidentally you'll find that their blood pressure might be increased.

GP 1

<u>Going the Extra Mile</u>

This subordinate theme emerged across the data set. The HCPs place great emphasis on being able to help patients and utilise a range of strategies to form rapports with their patients, in the hope to foster supportive and collaborative working relations, as evidenced by the following quote.

2: We ask them what their daily routine is… why they've started smoking... I remember facts about that person… when I see them again to make it personal I'll bring up little bits of their life.

1: We are giving them personal time.

2: I feel pleased that they come to us... in spite of everything else they may have going on…

Smoking Cessation CHIPs – 1 & 2

HCPs expressed their frustration when patients were not accessed quickly enough by external support services (i.e. counselling), as they understand their patients' needs and desperation for help. GP 1 states that this often affects patients' perceptions of such services, potentially minimising the perceived value of such psychological services. GP 1 is eager to assist her patients and also offers alternative treatments or information to aid her patients, who fail to receive timely support from tertiary services. GP 2 states this delay in service accessibility makes her stressed, eliciting feelings of unease and anxiety.

I've had patients come back two or three months down the line and they still haven't got an appointment... they find it disappointing… they thought they would have been seen quicker... started dealing with their issues… they develop a perception that it takes a long time get help. I feel bad that they're not accessed quickly enough... in that instance I offer alternatives.

GP 1

If the patient comes to you and is still unsatisfied... they haven't received the appointment… then I feel stressed.

GP 2

It is important to acknowledge that this study has incorporated a diverse range of HCPs from different services, and that they employ different working models, relevant to

their service areas. Hence some HCPs were able to offer support in different ways, such as longer consultation times, follow ups, and referrals. For example the CHIPs felt that they were able to offer more time in informal settings (i.e. *'we are not sitting in an office like a doctor'*), and that this influenced the CHIP-patient communication, as patients *'talked to them a lot more'*, and that they could offer a more personalised service, particularly for those presenting with additional needs. The allocation of *'time'* was central to the CHIPs and GP 1 perceptions for *'duty of care'* and *'going the extra mile'*. However the following extract from pharmacist 1 indicates feelings of helplessness, as there is an acknowledgment that referral to tertiary services may not be enough to tackle the level of need presented by some patients, due to the multifaceted nature of the stressors.

Sometimes all you can do is signpost them to the relevant agencies.

But sometimes listening to them might ease the burden. They just want an outlet, someone to talk to. Sometimes they have got so much going on in their lives, smoking, drinking, abusive partnerships, adolescent children, financial worries - where do you begin?

Pharmacist – 1

It's making time to talk, listen, and help.

Weight Management CHIP – 2

This patient was depressed… I gave her extra time... we talked about smoking she needed to be spoken to differently. I made sure the next CHIP that saw her was more experienced...

I didn't want anyone to see her... I wanted to make sure she had the support again.

Smoking Cessation CHIP – 2

I give them time to vent their feelings and actually feel free to talk to me about how they feel about things.

GP 1

Professional Boundaries

Exploration of the HCPs' experiences of patient reported stress illuminated several areas of concerns, such as management of disclosure, time, remit, and knowledge boundaries. These shall be discussed in light of the evidence extracted from the data set.

As previously mentioned the CVD CHIPs address stress within their CVD service, hence the programme provides a forum for patient reported stress. The following extract exemplifies the perceived and actual boundaries faced by the CVD CHIPs, in the management of patient disclosure. The disclosure is attributed physical properties as evidenced by the terminology used (i.e. *'it gets really heavy'*; *'what people carry with them'*; *'things they offload'*; *'where do you take it'*), implying that this disclosure is a 'load' or 'object' that is transferred from the patient to the HCP. The HCP then accepts responsibility for the management or *'handling'* of this load.

However it appears that the CVD CHIPs do not feel adequately equipped to *'handle'* this *'load'*, eliciting feelings of anxiety, as they are worried about the patient/s, and the impact of their disclosure, as it can initiate emotive responses in the patient/s, leaving them in a perceived *'vulnerable state'*. Even though the smoking cessation service and weight management service do not address stress as the CVD service does, it appears that there were similar concerns reported by the smoking cessation and weight

management CHIPs regarding patient reported stress, as there was uncertainty on how to advise such patients, and how to deal with the disclosure.

2: You don't want to open up a can of worms and then leave them… there is some anxiety… exactly how far to go with that, and the questions to ask.

1: That stress questionnaire… is probing… it is quite emotive… I have had people break down in tears, and it gets really heavy... I am not confident in how far I am allowed to go with them? Services that we can refer to? We are not trained counsellors.

You're dealing with issues that you are not really trained to deal with.

You are leaving them in a vulnerable state... As much as you try to give suggestions…

You're still leaving them in a very vulnerable state...it can be nerve-racking...

2: It is surprising what people carry with them as well… the things they offload to you... where do you take it? What do you do with it?

CVD CHIPs – 1 & 2

1: When they say that stress made them go back to smoking… I find it hard to advise them it's like trying to advise them about their life and how to deal with it... Stress is personal and a private thing.

2: You feel you've got a boundary you don't want to go into too much detail… you don't want to ask them too much about their personal life because they're opening up to you, telling you how they feel.

Smoking Cessation CHIPs - 1 & 2

As explored previously, the HCPs believed that allocation of consultation time was associated with *'going the extra mile'*. However the HCPs often felt that they did not have enough time to address the patient reported stress, as they had to allocate time to other patients, which meant that the consultation times were often constrained to

solely the primary issues (i.e. smoking cessation). The pharmacists expressed their desire to allocate greater time to patients; however they also felt that this was restricted by competing demands (i.e. *'running a busy pharmacy'*). The CVD CHIPs acknowledged that greater time had to be allocated in order to accommodate for the stress talks, in order to adequately address the issues which emerged. Hence time is an important component in the management of stress disclosure for HCPs.

2: We get a set amount of time with each person

1: You can't sit down and talk about it (stress).

2: I don't mind listening or talking… but when you've got other people waiting…

1: At the moment we wouldn't be able to talk to them about their general stress and their smoking stress.

Smoking Cessation CHIPs - 1 & 2

The programme is longer now… initially we felt there wasn't enough time for it (stress topic)… however we felt that there was nothing that could be taken out… it has grown to three sessions.

CVD CHIP – 1

Remit was another major boundary which the HCPs reported when reflecting on their experiences of patient reported stress. The three extracts highlight that the HCPs often felt restricted by their occupational remit (i.e. '*we're not able'*; *'not supposed to'*; *'can only do'*; *'we have to'*) to explore or address patient reported stress any further. The extracts from CVD CHIP 1 and the pharmacists highlight that this can elicit *'frustration'* as the HCPs feel *'in a difficult situation'*, where they are constrained and limited in their ability to assist patients, who may be experiencing high levels of stress, which may be inhibiting their health-related behaviour change, or seeking medical advice.

The extract from the smoking cessation advisors reinforces that there is sometimes an unspoken, but an agreed and shared agenda between HCPs and patients, whereby the patients do not *'expect'* advice on stress when seeking support for smoking cessation, even though stress may be a barrier in the behaviour change process. The impact of remit appears to not only affect how HCPs feel when presented with patient reported stress, but also how patients may not address stress-related issues which may be pertinent to their health-related behaviour change or wellbeing, due to this perceived remit boundary.

We're not stress specialists. They come to us for stop smoking… I don't think they expect more from us... we have to keep it informal… Otherwise we're going off smoking.

Smoking Cessation CHIP – 1

1: We just touch the surface of it… the service remit means there is only so much we can do… We can only raise awareness and help them identify… and hope whatever tools we give them can be used… But we can't follow up… It's frustrating… you can only do so much to help them move beyond the barriers of stress…

2: There is more we could do but we're restricted by the demands of the Commissioners.

CVD CHIPs – 1 & 2

2: We are in a difficult situation… we are not supposed to say that this drug is for… we are supposed to say what did the doctor prescribe… if they say 'I went into the doctor for this… then you can discuss it… you are waiting for them (patient) to tell you... we're not privy to the conversation the patient has had with the doctor.

1: We can't establish if they require antidepressants or help with stress based on the prescription.

Pharmacists – 1 & 2

Another boundary which emerged was knowledge. The HCPs felt they could not advise or help patients when they reported stress as they did not have enough knowledge regarding stress and stress management. Despite the CVD CHIPs increased awareness on the basic stress management principles and the aetiology of stress, they feel *'powerless'*, as they perceive their knowledge to be insufficient. CVD CHIP 1 expresses that these feelings are amplified in the one-to-one consultations due to the nature of patient reported stress and their desperation for help.

2: I feel powerless… we're only trained to a certain level… you wonder if what you're saying is correct?

1: We wanted stress management training because we aren't able to practice confidently.

2: I don't feel I know enough.

1: It is more intense individually… they (patients) look to you for answers… when it is 1-2-1 they're really pleading, it is a like a cry of help… they are expecting you to give them everything… I find that hard because I don't feel skilled enough…

CVD CHIPs – 1 & 2

This perceived gap in knowledge is further evidenced in the following account. The smoking cessation CHIPs believe that there is a difference in *'personal everyday stress'* and *'smoking stress'*, and feel that they are more confident to provide advice on '*smoking stress'*. Therefore remit appears to dictate the HCPs knowledge bases, and their competency to address *'certain forms of stress'*. The HCPs desire to enhance their

knowledge on stress and stress management, in order to practice competently and confidently shall be explored in greater depth in the following super-ordinate theme.

2: We don't feel we've got the experience or the knowledge...

1: I try to bring it back to the smoking stress and withdrawal… how smoking can make them feel more anxious and stressed...

Smoking Cessation CHIPs - 1 & 2

3. <u>Perception of Stress Management</u>

This theme shall explore the HCPs perception of stress management and its perceived utility for patient reported stress, through the four subordinate themes of: *experience, the missing link, mind the gap,* and the *patient as the locus of control.*

<u>Experience</u>

In spite of the perceived lack of knowledge or training reported by the HCPs, they were able to identify instances where they had recommended certain resources or activities in order to reduce stress, overall the HCPs believed that stress could be managed. However there were some differences regarding stress management knowledge, due to the varied levels of experience amongst the HCPs. This influenced the advice which HCPs provided to patients, and the perceived utility of the various tools recommended, as evidenced in GP 2's account below describing her referral actions to tertiary services.

Interviewer: Do you recommend any stress management techniques, like relaxation techniques, coping strategies, etc.?

GP2: No. Because I'm not trained on those ones. Voluntary services, MIND… other institutions can help these patients. I give them the numbers.

GP 2

Furthermore, as evidenced earlier the smoking cessation CHIPs informed patients about the physiological changes, which occur during nicotine withdrawal, focusing more on *'smoking stress'*. However through further investigation it appeared that they used cognitive behavioural principles (i.e. ABC model) to help patients plan alternative and prospective coping mechanisms in contrast to previous maladaptive coping patterns (i.e. smoking). Despite successful implementation of this model, the smoking cessation CHIPs were not aware that the model was part of CBT, or any other stress management strategies.

In contrast, GP 1 and the CVD CHIPs were able to refer patients to specific resources or recommend specific activities, due to their experience acquired whilst working within psychiatric medicine and, or based on their self-taught knowledge regarding stress management techniques. The following extracts evidence the stress management strategies used by GP 1 and the CVD CHIPs.

I have significant psychiatric experience… so I'm able to deal with it… normally I use basic scales… PHQ-9 or GAD-7… if the patient decides on counselling…
I give them internet resources, like Mood Gym or Living Life to the Full… while they are waiting for therapy or not keen on medication. Patients find them helpful.
I always advise relaxation techniques for stress related disorders. Some engage in Reiki, Yoga, or swimming… activities that help their physical and mental wellbeing…
Breathing techniques, soft music to relax them… Patients are usually quite receptive…

GP 1

2: We look at distraction techniques, breathing, meditation, guided imagery… muscular relaxation and mindfulness. I use the relaxation tapes too.

1: And physical activity… we include in the CVD programme.

2: Some prefer certain exercises… People do enjoy the relaxation. They say "That's the best bit"…

1: We also use biofeedback… so people are aware of their stress and what effect it has on them…

CVD CHIPs – 1 & 2

Even though stress management strategies were not formally incorporated in to the weight management programme, the HCPs noticed that certain aspects of the programme (i.e. walking groups) were found to be efficacious in reducing patients' stress levels. The CHIPs attributed this to physical activity, increased social support and cognitive reappraisal initiated by shared stress disclosure amongst the patients during the group walks.

1: We don't cover stress management in the programme, but once they start exercising, they feel better... there is a positive effect.

2: Some people are on their own… actually going out and talking to other people… what's happening in their life may seem minute after talking to others... with the added exercise… being outdoors… you get people really laughing… it relieves stress.

Weight Management CHIPs – 1 & 2

Mind the Gap

In light of the evidence discussed so far, the HCPs express 'gaps' in their knowledge regarding stress and stress management, which can elicit anxiety, frustration and a perceived inability to help patients when they report stress. Greater exploration revealed that the HCPs were keen for training regarding stress management to fill the 'gaps' in their knowledge. They believed a greater awareness of stress management techniques and stress awareness would equip them with the skills needed to help patients; in light of their past experiences of patient reported stress, which had elicited uncertainty in their practice. Some felt that an increased awareness could promote greater empathy in the HCP-patient relationship, as it would '*open their eyes'* into what their patients are '*going through'*. The HCPs were able to identify specific topics that they would want in a training programme (i.e. how to deal with one-to-one stress related consultation, training packs including referral services, CBT approaches to alter maladaptive cognitive patterns, biofeedback, relaxation techniques, etc.).

The desperation for training is further evidenced in the CVD CHIPs accounts. They express their frustration after their training requests but been rejected. The CHIPs describe how they have had to learn *'along the way'*, in their journey and quest for knowledge in order to help their patients with their stress-related problems. However the CHIPs ability to practice confidently is hindered, as they place emphasis on formal *'evidence based'* training; compared to their existing knowledge base, which has been self-taught so far. Hence there is a clear need and desire for formal and structured stress management training, in order to *'improve services… for the wellbeing of patients',* and to increase the HCPs confidence regarding their applied practice.

1: We expressed interest in stress management training, because we really felt we needed it for this programme, but we got turned down. If there was training we would be front of the queue… Helping patients to identify their signs of stress… some support around rephrasing, and changing their perspective and thinking would be helpful.

2: I have picked up things along the way… reading I have done. I do exercises that raise stress awareness, but they're not publicised or accredited.

You hope that you're getting the right things across…

I know more now, but it is still not enough, there is still so much more… knowing that you have that formal training… you are giving people the right information… that's important for me

CVD CHIPs – 1 & 2

1: Techniques like relaxation… if you could give them something they could try. At the moment we're just doing what's in our heads or what we heard on the CVD service…

2: I think training is a good idea, no matter what area you work in as a CHIP….

1: We're all coming up against people that have got stress affecting their behaviour change or health.

Smoking Cessation CHIPs – 1 & 2

<u>The Missing Link</u>

All of the HCPs believed that there were not enough services or resources to assist patients with their stress-related problems, and that they did not have enough information regarding where such services may exist, in order to refer patients. This inability to address patients' needs generated concerns amongst the HCPs, as they felt as though were *'failing in their duty of care'*, due to their lack of knowledge on stress

management, as well as the lack of services to refer patients to; eliciting feelings of unease and discomfort.

2*: People don't know what's out there… We aren't really sure.*

1: I think stress is not built up enough… it's not made to seem as important as it is in health services?

Smoking Cessation CHIP – 1 & 2

1: Those in our programme may go through the stress management that we do… We kind of scratch the surface with that… but apart from that there is nothing else in terms of health and stress… something a bit deeper would be better…

2: …if issues are raised there is nothing for them to go to… I feel as though I'm failing my duty of care

1: …we do give them reassurance, but it might not be what they need… it can be really hard sometimes.

CVD CHIP – 1 & 2

The GPs and pharmacists believed that the services or options available to patients presenting with stress-related problems were difficult to access and not necessarily tailored to help '*this group of patients'*. GP 1 reflected on her experiences in general practice and psychiatric medicine, and felt that there was a clear distinction between patients with clinical mental disorders, and those with high to moderate levels of stress. She felt that there was a gap in service provision to assist patients in that latter group, particularly with somatoform disorders, who *'may not need a higher level'* of psychological and, or pharmacological input, but more tailored '*intermediary*' services.

There are other avenues rather than antidepressants, but where does the doctor refer them? How many of these places are available? There is MIND… I have referred people but they're so overwhelmed… One patient needed an appointment within two days… they had a three week wait.

Pharmacist – 1

Many patients are coming with stress-related disorders and problems… they may not fit under the umbrella of depression or anxiety… they would benefit from an intermediary service that is not as intense as the others… I'm struggling to know where to send them… they may not need a higher level of input. They might just need an intermediary service… A stress-related service would benefit this group of patients.

GP 1

The HCPs felt that any form of intervention would be beneficial to address this unmet need in the service provision. The CVD CHIPs believed that a holistic approach within health improvement services, incorporating stress management techniques could act as a relapse prevention strategy; adding value to the services (i.e. smoking cessation, weight management, alcohol management), as they believe that such techniques *'equip'* patients with alternative coping skills *'for the future'*.

1: It sets us aside from the other health improvement directorate programmes because of the stress part… It's a holistic programme… fitness levels and confidence increase… it is not just stress in isolation… It's looking at everything.

2: We're equipping people for the future, even if they don't feel stressed now… they are able to take on board what they have learnt…

and maybe use that in the future.

CVD CHIPs – 1 & 2

The smoking cessation CHIPS felt that leaflets could act as one of the stress management intervention mediums, as they would be easy to distribute, and help raise awareness amongst their patients on stress and the relevant resources and services available. This is particularly pertinent as stress awareness amongst patients varied immensely, as evidenced in study 1, and based on the HCPs professional experiences.

1: Even having some basic literature… nothing too heavy just to give to them.

2: They might see stress differently after reading about it… With links for them to get further information…

Smoking Cessation CHIPs - 1 & 2

In spite of the HCPs advocacy for stress management services and their perceived need in service provision, some HCPs did express some opposition towards stress management services. Some felt that the stigma surrounding stress and mental health can create *'apprehension'* amongst patients; potentially inhibiting the uptake of such services. Some HCPs therefore suggested that any potential service or intervention should not be labelled with any *'mental health tag'*, due to the negative conations attributed by patients.

In relation to the previous subordinate theme of *'mind the gap'*, some HCPs felt that any potential deployment of a stress management service would also require accompanying training for HCPs to ensure accurate referrals, as GP 2 states.

GPs are generalist... Unless they are specially trained to measure and recognise stress and to designate appropriate services… we might start referring inappropriately… clogging services at a lower level.

GP 2

However, GP 2 also believed that the need for such a service was too vast, and that it could become a 'financial constraint', and that it may not necessarily be a public health priority or responsibility, as macro factors (i.e. economy and politics) often influence stressors (i.e. work demands, job security, and unemployment). Hence, she believes that the current services available (i.e. counselling and pharmacological interventions) are to some extent rendered ineffective as the *'root cause'* cannot be easily altered; adopting a systemic approach.

The problem of making these services widely available in the community is the financial constraint. We will have to spend a lot of money on it… I am quite concerned about that.

To some extent… stress is related to the life circumstances which we cannot change. We can try to change the thinking… give anti-depressants to help them. But at the end of the day, it's due to the circumstances which cannot be changed... the root cause is still there… The problem is that a lot of patients present with these sort of complaints. It would need a lot of dedicated services to treat all of them.

GP 2

Despite the contrasting views on service provision for stress management, the HCPs acknowledge that patient reported stress was a key factor in their consultations, and that a concerted effort is required to assist these patients, whether it is through training provision for HCPs, psycho-educational resources, or service development.

<u>Patient as the External Locus of Control</u>

It is apparent that the HCPs appear to advocate the utility of stress management services and interventions. However, they felt that the efficacy of such services was

dependant on the patients and their ability to access services and utilise the principles/tools provided. The HCPs therefore emphasised that the spectrum of the intervention utility is dependent on the patient, as they are deemed as the agent of control.

You advise a patient who is on blood pressure tablets - you should try and relax. But ultimately it is down to the individual whether they take that advice… smoking isn't good for them. I know they are stressed and the first thing they turn to is that… so we offer a nicotine replacement therapy (NRT)… but obviously some people feel they still can't cope so… you can give the advice… but it is an individual decision, they have to do it.

Pharmacist – 2

Once again, patients' perceptions of stress and stress management were identified as potential barriers for service uptake. For example, the CVD CHIPs found that some patients were resistant to their stress programme, due to their pre-conceived assumptions of stress management techniques requiring *'effort',* and a pessimistic attitude towards their efficacy in stress reduction. However, these beliefs appear to be amenable to change, hence the marketing and campaign design for such a service needs to acknowledge the stigma and pre-conceived beliefs surrounding stress and stress management. Such interventions would also need to offer accessible and *'user-friendly'* strategies, which can equip and empower patients; enhancing their perceived 'control', which is often reduced during the stress experience.

1: I don't think people are very open to the idea of stress management… they think it is too much effort and that you have just to accept stress and that there is nothing you can do with it.

2: But once you inform them how easy it is to manage stress… they're quite receptive, they do want it.

CVD CHIPs – 1 & 2

CHAPTER FOUR:

A CALL FOR AN INTEGRATED HOLISTIC PUBLIC HEALTH SERVICE

Discussion

Both studies one and two elucidated the lived experience of stress through the exploration of self-reported stress, and the experiences of patient reported stress from a healthcare professional's (HCPs) perspective. The findings suggest that stress is a major concern within public health.

Participants in study one described a range of stress responses which either had an adaptive or maladaptive effect on their health outcomes. For example, participants often adopted risky behaviours such as excessive smoking, excessive alcohol consumption, and poor nutritional habits. Often such responses were associated with feelings of reduced behavioural control, validating previous findings where the bidirectional association between stress and control has been exemplified within the context of maladaptive health behaviours (Payne et al., 2005; Crescioni et al., 2011; Junger & Van Kampen, 2010). In addition, study 2 exemplified that HCPs were often faced with patient reported stress, whereby patients failed to initiate or maintain health-related behaviour change (i.e. smoking cessation), or patients presented with stress-related disorders (i.e. hypertension, depressive symptomology). Thus the impact of stress on health outcomes was identified through the two studies.

The economic cost and burden of stress-related conditions on the UK economy and public services is immense. The Depression Report published by the Centre for Economic Performance (2006), states that one in six of all people suffer from depression or chronic anxiety; affecting one in three of all families, and that there are

more mentally ill people on incapacity benefits, compared to the total number of people on unemployment benefit. The evidence presented in chapter one highlights that stress can increase one's vulnerability for physical and mental health disorders. Hence the need for better stress management and prevention strategies is one of great importance, to potentially minimise the economic burden on the economy.

The Centre for Mental Health (CMH) forecasted that with greater awareness and mental health support, businesses could save approximately eight billion pounds a year *(CMH, 2007).* The National Institute for Clinical Excellence - NICE (2009) state that the promotion of positive mental health is paramount in potentially reducing costs to employers, the National Health Service - NHS, and the overall economy (Bartlett, 1998: page 3).

The lack of stress management provision within public health services was highlighted. However the gap in the HCPs perceived and actual ability to assist patients reporting stress was also evidenced. The various qualitative accounts from the HCPs, illustrate that patient reported stress is common across various healthcare domains (i.e. health improvement, community pharmaceutical provision, and general practice). HCPs felt that they were unable to assist patients adequately with their stress-related issues, due to time, remit and knowledge boundaries. It was evident that the HCPs felt passionately about their duty of care, and placed emphasis on holistic wellbeing, and that this gap in knowledge and service provision elicited anxiety and concern amongst the HCPs, as they were limited in their ability to help patients with their stress-related issues.

In light of the evidence presented so far, if the risk and burden of stress-related disorders is to be tackled a structured approach is needed. Currently the government

places importance on work-based stress management programmes, with the implementation of the Health and Safety Executive (HSE) Management Standards. However studies one and two have exemplified that the effects of stress are not constrained to just the workplace. The impact of stress is felt within various domains especially within public health services. Thus the author proposes two forms of strategic stress management solutions:

1. Incorporating stress management services within public health
2. Providing training to HCPs faced with patient-reported stress

The following sections shall provide recommendations for the two strategic stress management solutions identified, as well as explore the wider contextual issues highlighted by this doctoral research.

7.1 Integration of Stress Management in Public Health Services

In light of the evidence presented in studies one and two, the gap in service provision was exemplified. The HCPs had all experienced patient reported stress, whereby the patients had difficulties in managing their stress, and their health-related behaviours. Patients disclosed instances where they struggled to consequently manage their stress responses (e.g. behavioural, psychological, and physical), hence the need for dedicated stress management services was identified from a public health perspective. Elements of stress management incorporated into a holistic model of health improvement could offer relief to those patients struggling to manage their stress levels, which often acted as a genesis for maladaptive health behaviours (i.e. negative smoking behaviours, and alcohol consumption) (Everson-Hock, Taylor, Ussher, & Faulkner, 2010). However the referral routes, marketing models, and the service model would need to account for

the various needs identified in terms of stress management provision, as briefly outlined as follows, and illustrated in appendix 14.

7.2 Clinical Implications of Stress Management Services

There are a range of stress management interventions and tools available for clinicians (Ong, Linden, & Young, 2004) which can be efficacious for a range of disorders, for example increasing treatment efficacy, and reducing the risk of illnesses or mortality (Schneiderman, Ironson, & Siegel, 2004; Grossman, Niemann, Schmidt, & Walach, 2004).

For example, stress management has been shown to reduce the risk of developing disease in women positive for viruses (i.e. HIV and cervical cancer) (Antoni, Pereira, Marion, Ennis, Andrasik, Rose, McCalla, & Simon, 2008), as well as increase the effectiveness of the influenza vaccinations in chronically stressed older individuals (Vedhara, Bennett, Clark, Lightman, Shaw, Perks, Hunt, & Philip, 2003).

As outlined in chapter one, stress poses a particular threat to patients with or at risk of heart disease. A systematic review conducted by McAlister, Lawson, Teo, and Armstrong, (2001) found disease management interventions for CHD patients, which focused on stress management and lifestyle changes, significantly decreased hospital admissions and mortality rates. These findings were also validated in Dusseldorp and colleagues (1999) meta-analysis of 37 studies, which suggested that psycho-educational (health education and stress management) programs for coronary heart disease patients yielded a 34% reduction in cardiac mortality, a 29% reduction in recurrence of myocardial infarction (MI); and significant ($p < .025$) positive effects on

blood pressure, cholesterol, body weight, smoking behaviour, physical exercise, and eating habits.

There is a considerable body of evidence pointing towards stress management interventions for a range of disease management and prevention programmes, as the evidence suggest that there are improved health outcomes, and a significant preventative value (Dusseldorp, van Elderen, Maes, Meulman, & Kraaij, 1999; Katzer, Bradshaw, Horwath, Gray, O'Brien, & Joyce, 2008). Anderson, (1988) postulates that to accept the idea of stress as an important aspect of healthcare, is to embrace a holistic rather than a dualistic concept of healthcare, in which disease and health and treatment are a function of a person.

7.3 What is Stress Management?

Ong and colleagues (2004) reviewed one hundred and fifty-three studies on stress management, and found that stress management interventions often employed a number of techniques ranging from imagery, relaxation, meditation, cognitive behavioural approaches, and systemic approaches. The majority of the interventions reviewed often employed a combination of these various techniques, in order to raise stress awareness, and promote alternative adaptive coping responses. For example, cognitive behavioural stress management (CBSM) interventions have been used effectively in several studies (Linden, & Wen, 1990; Rutledge, Hyson, Garduno, Cort, Paumer, & Kappagoda, 1999; Vedhara et al., 2003; Antoni et al., 2008); whereby relaxation training, cognitive behaviour therapy and interpersonal skills training are combined, resulting in a reduction of stress levels.

Despite the efficacy of these stress management interventions, it must be acknowledged that research papers often fail to provide sufficient information on the

intervention plans, and may in some cases inconsistently label techniques (Ong, Linden, & Young, 2004). Interventions also tend to be tailored according to the target population (i.e. particular disease groups), thus recommendations for stress management interventions need to be based on the population needs, and offer a range of services to accommodate for the scope of need (Lehrer, Carr, Sargunaraj, & Woolfolk, 2004).

For example, both studies one and two exemplified that stress awareness varied amongst individuals, and that it was a pivotal predictor of coping. Thus biofeedback a mind–body technique (Frank, Khorshid, Kiffer, Moravec, & McKee, 2010), which aims to raise awareness on the thought and behaviour patterns, could be useful in raising awareness amongst patients. Various abbreviated forms of biofeedback have been developed which would permit cost-effective implementation. In some cases psycho-educational information on the effects of stress can also prove to be most efficacious, as it can increase ones awareness of their physiological and emotional states, as evidenced in study two.

Studies have demonstrated biofeedback's utility in promoting self-regulation over the stress response through this increased awareness, for patients suffering with stress, anxiety, depression, hypertension, and tension headaches (Hammond, 2005; Tsai, Chang, Chang, Lee, & Wang, 2005; Nestoriuc, Rief, & Martin, 2008; Siepmann, Aykac, Unterdorfer, Petrowski, & Mueck-Weymann, 2008). In fact, the older participants in study one were more attuned to the physiological effects of stress, due to their existing health conditions (i.e. hypertension, cardiovascular disease), which in turn influenced their coping styles, compared to those hostile or risky strategies employed by the younger participants.

In addition relaxation techniques which focus on breathing patterns, progressive muscular relaxation (PMR), and guided imagery could help those individuals with high stress levels, as they offer a greater sense of perceived control and distance from the stressor. For example studies have demonstrated physiological and psychological benefits of PMR such as lower blood pressure, cortisol, heart rate, fatigue, anxiety, and pain, as well as increased perceived control, quality sleep, and energy (Krajewski, Sauerland, & Wieland, 2011; Kwekkeboom, Wanta, & Bumpus, 2008; Pawlow & Jones, 2005).

Relaxation (i.e. yoga – breathing techniques, meditation, or music) was identified as one of the effective mediums employed by participants in study one, and one of the tools commonly recommended by the HCPs to their patients in study two. Thus Mindfulness-Based Stress Reduction (MBSR), (Kabat-Zinn, 1990), could prove to be efficacious; building upon the relaxation element of the stress management service model. It provides systematic mindfulness meditation training, applicable for a wide range of chronic medical and stress related disorders (Grossman, Niemann, Schmidt, & Walach, 2004; Kabat-Zinn, Lipworth, & Burney, 1985; Kristeller, 1999; Miller, Fletcher, & Kabat-Zinn, 1995). Sessions consist of mindfulness meditation and gentle hatha yoga training, as well as psycho-educational discussions about stress and coping, which are applied and tested through homework assignments (Kabat-Zinn, 1990).

Studies suggest that MBSR programs are useful interventions for various medical and psychological disorders (Grossman et al., 2004; Baer, 2003; Bishop, 2002). For example after a four-week brief MBSR intervention, patients with or at risk of coronary heart disease (CHD) reported significant reductions in depression and perceived stress (Olivo, Dodson-Lavelle, Wren, Fang, & Oz, 2009). Interventions which incorporate self-relaxation skills tend to empower individuals during and post-intervention; promoting

long-term benefits in general wellbeing. They are potentially cost-effective in the long term as patients are able to self-manage and monitor their conditions and stress levels; building upon the patient-expert model.

However, both studies one and two exemplified that some patients' required deeper psychological intervention, due to the stress responses experienced (i.e. aggressive outbursts, addictive behaviours, exacerbation of anxiety disorders). Building upon Lazarus and Folkman's Transactional Model of Stress and Coping (Lazarus & Folkman, 1984), cognitive-behavioural principles, would address the maladaptive coping and appraisal processes, in a structured format. Such an approach could encompass assertiveness training, anger management, and self-monitoring of stress intensity; permitting a tailored approach. In addition, there is also strong evidence advocating cognitive behavioural therapy, and its efficacy for stress management (Bisson & Andrew, 2007).

Effective stress management interventions need to offer a range of tools and address the various needs presented by patients (i.e. low, moderate and high stress levels) as outlined in the proposed service model (appendix 14a). Lehrer and colleagues (2004) postulate that those patients who tend present with a predominant muscular component of the stress response tend to respond more effectively by muscularly oriented methods (i.e. PMR), whereas those with higher levels of stress, potentially borderline anxiety and phobias tend to respond more to methods incorporating cognitive behavioural components. Thus a range of stress management interventions should be offered to accommodate for the variability presented in the patients stress responses and experiences.

7.4 Stress Management Service Structure

A range of services for stress management should be offered, and delivered in various modes (i.e. one-to-one, group, online, SmartPhone apps, etc.) to promote flexibility for service accessibility.

For example, one-to-one interventions or programmes can provide a more tailored approach in addressing individual needs. Both the participants and the HCPs identified that the inclusion of one-to-one sessions was paramount, due to the sensitive nature of stress-related disclosure, issues surrounding stigma, and perceptions of weakness. However a group format could also provide social support for service users building upon their shared experiences. For instance, online support groups can provide a social forum for stress disclosure which can be a cathartic outlet for the patient, as well as permitting the identification of alternative coping strategies (Meier, 2003). This would promote a 'patient-expert' model which can be empowering for service users, and as stress was associated with perceptions of reduced control; this approach would be efficacious in promoting a sense of empowerment and mastery.

In addition, the integration of technology in health service provision has been most efficacious for a range of interventions, such as medication adherence, health promotion and stress management (Lawrence, Allison, Chen, & Demand, 2008; Safren, Hendriksen, Desousa, Boswell, & Mayer, 2003; Meier, 2002; Villani & Riva, 2012). Internet programmes are able to reach a wide audience, in a cost effective manner and with convenient administration (Griffiths, Lindenmeyer, Powell, Lowe, & Thorogood, 2006). With the increasing workloads, low staffing and decreased funding in health services, internet-based and electronic interventions can, to some extent supplement service provision and offer 'instant support' to service users. The need for instant access to stress management services and information for stress management

emerged as a key finding, in both studies one and two, further advocating the need for 'e-stress management programmes', as they can offer '24/7' and real-time support.

The various modes in service provision could also provide a stepped care approach towards stress management (Kilfedder, Power, Karatzias, McCafferty, & Niven, 2010), to accommodate for the various stress management needs. For instance psycho-educational resources could help increase awareness on stress symptoms and better recognition, whereas face-to-face interventions could provide a more tailored and structured form of intervention for those with more complex needs. The allocation of services should be determined by the screening process, which is dicussed further in the following section.

7.5 Stress Management Screening

An adequate screening process is crucial to ensure the levels of stress are tentatively and accurately captured, to inform the level of stress management intervention required based on the patient's presented need (i.e. low levels of stress - psycho-educational information vs. high levels of stress - MBSR), and screening tools could assist in effective recognition and informing the appropriate forms of intervention allocation.

There is a wealth of evidence validating a range of clinical scales that have been used in the field of stress. Stress scales (*Perceived Stress Scale* - Cohen, Kamarck, & Mermelstein, 1983; *Life Event Checklists/Social Readjustment Rating Scale* - Holmes & Rahe, 1967), depression scales (*Depression Anxiety and Stress Scale* – Lovibond & Lovibond's, 1995) and coping scales (*Ways of Coping Questionnaire* – Folkman &

Lazarus, 1988; *COPE scale* - Carver, Scheier, & Weintraub, 1989) have been used extensively in the field, and can inform clinical decision making. Despite the utility of such scales they are open to bias, and prone to poor test-retest outcomes due to their retrospective measures (Raphael, Cloitre, & Dohrenwood, 1991). Furthermore as this doctoral research has demonstrated, the stress experience is highly subjective, and is open to many confounding variables, such as gender, age, coping styles, history of stress exposure, stress appraisal, to name but a few variables (Parker & Endler, 1992). Thus the positivistic endeavour to quantify and label such a subjective experience appears to be somewhat a contentious activity.

A patient-centred approach could allow for a more open form of screening, whereby self-reported measures, such as diaries, and one-to-one consultations could be used to inform screening and intervention allocation. This tailored approach would be more apt in identifying individual problem areas, allowing a more targeted approach to stress management (Lehrer et al., 2004). At the same time it would help identify those patients that may be presenting with more severe psychological issues, and that require more intensive services.

In addition a patient-centred approach could offer a more sensitive form of screening and case formulation, compared to a more impersonal and clinical process of screening where clinical scales are utilised. A patient-centred approach would appear to be apt, in light of the sensitive nature of the stressors some participants were exposed too. Study two revealed that some patients found some of the questions on the stress scales to be too probing, generating emotive outbursts, which then led to increased anxiety amongst the HCPs, as they felt ill-equipped to deal with such cases; hence a patient-centred approach would offer a private and sensitive approach for the screening. However such a mode of screening would require dedicated staffs, which

are trained to a high level, and confident in their ability to manage stress-related disclosure.

In summary, stress management services offer scope for intervention and prevention of stress-related conditions. There are numerous evidence based stress management tools which can be offered to patients, in various modes, with varying degrees of cost. However the scope of e-interventions and patient-led programmes, offer a flexible and cost-effective medium to assist service users in their stress management, which is paramount in light of the financial constraints faced within the National Health Service (NHS). Developments in more user-friendly and accessible stress management services offer the potential for greater uptake of services, which in turn could assist in the long term reduction of public health expenditure. Thus the holistic model to behaviour change and stress management strategies would need to be further tested, and potentially piloted to inform future commissioning activities and health improvement service provision.

However the deployment of such a service would require a structured approach, where relevant stakeholder approval would be crucial to ensure that the service is integrated into existing services (i.e. health improvement services – smoking cessation, weight management, and cardiac rehabilitation programmes). More importantly the provision of training for primary care healthcare providers would need to coincide with the deployment of the service, to ensure that they are equipped with sufficient knowledge of the service, referral process, and depending on their level of involvement, the administration of stress management techniques. This is further discussed as follows.

7.6 Training for Patient Reported Stress

In spite of the supporting evidence for stress management interventions, closer examination revealed that greater focus is also needed on stress management training for those professionals in front line services. For example, study two exemplified and confirmed that a range of healthcare providers are exposed to patient reported stress (Katon, Sullivan, & Walker, 2001; Haug, Mykletun, & Dahl, 2004; Haftgoli, Favrat, Verdon, Vaucher, & Bischoff, 2010; Crump et al., 2011). Healthcare providers often felt ill-equipped to help their patients, as they did not have the necessary skills or knowledge, or the confidence to talk about stress; coupled with a lack of available resources to refer patients too (Crump et al., 2011); suggesting that service provision alone is not enough to address the associated with patient reported stress.

Training for HCPs could help ensure that they would identify stress symptomology, especially as the two studies highlighted that some patients failed to identify the impact of stress on their health and wellbeing (Henningsen et al., 2007; Aragones et al., 2007; deWaal et al., 2008). Training could also help HCPs to feel more able, and comfortable to engage in a 'stress-discourse' with their patients, and hopefully facilitate more patient-referrals to the correct services for stress (Bakker et al., 2010). Studies have shown that primary care patients do expect their healthcare providers, such as GPs to offer and provide more psychological support (i.e. psycho-educational information, counselling, referrals to relevant psychological services), and that greater emphasis on psychosocial training is needed to facilitate this process (Frizsche, Armbruster, Hartmann, & Wirsching, 2002). For example Bakker and colleagues (2010) demonstrated that providing GPs with training on a minimal intervention for stress-related mental disorders and sick leave (MISS) increased the administration of screening tools and leaflet distribution, compared to the control group.

Study two reinforced how passionate the HCPs were about their patients', and that they placed great importance on the 'duty of care'. They were desperate for stress and stress management training provision, to elevate their fears and anxiety when dealing with patient reported stress. They were able to identify areas of weakness or gaps in their knowledge, reflecting on their past experiences of patient reported stress. Thus the findings from the two studies were used to inform a training programme for HCPs on stress (appendix 15), which would address key topics such as: what is stress, effects of stress, measuring stress (Bakker et al., 2010), an overview of stress management tools, and talking about stress (Marinker, Blenkinsopp, Bond, Britten, & Feely, 1997; Marcinowicz, Konstantynowicz, & Godlewski, 2010; Silverman & Kinnersley, 2010).

As evidenced by Bakker and colleagues (2010), the structure and modality of the training programme is central to the effective implementation of the acquired knowledge. For example, such training programmes would need to incorporate socratic, facilitative, and didactive learning models (Banning, 2005), to accommodate for both a facilitator-centred and a trainee-centred training style. Therefore providing scope for the HCPs to reflect and draw upon their past experiences of patient reported stress; helping them to identify useful or less effective strategies that could be developed and enhanced. In turn potentially empowering the HCPs with a greater sense of confidence and greater ownership of the strategies identified. In contrast, the didactive approach could be efficacious in imparting knowledge on the various stress management tools, which the HCPs may be less knowledgeable about.

Role play tasks would enable socratic and facilitative modes of learning, as HCPs would be able to test a range of skills such as communication (verbal and non-verbal), screening, as well as the HCPs ability to teach and recommend stress management techniques/tools/resources to patients. This form of applied learning has been used successfully in other training programmes for HCPs (Bakker et al., 2010; Martin &

Chewning, 2011), where action scenarios have enabled HCPs to practice using tools or intervention models.

It would be important to tailor the training programmes for different HCP groups (Slovic, Finucane, Peters, & MacGregor, 2004; Gregory, Peters, & Slovic, 2011), as they may be restricted on the level of intervention they can provide due to remit and time constraints. Any potential deployment of such a training programme would need to be informed by stakeholder involvement and stringent piloting, to facilitate the potential development of more cost-effective and flexible forms of training, such as interactive on-line programmes (Sargeant, Curran, Ferrier, Allen, Kirby, & Ho, 2004). These would potentially offer greater flexibility for training uptake, especially in light of the increasing workloads and service demands that many frontline healthcare professionals are exposed to.

Therefore the need for a structured training programme has been identified. However such a training programme would need to be piloted across different HCP groups, in order to determine whether the content was relevant, and the balance between the various teaching modalities was appropriate to facilitative learning. Specific evaluation outcomes would need to be identified for the various HCP groups (as the level of stress management intervention provision could vary due the HCP remit), as part of the training evaluation.

7.7 Future Directions in the Field of Stress

Despite the proposed integration of stress management programmes in public health and the provision of training programmes for HCPs on stress and stress management, wider contextual issues need to be addressed, in the field of stress.

The research has exemplified that stress is socially constructed, and that a range of meanings are attached with the term stress; reinforcing the subjective nature of stress and the methodological issues associated with the definition and measurement of stress. Further investigation revealed the negative connotations associated with stress and stress management (i.e. inability to cope is a weakness; opt-out card) perpetuate taboo and stigma within society (Kinman & Jones, 2005); inhibiting stress disclosure and seeking advice or assistance (Jorm, 2000), through self-stigmatisation (Bryne, 2000; MIND, 2010, 2011). Life experience and stress severity/response often influenced the extent to which taboo or stigma influenced the patients' likelihood of seeking stress management advice; reinforcing that the meaning, perception, and experience of stress is not static or fixed.

Issues such as taboo and stigma surrounding mental health need to be addressed, if the burden of mental illnesses and disorders are to be grasped and efficiently managed. These negative perceptions are enough to deter the uptake of stress/mental health services, which are in essence the outlets of support for patients with the greatest levels of need/s.

Docherty (1997) found that not only did the patients' shame hinder disclosure regarding depression; physicians were reluctant to enquire about it. Even though some may argue that the introduction of new mental health guidelines and policies (i.e. NICE,

Department of Health) have resulted in an increased awareness and discourse regarding mental health in primary care over the last decade; study two suggests otherwise. The study exemplified that some HCPs lack the confidence to 'talk about stress', therefore the proposed training programme for HCPs could facilitate greater confidence amongst HCPs in dealing with patient reported stress, and in turn promote and encourage a conducive environment to overcome the barriers associated with stigma and taboo in terms of stress disclosure.

However, adopting a positive psychology perspective could also offer some assistance. Early exposure to mental health issues and discourse, could help remove stigma through an increased awareness and the removal of perceived barriers (i.e. stress should be manageable, inability to cope equates to an internalised sense of failure). It could also act as a preventative measure, as stress management tools could be taught (i.e. portable biofeedback devices, management of finances, prioritisation) to reduce stress levels (Ratanasiripong, Sverduk, Hayashino, & Prince, 2010). This type of preventative strategy is paramount, as stress is a significant predicator of psychological distress in college students and can manifest as anxiety and depressive symptoms in later life (Amutio & Smith, 2007; Morrison & O'Conner, 2005). Population based interventions can be efficacious, hence school-based interventions provide the suitable platform for such forms of early preventative interventions (NICE, 2007).

Longitudinal studies have shown that brief school-based intervention for children can produce durable reductions in anxiety problems (Dadds, Holland, Laurens, Mullins, Barrett, & Spence, 1999). However such forms of interventions require further testing, greater tailoring to the population demographics, longitudinal measures, and the selection of appropriate evaluation measures (i.e. different modalities – visual, auditory, tailored for various cognitive levels, and relevant construct measures – coping

skills, behavioural outcomes), highlighting another area for intervention and evaluation within the field of stress.

In addition both studies one and two highlighted that a systemic approach towards stress management would also be required, in that parent support groups and financial management advice could help those with parenting or financial stress. Thus effective pathways between local community voluntary services (CVS) would need to be established to address these specific needs, highlighting the role of the wider determinants of health and stress within a biopsychosocial framework.

It is paramount that the proposition of any service or intervention model addresses the importance of transparency, in that any intervention plan or service model should be as clear and concise, to facilitate evidence based practice. To further ensure that intervention models can be both tested and easily replicated, to promote effective intervention deployment and development. This could also promote effective commissioning of services, which is pertinent in light of the massive economic pressures faced today by the public sector services, such as the NHS. Therefore As stress management strategies offer both therapeutic and economic benefits; greater focus is needed on stress management services within public health and the NHS.

7.8 Epistemological and Methodological Considerations

The qualitative methodology utilised in the two studies consequently proved to be an efficacious tool to permit an open and flexible mode of study into the stress experience, facilitating a shared exploratory journey between the participants and the

researcher into the lived experience of stress. The neutral method of inquiry (Stam, 2004) captured the characterisations of health, stress and coping.

Guimond-Plourde (2009) postulated that 'moving from the empirical to the phenomenal makes it possible to evoke a return to dimensions of meaning which have been set aside or forgotten in the lived experience of stress and coping'. The phenomenological perspective utilised in the two studies revealed what has not been appreciated or focused upon in the field of stress and coping (Guimond-Plourde; 2009).

The studies demonstrated how effective a qualitative approach is for analysing subjective topics such as stress, through the individuals' sense of self, experience, and meaning of their (Nicolson, 1995). The phenomenological perspective attenuated to the various factors which influenced the perception of stress, and subsequently the participants' stress experiences.

A number of issues were exposed, highlighting areas that require further attention, investigation, and testing in the field of stress. The qualitative methodology rejected the sterile assumptions often emphasised in this field of study, which typically places a greater focus on a quantitative approach.

This doctoral research has asserted that stress is not only difficult to define, but also to quantify. The phenomenological mode of analysis revealed that the individuals attached a range of meanings to their stress experiences, providing further support for interactional models of stress. Whilst the thematic form of analysis allowed a global exploration of the experiences amongst the data set; subsequently highlighting areas for attention, informing the development of service recommendations and training programmes for HCPs. Thus the thematic phenomenological approach was useful in

opening up the experiences of stress; through both the patients 'and the HCPs' perspective.

7.9 Concluding Remarks

In summary, the exploration of the stress experience through a thematic phenomenological perspective has enabled a return to the lived experience and how stress is labelled and perceived, both by the individual and society. Stress has become deeply rooted in everyday discourse, conveying feelings and perceptions of limited control, anger, excessive demands, pressure, and weakness, to name but a few. However the impact stress asserts on health and illness, exemplifies that it is far more wide reaching, and that greater emphasis should be placed on earlier stress management interventions.

Health psychology explores a range of health related conditions and behaviour. However as this research has exemplified stress plays a dominant role in most health-related behaviours. Yet the role of stress management interventions across diabetes management, weight management, and smoking cessation, for example, appears to be minimal, and somewhat overlooked within the intervention programmes typically offered in this domain of health care provision. Thus if health improvement services are to be effective, the role of stress cannot be overlooked, as stress plays an instrumental role in how individuals behave and utilise various coping styles, which can further exacerbate the risk of illnesses, which are predominantly preventable (i.e. lung cancer, type 2 diabetes, coronary heart disease).

Hence the impact of stress and the utility of holistic stress management services within public health need to be recognised, in order to permit concerted efforts in the development and investment of holistic health improvement programmes. The deployment of dedicated stress management services is paramount, alongside the provision of training for HCPs, to ensure that patient reported stress is adequately addressed, within a preventative framework of wellbeing.

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APPENDICES

Appendix 1 – Participant Information Handout

Version 1: 12/02/10
Information Sheet

NHS South West Essex

Participant Information Sheet

Study Title – Exploration of the Lived Experience of Stress and Stress Management
Lead Researcher – Miss P. K Kalsi

I am a Doctorate in Health Psychology student at City University and a Trainee Health Psychologist with South West Essex PCT. I would like to invite you to participate in research that I am carrying out. Before you make a decision about participating, please read the information sheet and understand why the research is being done and what it will involve.

What is the purpose of the study?

The aim of the study is to explore your views and experiences of stress and stress management. As well as aiming to understand the barriers that local residents of Basildon and Thurrock may face in accessing a stress management service, and how these barriers can be overcome. The results from the discussion will help us to understand the needs of the local people, and potentially guide service provision.

Why have I been chosen?

You have been chosen because you live in Basildon and Thurrock, you have self-reported high levels of stress in the last year, and you are aged 18+ years.

Do I have to take part?

Taking part is entirely voluntary. If you decide to take part, you will then be requested to sign a consent form. You are still free to withdraw at any time and without giving a reason. This will not affect you adversely or negatively in any way.

What will happen to me if I take part?

If you decide to take part in this study, you will be required to take part in an audio-taped group discussion. The discussion will typically take 45-55 minutes and will remain strictly anonymous. However the researchers are only permitted to breach the code of confidentiality if any illegal or inappropriate misconduct is disclosed during the research by any of the research participants.

The discussion will consist of approximately five other participants and will be semi-structured in nature, which means that you will be asked open-ended questions and the discussion will be designed to explore your view of things, with minimal amount of assumption from the researcher. You and other participants will be expected to discuss your thoughts and experiences of stress and stress management. The discussion will also focus on ways to enhance local knowledge about stress management, as well as ways of overcoming the barriers in accessing a stress management service.

Your discussion will be audio-recorded to help with the transcription process which will allow the researcher to analyse the discussion. The lead researcher (xxxxxxxxx) will be

present in the discussion group, and facilitate the discussion. A second member of the research team (xxxxxxxxx) will also be present during the focus group for health and safety purposes.

Will my taking part in this study be kept confidential?

If you consent to taking part in the study, all the information which is collected about you and from you will be kept strictly confidential. It will under no circumstances be passed on to anybody. However the researchers are only permitted to breach the code of confidentiality, if any illegal or inappropriate misconduct is disclosed during the research by any of the research participants.

Your name will always remain separate from the answers that you give, and you will be recognised by a participant number, which you will be assigned. Your personal details and the audio recordings will be destroyed once transcription has taken place.

Participants also have a duty to ensure that they maintain the code of confidentiality, so that the content of the discussion group is not communicated with each other or others outside the discussion group, at any time after the focus group.

What are the possible disadvantages and risks of talking part?

There are minimal risks of taking part in this study, as your participation is voluntary (i.e. it is your choice to answer the questions or not). If you feel you have been affected by this research please consult with the research team or your G.P..

What are the possible benefits of taking part?

We cannot promise this study will help you, but the information we get from this study will help in understanding the local awareness of stress and stress management. This study may facilitate a review or change to stress management services within Basildon and Thurrock.

What happens when the research study stops?

For this part of the study, once the focus groups and the questionnaires are complete you will not be contacted again. The findings from the discussion may be used to potentially develop a stress management service.

The results will be disseminated in a report format, but no names will be provided. Direct quotes will be used to evidence the findings. It is possible that the research may be published in an academic journal, as it is part of a doctoral research project.

What will happen if I don't want to carry on with the study?

If you decide to withdraw, efforts will be taken to destroy all your identifiable data. However any unidentifiable data may be retained and included in the analysis.

NHS
South West Essex

What if there is a problem?

a) Complaints

If you have any concern about any aspect of this study you should ask to speak to the researchers, who will do their best to answer your questions.

1. **Parmpreet Kalsi** – Lead researcher: Contact Number: xxxxxxxxxxxxx
2. xxxxxxxxxxxxx – Assistant researcher: Contact Number: xxxxxxxxxxxxx
3. xxxxxxxxxxxxx - Assistant researcher: Contact Number: xxxxxxxxxxxxx

If you remain unhappy and wish to complain formally you can do this, by contacting the **Patient Advice and Liaison Service (PALS),** which is a confidential service that aims to listen to your concerns, suggestions or queries. They will do their best to sort out problems quickly on your behalf. The PALS contact details are stated below:

- ***Basildon Tel:*** xxxxxxxxxxxxx
- ***Thurrock Tel:*** xxxxxxxxxxxxx

Remuneration

You will be given a £20.00 voucher for your participation, and your travel expenditure shall be reimbursed upon display of a valid receipt (maximum £10.00).

Contact Details

If you have any questions or queries please contact:

Parmpreet Kalsi Trainee Health Psychologist – Lead researcher Contact Number: xxxxxxxxxxxxx
xxxxxxxxxxxxx Trainee Health Psychologist – Assistant researcher Contact Number: xxxxxxxxxxxxx
xxxxxxxxxxxxx Health Psychology Team Leader– Assistant researcher Contact Number: xxxxxxxxxxxxx

Thank you!

Appendix 2 – Participant Consent Form

Version 1: 12/02/10
Consent Form

NHS South West Essex

Consent Form

Title of Project: Exploration of the Lived Experience of Stress and Stress Management
Name of researcher: Miss P. K. Kalsi

	Please initial to confirm acceptance
1. I confirm that I have read and understood the information sheet dated 12/02/10 (version 1) for the above study and have had an opportunity to consider the information, and ask questions, and have had these answered satisfactorily.	☐
2. I understand the responses I give will be treated as confidential, my contact details will always remain separate from the data and I will only be recognised by my participant number.	☐
3. I understand that the discussion will be audio-taped to permit transcription. I give permission to be audio-taped.	☐
4. I understand that participation in this study is entirely voluntary and refusal to take part involves no penalty and I may withdraw from the study at any point.	☐
5. I understand that standardized debriefing will take place once the focus group has taken place. The debriefing will include information on the purpose of the study, background research and the design of the study so that I can recognise my contribution to the research.	☐
6. I understand that anonymised quotes will be used in any written publication. I give permission for the use of anonymised quotes.	☐
7. I agree to take part in the above study	☐

Participant Number: _____

_____	_____	_____
Name of Participant	Date	Signature
_____	_____	_____
Name of Person Taking Consent	Date	Signature

If you are interested in learning about the findings of this study please tick the box below.

☐ **By ticking this box, I confirm that I consent to the researcher contacting me after the study, to learn more about the findings obtained from the research.**

Appendix 3 – Participant Debriefing Sheet

Version 1: February 2010
Debriefing Sheet

NHS
South West Essex

Debriefing Sheet

Exploration of the Lived Experience of Stress and Stress Management

Thank you for taking your valuable time out to take part in this research. Your contribution is very much appreciated. The aim of the study is to explore South West Essex residents' views on stress and stress management tools. This study also aims to understand the barriers that local residents of Basildon and Thurrock may face in accessing a stress management service and how these barriers can be overcome. The results from this discussion will help us to understand the needs of the local people and will enable us to potentially develop a tailored stress management service.

Stress is the way that you feel when pressure is placed on you. A little bit of pressure can be productive, and help you to perform better at something. However, too much pressure or prolonged pressure can lead to stress, which can be unhealthy for the mind and body. Everyone reacts differently to stress, and some people may have a higher threshold than others. Too much stress often leads to physical, mental and emotional problems. In the UK, anxiety and depression are the most common mental health problems, and the majority of cases are caused by chronic stress. Research by mental health charities also suggests that a ¼ will have a mental health problem at some point in their lives.

Therefore in order to develop strategies for improving mental and physical health in Thurrock and Basildon, it is crucial to understand how residents view and experience stress. Thus, this study will help in broadening knowledge, and developing services for stress management in Thurrock and Basildon.

If you by any way have been affected by taking part in this research, then you can consult the researcher, as they have basic counselling skills, or alternatively please contact your G.P.. If you would like further information on stress then please contact any of the following services:

NHS Choices

www.nhs.uk/Pages/HomePage.aspx

- Type stress into the search box to obtain more information

Samaritans

www.samaritans.org.uk/

xxxxxxxxxx

MIND

www.mind.org.uk/

xxxxxxxxxx

If you have further questions about this study, or if you wish to lodge a complaint or concern then please contact:

Parmpreet Kalsi
Trainee Health Psychologist – Lead researcher
Contact Number: xxxxxxxxxx

xxxxxxxxxx
Health Psychology Team Leader
Contact Number: xxxxxxxxxx

Patient Advice and Liaison Service (PALS) - A confidential service and aims to listen to your concerns, suggestions or queries. They will do their best to help sort out problems quickly on your behalf.

- ***Basildon Tel:*** xxxxxxxxxx
- ***Billericay, Brentwood and Wickford Tel:*** xxxxxxxxxx
- ***Thurrock Tel:*** xxxxxxxxxx

The Health Psychology Team declares that the information provided above is in accordance to the best of our knowledge.

Appendix 4 – Focus Group Questions

Hello, my name is Parmpreet Kalsi, and I'm a trainee health psychologist with NHS South West Essex. I am here today to ask you some things about stress and stress management. This is not a test; there are no right and wrong answers. I'm here to find out your opinions and its okay to have a different opinion to everyone else.
`

Mention tape recorder/confidentiality – exceptions where it may be breached/ not obliged to answer if they feel uncomfortable/ ground rules (respect for others and their opinions, no talking over each other, etc).

Introduction

1. Can we just go around and introduce ourselves, without telling me your name.
   Prompt: i.e. your age, profession, or anything you may wish to say about yourself.

2. What does 'health' mean to you?

3. Would you regard yourself as being healthy?
   Prompt: What things do you do…

4. What barriers may people face in leading a healthy life?

5. What are your main sources of information on health & keeping healthy?
   Prompt: e.g. sources like books, magazines, other? Least and most important

Views on Stress

6. What does stress mean to you?

7. Can you tell when you're stressed? – How?

8. What are your experiences of stress?

9. How do you think stress affects people?
   - **Probe:** health – CVD, risky behaviours, sexual dysfunction, concentration levels, stress leave from work? Do you identify with that?

10. What do you experience in your body when stressed?

11. How do you know when you are stressed?

Views on Stress Management

12. Do you think stress can be managed?

13. How do you manage your stress?

14. What do you think about stress management?
    - **Probe:** i.e. do you think stress can be managed / do you think some tools/services are more effective than others?

15. Do you think people would benefit from stress management services?
    - **Probe:** If yes – please state how.

16. Are you aware of any stress management tools?
    - **Probe:** If yes – please state, explain tool

17. Are you aware of any stress management services?
    - **Probe:** If yes – please state.

18. What are your views on the referral process to these services?

(solutions for how to overcome will be addressed in the next section)

Service Design

It is hoped that this study will inform the design of a stress management service in NHS South West Essex. The following questions will now ask about your views on how the service could be designed.

19. What stress management tools/services should be offered?

20. Who could deliver the service?
    - **Probe:** Why? capacity issues (i.e. accommodation)

21. What time do you think that the service should be offered?

22. Where should the service be run/ offered?
    - **Probe:** GP surgeries, Clinics, Pharmacists, etc.

23. What do you think the referral process should look like?
    - **Probe:** self referral, barriers, solutions on how to overcome.

Conclusion

24. Is there anything else you wish to share on this topic?

That's the end of the focus group. I would like to thank you for your contributions to this focus group. All the information obtained in this group will be used in a constructive way to design a stress management service, which aims to enhance public health.

Appendix 5 - Screening Questionnaire

Thank you for your time. I have few questions I would like to ask you. Please note that I will not ask for any personal details at this stage, and any information you provide will be kept strictly confidential.

1. What town do you live in?

Thurrock		If yes, exclude
Basildon		If yes, exclude
Brentwood		
Other		

2. How old are you?

< 18 years		If yes, exclude
18-29 years		
30-49 years		
50 + years		

3. What is your gender?

Male	
Female	

4. Have you in the last year experienced high levels of stress?

Yes		
No		If no, exclude

5. Have you ever suffered from depressio[illegible] anxiety or any other mental illnesses?

Yes		If yes, question 6
No		If no, question 8

6. If yes, when?

Less than 1 year		If yes, exclude
Greater than 1 year		If yes, question 7

7. Are you still receiving treatment (i.e. medication or counselling)?

Yes		If yes, exclude
No		If no, question 8

8. Will you be available to attend:

Date: 23/02/10. Pitsea Leisure Centre 18-29 years - male	Date: 15/02/10. Civic Offices 18-29 years - female
Date: 16/02/10. Civic Offices 30-49 years - male	Date: 25/02/10. Pitsea Leisure Centre 30-49 years – female
Date: 26/02/10. Pitsea Leisure Centre 50 + years – male	Date: 19/02/10. Civic Offices 50 + years - female

Thank you for your time.
Hand *participant information sheet* if participation accepted and collect *contact details*.

Appendix 6 – Participant Recruitment Email

Dear Sir/Madam,

I am a Trainee Health Psychologist working for your local NHS service. I am conducting a study on stress and stress management.

The study will require your participation in a focus group, which is a group discussion, consisting of five other individuals. The discussion will last for approximately 45-55 minutes. You will be given a leaflet once the study is complete to learn more about the study, as well as useful contact details.

Your insight and views are most valuable to the study, as it is hoped that they will shed light on your experiences of stress and stress management.

If you wish to take part in the study please confirm your attendance for the focus group by either email, or telephone (details are stated below). You will then be contacted by the lead researcher (Parm Kalsi) and then be asked a list of questions to determine whether you will be able to take part in this study.

However please take some time to refer to the dates, times and location details for the focus groups in the two tables below. The focus groups are divided by age and gender. Please refer to the table below to see which category is appropriate for you, and whether you will be able to attend at the given time and date.

Focus Group 1 Date: 15/02/10 - 5.30-7.30 p.m. Civic Offices 18-29 years - female	Focus Group 2 Date: 16/02/10 5.30-7.30 p.m. Civic Offices 30-49 years - male
Focus Group 3 Date: 19/02/10 -5.30-7.30 p.m. Civic Offices 50 + years - female	Focus Group 4 Date: 23/02/10 - 5.30-7.15 p.m. Pitsea Leisure Centre 18-29 years - male
Focus Group 5 Date: 25/02/10 - 5.30-7.15 p.m. Pitsea Leisure Centre 30-49 years – female	Focus Group 6 Date: 26/02/10 - 5.30-7.15 p.m. Pitsea Leisure Centre 50 + years – male

The addresses for where the focus groups will be conducted are provided. Please note that depending on which focus group you will be attending the venue will vary.

Venue for - Focus groups 1, 2, and 3 **Civic Offices** xxxxxxxxxxxxx	Venue for - Focus groups 4, 5, and 6 **Pitsea Leisure Centre** xxxxxxxxxxxxx

You will be given a £20.00 voucher for your participation, and your travel expenditure shall be reimbursed upon display of a valid receipt (maximum amount £10.00). If you any questions, or would like further information you can contact the lead researcher on the contact details stated below.

Kind regards,
Miss Parm Kalsi BSc (Hon), MSc (Dist), DPsych student
Trainee Health Psychologist - CONTACT DETAILS

Appendix 7 – Private Information Sheet – Participant Demographic Information

Private Information

This sheet will be kept separate from the responses that you give during the interviews and will be kept in a locked cabinet. Once the responses from all the participants are analysed this sheet will be destroyed.

Participant Number: _____

Gender: MALE / FEMALE

Age: _____

Ethnicity: _____

Occupation:

Student
Manual
Routine non-manual
Managerial
Professional
Medical/Nursing
Semi-retired
Retired
Unemployed
Other: _____

Print your First Name: _____

Print your Last Name: _____

Home Address: _____

_____

_____

County: BASILDON / THURROCK

Tel (Home): _____

Tel (Mobile): _____

Email Address: _____

Appendix 8 – Focus Group Questions – HCPs

Version 2: 29/06/10
Focus Group Question List

Focus Group Questions – HCPs

Hello, my name is Parmpreet Kalsi, and I'm a trainee health psychologist with NHS South West Essex. I am here today to ask you some things about stress and stress management. This is not a test; there are no right and wrong answers. I'm here to find out your opinions and its okay to have a different opinion to everyone else.
`

Mention tape recorder/ confidentiality/ not obliged to answer if they feel uncomfortable/ **ground rules**.

Introduction

1. Can we just go around and introduce ourselves, without telling me your name.
   - **Prompt:** i.e. your age, profession, or anything you may wish to say about yourself.
2. What does positive well-being mean to you?

Views on Stress

3. What does stress mean to you?
4. Is it a common area of concern for your patients/service users?
   - **Probe:** If yes (i.e. how often is it a reported concern).
5. How do you think stress impacts on your patients'/service users' their health?
   - **Probe:** If yes, how……?
6. How do you think the disclosures from your patients'/service users' about stress affects you?
   - **Probe:** If yes, how do you feel……?

Views on Stress Management

7. Do you think stress can be managed?
8. What do you think about stress management?
   - **Probe:** i.e. do you think stress can be managed / do you think some tools/services are more effective than others?
9. Do you think that your patients/service users would benefit from stress management services?
   - **Probe:** If yes – please state how.
10. Are you aware of any stress management tools?
    - **Probe:** If yes – please state., explain tool
11. Are you aware of any stress management services?
    - **Probe:** If yes – please state.

Follow on question for question 9

12. What are your views on the referral process to these services?
(solutions for how to overcome will be addressed in the next section)

Service Design

It is hoped that this study will inform the design of a stress management service in NHS South West Essex. The following questions will now ask about your views on how the service could be designed.

13. What stress management tools/services should be offered?
14. Who could deliver the service?
    - **Probe:** Why? capacity issues (i.e. accommodation)
15. What time do you think that the service should be offered?
16. Where should the service be run/ offered?
    - **Probe:** GP surgeries, Clinics, Pharmacists, etc.
17. What do you think the referral process should look like?
    - **Probe:** Barriers, solutions on how to overcome.

Training

18. How do you feel when talking about stress with your patients and service users?
    - **Probe:** Confidence / Scale 1-10
19. Have you ever attended training on stress and stress management?
    - **Probe:** if so what? Particular topics?
20. Would you attend training/workshops on stress (again)?
    - **Probe:** If yes – timings, locations, delivered by who, etc.
      If no – why?

Feed on from question 16:

21. What topics, would you like to be included?

Conclusion

22. Is there anything else you wish to share on this topic?

That's the end of the focus group. I would like to thank you for your contributions to this focus group. All the information obtained in this group will be used in a constructive way to design a stress management service, which aims to enhance public health.

Appendix 9 - Invitation Email - HCPs

Hello,

I am a Trainee Health Psychologist at NHS South West Essex. I am conducting some research on stress and stress management, and am very interested in your views and opinions on stress and stress management, as a healthcare professional in NHS South West Essex.

You must have a minimum of 1 year work experience within you role as a GP, Pharmacist, or Community Health Improvement Practitioner (smoking cessation advisor, healthy eating advisor, etc) at NHS South West Essex.

If you decide to take part in this study you will be required to participate in a group or a one to one discussion. The discussion will typically take 45 minutes and will remain strictly confidential and anonymous. The group discussion will consist of approximately six to seven other participants.

You and other participants will be expected to discuss your thoughts and experiences of services users reporting or displaying signs of stress and your views on stress management. The discussion will also focus on ways to enhance local knowledge about stress management, as well as ways of overcoming the barriers in accessing a stress management service. Your discussion will be audiotape recorded to help with the transcription process which will allow the researcher to analyse the discussion.

Your names and personal details will remain confidential, and pseudonyms will be used for any written notes. Attached is the participation information sheet, which provides greater detail about the study and participation.

If you interested in being involved in the study, please contact the lead researcher on: xxxxxxxx, or by email: xxxxxxxx, to find out more about the research, and how you can get involved. **Contact must be made within two weeks, upon receipt of this invitation, to confirm your interest in participation.**

It should be noted that the times and dates for when the focus group will be conducted are yet to be negotiated. If in the event the focus group is to be conducted in your work hours, it shall be your responsibility to negotiate your time allocation for your participation in the study, with your team leader.

Kind regards,

Miss Parmpreet Kalsi

Trainee Health Psychologist
BSc (Hons), MSc (Dist), DPsych student

Appendix 10 - Participant Information Sheet HCPs

Participant Information Sheet

Study Title:

A Qualitative Study Exploring Healthcare Professionals' Views on Stress and Stress Management in NHS South West Essex

I am a Doctorate in Health Psychology student at City University and a Trainee Health Psychologist with NHS South West Essex. I would like to invite you to participate in research that I am carrying out. Before you make a decision about participating, please read the information sheet and understand why the research is being done and what it will involve. We suggest you spend five minutes to read this.

Part 1 provides information on the purpose of this study, and what will happen if you take part. Part 2 gives more detailed information about the conduct of this study. If you have any questions, you can ask any member of the research team.

PART 1

What is the purpose of the study?

The aim of the study is to explore your views on stress experienced by your service users/patients, and what services you would recommend for a stress management service aimed at your service users/patients. The study also aims to understand the barriers that local residents of Basildon and Thurrock may face in accessing a stress management service, and how these barriers can be overcome. The results from the discussion will help us to understand your perception of local people's needs regarding stress, and views on stress management in South West Essex. It is hoped that this will enable us to develop a tailored stress management service for the residents in South West Essex.

Why have I been chosen?

You have been chosen to take part in this study because you are a healthcare professional (HCP) in Thurrock and Basildon, who may have experience of service users/patients reporting various levels stress. We believe your insight and experience is vital, to assist the potential development of a stress management service for residents in South West Essex.

What is the process of participant recruitment?

An invitation email has been sent to healthcare professionals (GPs, Pharmacists, and Health Improvement Practitioners) in South West Essex. Individuals who are interested in participating in the discussion group, have been requested to contact the lead researcher. Once a list of healthcare professionals who have expressed their interest in participating is compiled, the final dates and times for the discussion group will be communicated to them. Individuals, who confirm their attendance for the scheduled focus groups will be recruited for the study. Thus purposive sampling will be used to recruit participants.

Please note if the date and time for the focus groups falls within your work hours but you wish to participate, it will be your responsibility to seek permission from your line manager for your attendance.

Do I have to take part?

Taking part is entirely voluntary. If you decide to take part, you will then be requested to sign a consent form. You are still free to withdraw at any time, without giving a reason. You will not be affected adversely, as a result of your withdrawal.

What will happen to me if I take part?

If you decide to take part in this study you will be invited to attend a discussion group at:

Civic Offices

xxxxxxxxx

You will be required to provide written consent for your participation in the study, as well as being audio-recorded for the duration of the discussion, as the study involves you taking part in an audio-taped group discussion. The lead researcher (Parm Kalsi) will be present in the discussion group, and facilitate the discussion. A second member of the research team (xxxxxxxxx) will also be present during the focus group for health and safety purposes.

The discussion will typically take 45 minutes and will remain strictly confidential and anonymous. However the researchers are only permitted to breach the code of confidentiality if any illegal or inappropriate misconduct is disclosed, during the research by any of the research participants.

The discussion will consist of approximately six/seven other participants and will be semi-structured in nature. This means that you will be asked open-ended questions and the discussion will be designed to explore your view of stress, with minimal amount of assumption from the moderator. You and other participants will be expected to discuss your thoughts on stress experienced by your service users/patients and the stress management tools that are currently available/unavailable to them. The discussion will also focus on ways to enhance local knowledge about stress management, as well as ways of overcoming any barriers that your service users/patients may face in accessing a stress management service.

Participants also have a duty to ensure that they maintain the code of confidentiality, so that the content of the discussion group is not communicated with each other or others outside the discussion group at any time after the focus group.

Your discussion will be audio-taped to help the researcher transcribe and analyse the data. This process will be verified by the second member of the research team (xxxxxxxxx) who will be present in the focus group. As a result xxxxxxxxx will check excerpts of the transcripts and the recordings to confirm that the transcription is correct. As the assistant researcher is also a registered member of the British Psychological Society, and an NHS employee, she shall abide to the ethical codes of conduct. Her contact details can be found at the end of the information sheet.

Will my taking part in this study be kept confidential?

If you consent in taking part in the study, all the information which is collected about you and from you will be kept strictly confidential. The information will not be passed on to any third parties. Your name will always remain separate from the answers that you give, and you will be recognised by a participant number. Your personal details (name, work telephone number, and work address) will be retained for three to six months, and the audio-tape recordings will be destroyed once transcription has taken place.

The researcher is only permitted to breach the code of confidentiality if any illegal or inappropriate misconduct is disclosed, during the research by any of the research participants. Participants also have a duty to ensure that they maintain the code of confidentiality, so that the content of the discussion group is not communicated to others, outside the discussion group, at any time.

What are the possible disadvantages and risks of taking part?

There are minimal risks of taking part in this study, as your participation is voluntary (i.e. it is your choice to answer the questions or not). It is not anticipated, but you may deem some questions to be sensitive, if so you are not obliged to answer, and you can inform the

researcher that you have no comment. It is acknowledged that you may be inconvenienced by the time taken to travel and partake in the focus groups. But efforts have been made to minimise any potential inconvenience (i.e. time, travel, location, parking availability) by ensuring parking is available, etc. However, if you feel you have been affected by this research, please consult with the research team or your GP. Contact details for the research team have been provided at the end of this information sheet.

What are the possible benefits of taking part?

We cannot promise that this study will help you, but the information we get from this study will help in understanding the healthcare

professionals' views and experiences of working with patients with stress-related problems. This study will be very beneficial in potentially establishing a stress management service for residents in Basildon and Thurrock, thus your views and opinions on the topic of investigation are most important and will provide valuable insight into this area of work.

What happens when the research study stops?

Once the focus groups are complete, the discussion will be transcribed verbatim (verified by the second researcher), and analysed by the lead researcher. Your involvement in the study ends when the focus group is complete and you will not be contacted again.

However the researcher would be happy to disseminate the results from this study if you are interested in the findings. If you wish to be contacted three months after the study, please tick the **RED** box at the bottom of the consent form, so you can be sent a summary of the results.

What if there is a problem?

Any complaint about the way you have been dealt with during the study or any possible harm you might suffer will be addressed. Detailed information on this is given in Part 2.

Will my taking part in the study be kept confidential?

All of your information will be kept confidential. Ethical and legal practices will be maintained throughout the study. Further details are provided in Part 2.

If the information in Part 1 has interested you and you are considering participation, please read the additional information in Part 2 before making any decision.

PART 2

What will happen if I don't want to carry on with the study?

If you decide to withdraw, efforts will be taken to destroy all your identifiable data. However if you withdraw during the focus group your comments will still be transcribed, on the condition that this data is not identifiable to you. Therefore this data will be retained and analysed. Any identifiable data will be destroyed and not included in the analysis.

What if there is a problem?

a) Complaints

If you have any concern about any aspect of this study, you should ask to speak to the researchers who will do their best to answer your questions.

xxxxxxxx – Lead researcher: Contact Number: xxxxxxxxx

xxxxxxxxx – Assistant researcher: Contact Number: xxxxxxxxx

If you require impartial advice on the study, you can contact:

xxxxxxxxx – Health Psychology Team Leader

Contact Number: xxxxxxxxx

If you remain unhappy and wish to complain formally you can do this, by contacting the **Patient Advice and Liaison Service (PALS),** which is a confidential service that aims to listen to your concerns, suggestions or queries. The PALS contact details are stated below:

- *Basildon Tel:* xxxxxxxxx
- *Thurrock Tel:* xxxxxxxxx

b) Harm

If you are harmed, as a result of your participation in the study, there are no special compensation arrangements. If you are harmed due to someone's negligence, then you may have grounds for legal action but you may have to pay for it. Regardless of this, if you wish to complain, or have any concerns about any aspect of the way in which you have been approached or treated during the course of this study, the normal National Health Service complaints mechanisms should be available to you.

Will my taking part in the study be kept confidential?

The data collected will be retained and only accessible to the research team. The anonymised transcripts will be retained for five years, and your personal details will be retained for three to six months, in a locked cabinet, located in a secure NHS building. Once the respective durations end, the data will be destroyed and cross-shredded. The audio recordings will be transferred to a password encrypted location on the NHS server. This will only be accessible to the lead researcher. Once the transcription is complete these recordings will be destroyed. The research team have a duty of confidentiality to you as a research participant, and we will do our best to meet this duty in compliance to the NHS Code of Confidentiality.

Exceptions for breach of confidentiality?

It should be acknowledged that the researcher is only permitted to breach the code of confidentiality if any illegal or inappropriate misconduct is disclosed, during the research by any of the research participants. This does not affect the confidentially protocol that will be maintained throughout the study (i.e. participant information shall remain confidential and be anonymised).

What will happen to the results of the research study?

The findings from the discussion will be used to potentially develop a stress management service for residents in South West Essex. The results

will be disseminated in a report format, but no names will be provided, as your participation will be treated as confidential. Direct quotes will be used to evidence the findings, but these quotes will not be identifiable to the participants as they will be anonymised.

It is possible that the research may be published in an academic journal, and or presented at conferences as it is part of a doctoral research project. Pseudonyms will be used for the reporting of quotes, to further ensure anonymity, in any written documentation and in any verbal presentation.

Who is organising and funding the research?

The research has been funded by NHS South West Essex. But no one will be paid for participation.

Who has reviewed the study?

All research in the NHS is looked at by independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by the Essex 1 Research Ethics Committee

Contact Details

If you have any questions, queries or would like to take part then please contact:

xxxxxxxxx Trainee Health Psychologist – Lead researcher Contact Number: xxxxxxxxx
xxxxxxxxx Trainee Health Psychologist – Assistant researcher: Contact Number: xxxxxxxxx
xxxxxxxxx Health Psychology Team Leader Contact Number: xxxxxxxxx

Thank you

Appendix 11 - Consent Form HCPs

Version 2: 23/04/10
Consent Form HCPs

Consent Form

Study Title:

A Qualitative Study Exploring Healthcare Professionals' Views on Stress and Stress Management in NHS South West Essex

	Please initial to confirm acceptance
8. I confirm that I have read and understood the information sheet dated 23/04/10 (version 2) for the above study and have had an opportunity to consider the information, and ask questions, and have had these answered satisfactorily.	☐
9. I understand the responses I give will be treated as confidential, my contact details will always remain separate from the data and I will only be recognised by my participant number.	☐
10. I understand that the discussion will be audio-taped to permit transcription, and that this process will be verified by the second researcher. I give permission to be audio-taped.	☐
11. I understand that participation in this study is entirely voluntary and refusal to take part involves no penalty and I may withdraw from the study at any point.	☐
12. I understand that standardized debriefing will take place once the focus group has taken place. The debriefing will include the purpose of the study, background research and the design of the study so that I can recognize my contribution to the research.	☐
13. I understand that anonymised quotes will be used in any written publication. I give permission for the use of anonymised quotes.	☐
14. I understand that relevant sections of my data collected during the study, may be looked at by individuals from NHS South West Essex, or from regulatory authorities, where it is relevant to my taking part in this research. I give permission for these individuals to have access to those records.	☐
15. I agree to take part in the above study	☐

By signing this form I am stating that I am over 18 years of age, and that I understand the above information and consent to participate in this study being conducted by an employee of NHS South West Essex.

Participant Number: _____

_____	_____	_____
Name of participant	Date	Signature
_____	_____	_____
Name of person taking consent	Date	Signature

Please tick the **RED** box below if you want a copy of the summarised results obtained from this study

☐ I confirm that I would like a copy of the summarised results obtained from this study.

Appendix 12 - Private Information Sheet –HCPs Demographic Information

Private Information

This sheet will be kept separate from the responses that you give during the interviews and will be kept in a locked cabinet. Once the responses from all the participants are analysed this sheet will be destroyed.

Participant Number: _____

Gender: MALE / FEMALE

Age: _____

Ethnicity: _____

Occupation:

Pharmacist
General Practitioner
xxxxxx Community Health Improvement Practitioner (CVD/ SMOKING/ WEIGHT MANAGEMENT)

Print your First Name: _____

Print your Last Name: _____

Work Address: _____

_____

_____

Tel (Work): _____

Work Email Address: _____

Appendix 13 – HCPs Debriefing Sheet

Debriefing Sheet

Study Title:

A Qualitative Study Exploring Healthcare Professionals' Views on Stress and Stress Management in NHS South West Essex

Thank you for your valuable time, to take part in this research. Your contribution is very much appreciated. The aim of the study is to explore healthcare professionals' (HCPs) views on stress and stress management; to assist in the design and potential development of a stress management service. This study also aims to understand your experiences of patients/ service users reporting stress, and the types of services that are available to you, to refer patients to. As well as assessing any barriers that you may encounter (i.e. with the referral process for stress management services), and how these barriers can be overcome. The results from this discussion will help us to potentially design a tailored stress management service.

Everyone reacts differently to stress, and some people may have a higher threshold than others. Too much stress often leads to physical, mental and emotional problems. In the UK, anxiety and depression are the most common mental health problems, and the majority of cases are caused by chronic stress. Research by mental health charities also suggests that a quarter of the population will have a mental health problem at some point in their lives.

Therefore in order to develop strategies for improving mental and physical health in South West Essex, it is crucial to understand how HCPs experience and deal with patients/ service users reporting stress. Thus, this study will help in broadening knowledge, and designing services for stress management in South West Essex.

If you by any way have been affected by taking part in this research, then you can consult the researcher, as they have basic counselling skills, or alternatively please contact your GP. If you would like further information on stress then please contact any of the services below:

NHS Choices
www.nhs.uk/Pages/HomePage.aspx
- Type stress into the search box to obtain more information

Samaritans
www.samaritans.org.uk
xxxxxxxxxxxx

MIND
www.mind.org.uk/
xxxxxxxxxxxx

It should be acknowledged that the researcher is only permitted to breach the code of confidentiality if any illegal or inappropriate misconduct is disclosed, during the research by any of the research participants. This does not affect the confidentially protocol that will be maintained throughout the study (i.e. participant information shall remain confidential and be anonymised).

If you have further questions about this study or if you wish to lodge a complaint or concern then please contact:

xxxxxxxxxxxxx
Trainee Health Psychologist – Lead researcher
Contact Number: xxxxxxxxxxxxx
xxxxxxxxxxxxx
Health Psychology Team Leader
Contact Number: xxxxxxxxxxxxx

Patient Advice and Liaison Service (PALS) - A confidential service and aims to listen to your concerns, suggestions or queries. As well as help sort out problems quickly on your behalf.

Basildon Tel: xxxxxxxxxxxxx
Billericay, Brentwood and Wickford Tel: xxxxxxxxxxxxx
Thurrock Tel: xxxxxxxxxxxxx

The Health Psychology Team declares that the information provided above is in accordance to the best of our knowledge.

Appendix 14 - Service Recommendations

Recommendations for a stress management service have been identified and are stated below.

Service Structure

- A range of services for stress management should be offered, and delivered in various modes (i.e. one-to-one, group, online, etc) to accommodate for the spectrum of need.

- Appendix 14a provides a diagrammatic representation of the proposed service design. Four types of interventions are proposed to accommodate for the variable need. These are outlined below:

  Low Intensity Counselling

  - Disclosure is an effective form of stress relief. It would be integral to include a forum for stress-disclosure, whether it be one-to-one or in a group setting to provide service users with this opportunity to release and discuss their stress-related concerns/experiences in a confidential and understanding environment (Lepore, Ragan, & Jones, 2000; Blumenthal, Sherwood, Babyak, Watkins, Waugh, Georgiades, Bacon, Hayano, & Coleman, 2005).
  - Tailored one-to-one counselling would allow individuals to address dysfunctional thoughts and behaviours, to prompt evaluation of coping skills, for those that may not want to attend the group sessions, or for those with have high levels of stress.
  - However disclosure can be rather emotive for individuals and be of a sensitive nature. Thus low-intensity IAPT providers should provide the appropriate service to offer low-intensity counselling, compared to other healthcare professionals who may lack clinical experience, to offer the level of support required.
  - If other healthcare professionals were to provide counselling, etc., some form of basic counselling skills training would be mandatory (see appendix 15).

  Relaxation

  - Relaxation can offer temporary distance/escape for service users; which can minimise the stress response (i.e. decrease elevated blood pressure; psychological anxiety, etc).
  - It has the potential to empower individuals with skills to use self-relaxation during, and after their use of the stress management service; promoting long-term benefits in general wellbeing too, as well as being increasing the value for money for service investment.
  - Activities such as meditation, yoga (Pilkington, Kirkwood, Rampes, & Richardson, 2005), massage are useful to aid relaxation, as individuals can use breathing relaxation skills, reflection and relieve muscle tension (often a consequence of stress) (Grossman, Niemann, Schmidt, & Walach, 2004;

Kabat-Zinn, Lipworth, & Burney, 1985; Kristeller, 1999; Miller, Fletcher, &Kabat-Zinn, 1995).

- Brief progressive muscle relaxation therapy (PMR), is transferable across all forms of stress management interventions, especially for relaxation as it can raise awareness on individuals stress-related muscle tension, which can potentially decrease muscle tension, permitting individuals to become more relaxed. PMR has been found to be most efficacious for stress management, and would be a useful inclusion for stress management (Blumenthal et al., 2005; Krajewski, Sauerland, & Wieland, 2011; Kwekkeboom, Wanta, & Bumpus, 2008; Pawlow & Jones, 2005).

Exercise

- Exercise has many beneficial outcomes for overall wellbeing. Evidence shows that it can boost positive emotions, and can play a pivotal role for mental health.
- Exercise can also help improve the quality of life by improving physical self-perception, satisfaction with life, physical activity levels and general health, especially for specific patient groups (Dua, Cooper, Fox, & Stuart, 2010).
- In addition, participants' gave accounts of where exercise had helped with stress management. Thus links should be established with existing leisure centres and physical activity programmes (i.e. walking groups), so individuals can be referred to exercise groups/services (i.e. swimming, Yoga, Pilates, etc.).
- Furthermore studies have found that patients with stable ischemic heart disease could benefit from both exercise and stress management interventions, as such interventions can reduce emotional distress and improve markers of cardiovascular risk more than usual medical care alone (Blumenthal et al., 2005). Dua and colleagues (2010) postulate that simple physical activity interventions like regular walking are feasible, safe and significantly useful in increasing the exercise capacity of patients with congenital heart disease.
- Such exercise programmes also provide a forum for stress-disclosure, as they can foster conducive support networks for service users, as they have shared experiences and agendas.

Structured Sessions

- The following topics should be addressed for structured stress management sessions:

  - Causes of Stress
    (i.e. patients own examples, and an overview of the demands and the availability of coping resources definition…)
  - Symptoms of Stress
    (i.e. Progressive muscle relaxation (PMR) therapy can demonstrate changes in muscle tension caused by stress / Biofeedback encourages individuals to attenuate their stress response, to fundamentally employ increased control over their stress experience, due to this increased awareness).

- Consequences of Stress
  (i.e. Behavioural – e.g. anger, psychological – e.g. low self-esteem, physical – e.g. increased heart rate and the long and short term effects. The ABC model of CBT could efficacious in highlighting stress responses).
- Reflection on Personal Stress Response - Homework
  (Diary to record stress, stress response, automatic negative thoughts, coping skills utilised, and reflection on this stressful episode. Once again the ABC model of CBT could be employed).
- Coping Skills and Goal Setting
  (i.e. alternative coping skills for stress, cognitive reframing and restructuring. These could be further tested in homework tasks, incorporating the diary)
- Relapse Prevention
  (i.e. Relaxation - meditation and breathing skills, prospective coping strategies, etc)

- Thus the inclusion of psychological therapies (i.e. Cognitive Behavioural Therapy - CBT) and their principles would be most beneficial to include in the stress management services, as there is strong evidence advocating their efficacy for stress management (Bisson & Andrew, 2007).
- Hence such Cognitive Behavioural Stress Management (CBSM) interventions which combine relaxation training, cognitive behaviour therapy and interpersonal skills training (i.e. Mindfulness Based Cognitive Therapy – MBCT, Kabat-Zinn, 1990), could be used to inform the structured stress management interventions. The efficacy of such CBSM interventions has been evidenced (Linden, & Wen, 1990; Rutledge, Hyson, Garduno, Cort, Paumer, & Kappagoda, 1999; Vedhara et al., 2003; Antoni et al.,2008);

Referral

- Self-referral would ensure that service users receive care when they need it, rather than waiting to be referred. It could also prompt service uptake, as some participants were deterred to seek referrals/ assistance from their GP's due to the stigma associated with stress.
- Both primary care and health improvement providers should be made aware of the benefits of stress management for their service users, to ensure that they refer those who require stress management services; ensuring service uptake. This could be reinforced through the additional training component for HCPs (appendix 15).
- Health Improvement Services (HIS), host multiple services to facilitate health-related behaviour changes (i.e. smoking cessation, etc.), and many of these areas are affected by stress. Thus partnership work between HIS and the stress management service would be efficacious, to promote the holistic model of health. For example stress management topics should be included in HIS programmes as a form of relapse prevention.

Screening Process

- As stress, depression and anxiety are closely correlated, a stringent screening process should be utilised, to ensure patients are allocated the correct level of psychological intervention. However due to the subjective nature of stress, a patient-centred screening process should be employed. This would involve a series of consultations with the patient, and the utilisation of self-reported measures, such as patient diaries. The patient diaries could exemplify the patient's behavioural, psychological and physiological patterns with reference to the stress experiences.
- A full history of the service users' mental health should be obtained. Excessive accumulation in stress can increase ones susceptibility to depression, and more so if they have a history of mental illness. This information would ensure that service providers are more receptive to such individuals; and referring them on to other services if a need is presented. Thus the screening process should have measures in place to adequately address risk management issues for those patients that may pose a risk to themselves or others.
- Service providers must have the correct skills to permit recognition of at risk patients. Training for HCPs should include an overview of the several mental health conditions, which can be linked to stress, in order to raise their awareness regarding the spectrum of need, and when to refer to higher intensity services.
- The exclusion of clinical scales could also reduce the use of medical jargon, which can impair communication between HCPs and patients. Thus a more patient-centred approach could increase productivity of communication (Sarkar, Schillinger, López, & Sudore, 2011).

Where will it take place?

- Across the data set (study one), participants stated the importance of accessibility, thus local venues with good transport links should be used (i.e. council offices, leisure centres, community/town halls, and GP surgeries). These venues are perceived as relaxed and comfortable, and were identified as suitable places for the stress management service; compared to other clinical settings which were associated as cold and impersonal. Thus, where possible, the use of hospitals/mental health units should be avoided, as it could deter service users from accessing stress management services.
- The service needs to be offered at convenient times. These are dependent on work patterns, during school time for parents, etc. The 50+ participants communicated the most flexibility in their time allocation due to their retired status.
- Participants identified the need for instant relief when stressed. An online forum/website would be useful in offering 24/7 tailored support and advice for service users. Stress scales could be used to navigate service users to useful sources of information. In addition the website would act as a hub of information on stress related topics (i.e. symptoms, causes, forms of stress management tools, etc.). An online forum/blog would also allow participants to share tips and advice on stress, as well providing a form of social support, when and if they require; empowering service users to be proactive in their own stress management (Lepore et al., 2000).

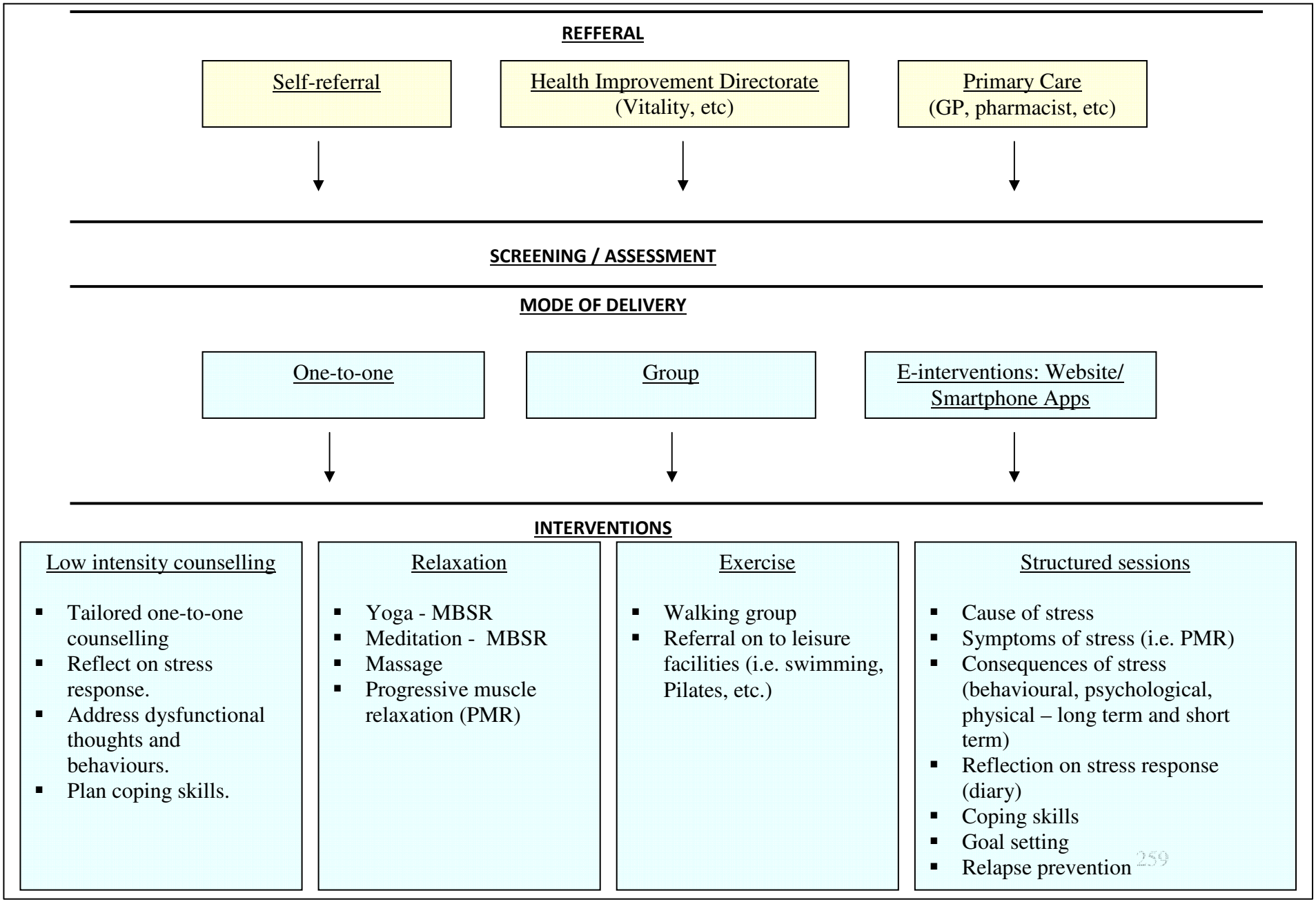
Who should deliver the service?

- Participants felt that the service should not necessarily be delivered by healthcare professionals who are perceived to promote a clinical biomedical approach. The stress management service could be delivered by trained community wellbeing practitioners, as they are perceived as approachable. Study two further supported the provision of the stress management service through the existing community wellbeing practitioner model.
- Pharmacists were also suggested as a mode of delivery as they were viewed as an accessible resource for health services, especially by the older participants. As pharmacists offer medicine reviews, smoking cessation advice, and a range of other services; it would be most beneficial to provide advice on stress and health, addiction, etc. This could raise awareness on how stress management could play a role in disease management and prevention. Presenting a window of opportunity to offer and, or signpost service users to the stress management service.
- In spite of the above recommendations regarding the stress management service provision, training on stress and stress management would need to be established to raise greater awareness on the service, and more importantly on stress, stress management, case formulation, and patient-HCP stress discourse, to ensure that the HCPs feel competent to deal with patient reported stress. (See appendix 15).

Advertising

- Such a service should be advertised as a wellbeing programme, which would sit well within a holistic health improvement service (HIS) model. The collaborative partnership could promote both services (i.e. weight management, stress management, smoking cessation), as well as acknowledging the impact stress can have on health-related behaviours directly and indirectly.
- A large NHS logo could deter uptake as it was associated with other NHS services; which were deemed as clinical, unapproachable and unfriendly. This perception clashed with the envisaged friendly, non-clinical, stress management service image. Despite this the NHS logo also offered a sense of security and reliability, hence would be worthwhile to place it in a subtle manner.
- An alternative title should be used to advertise the service, rather than *'stress management service',* as it was associated with stigma. Participants used various terms in their discourse of stress, and these could be used to advertise the service (i.e. unable to cope/ pressure / checklist of stress symptoms). The latter suggestion could prompt self-identification amongst individuals, and potentially encourage the uptake of service users, especially as some were not aware of their own stress.
- Posters and leaflets were identified as forms to advertise the service. These should be widely placed and disseminated to promote the service (i.e. GP surgeries, pharmacies, local newspapers, bus stops, sides of buses, citizens advice bureaus, Connexions and schools).
- However the development of any promotional and psycho-educational material should involve patients/patient groups, to ensure that a less biomedical approach is used, highlighting a more patient-centred approach (Jorm, 2000).

Appendix 14a –Stress Management Service Model Design



Appendix 15 – Training Recommendations

Study two exemplified the need for a training programme aimed at healthcare professionals (HCPS) on stress and stress management to assist them in their everyday practice. Many of the HCPs felt that training would be useful; in order to increase their perceived competence and confidence in dealing with patient reported stress in an effective manner. Thus in light of the findings presented, several recommendations are outlined as follows for the proposed training programme.

Healthcare Professional Target Groups

- A range of HCP groups should be offered the stress management training. The inclusion of multiple HCP groups in study two exemplified that patient reported stress is experienced across public health services (i.e. pharmacists, GPs, and health improvement practitioners). All of the HCPs expressed the need for greater support and training regardless of their remit and the variation in patient reported stress, as it was a common concern for their patients.

- The NHS South West Essex Pharmacy Needs Assessment (n=1014), found that patients valued the accessibility and personalised service pharmacists were able to offer. The patients' trustworthiness present opportunities for pharmacists to expand their reach in preventing and managing patients' wellbeing (de Bittner & Zaghab, 2011).The NHS SWE Pharmacy Needs Assessment revealed that stress management was an additional service that patients wanted from their local community pharmacies (Kanapathy & Kalsi, 2010), as stress impacted on their health related behaviours. Further reinforcing the need to offer multiple HCP groups with this form of training.

- However the training programmes would need to be tailored for the different healthcare providers, as the level of intervention they could offer would be influenced by remit and the available consultation time allocation. For example community wellbeing practitioners could offer greater flexibility in the allocation of consultation time, in both one-to-one or group settings compared to GPs.

Topics

- The training programme should cover the following topics outlined as follows. However the training overview (appendix 15a) provides more details on the content for each of these topics.

    - Perceptions of Stress
        - This would address the forms of patient reported/displayed stress. HCPs would be encouraged to reflect on their experiences to permit a shared understanding amongst the HCPs, regarding the various forms of patient presented stress and their stress symptomology.

- The Effects of Stress

    - Many of the HCPs stated that some patients were unaware of their stress levels and the impact it had on their wellbeing. The inclusion of this topic would not only inform the HCPs on how stress can effect physiology and behaviour, it could also prompt better recognition of stress-related conditions, which would be beneficial for those patients who struggle to identify their high stress levels and the impact on their wellbeing. It could also encourage subsequent referrals to appropriate services. An increased awareness on the effects of stress could also increase the HCPs perceived competence and confidence levels; empowering and equipping the HCPs with the relevant knowledge they so desperately seek.

    - Exploration of the various stress-vulnerability models, could also address the difficulties HCPs often faced regarding diagnosis and differentiation of stress and other mental illnesses, such as depression or clinical anxiety disorders. As well as increasing the HCPs awareness on the range of mental illnesses, and how they can be linked to stress. Study two revealed that the HCPs felt anxious regarding general mental health issues, due to their lack of understanding and knowledge. Hence the inclusion of this topic could be most useful in addressing misconceptions and equipping the HCPs with the correct facts.

    - HCPs must have the correct skills to permit recognition of at risk patients; thus the training should include an overview of the several mental health conditions, to raise their awareness. Furthermore HCPs must be aware of the reporting procedures utilised for those individuals at risk, to minimise the risk of harm to others and the individual. Study two revealed that a greater awareness on such issues and a clear protocol outlining referrals processes could provide HCPs with the much needed guidance, and in turn confidence to adequately deal with mental health disorders and stress.

- Stress Management Tools and Referral Routes

    - The HCPs stated that they needed more training regarding the various stress management tools available for patients with stress-related conditions. The majority had a vague understanding of simple relaxation strategies (i.e. exercise, listening to relaxing music, etc.), but felt that they needed a greater understanding of the evidence based strategies available in clinical practice.

    - Due to the various remit boundaries some HCPs wanted a more advanced level of understanding so that they could administer stress management tools (i.e. PMR, biofeedback, and counselling skills); whereas others felt that a general overview of the techniques and the services available to refer patients would be sufficient. Thus the training programmes would need to be tailored according to the HCP groups and their remits for stress management provision.

- Talking about Stress

    - The training programme must address communication models, with particular reference to stress discourse. The studies showed that some HCPs were not comfortable exploring stress-related issues, as they did not have enough knowledge on the topic in general, and were fearful, or anxious in their ability to manage certain forms of disclosure (i.e. disclosure which prompted emotive displays, or patient discomfort).

    - Studies have shown that HCP-patient communication influences health outcomes (Query & Kreps, 1996), thus the promotion of effective HCP-patient communication is paramount to ensure effective health outcomes.

    - Hence both forms of verbal and non-verbal communication should be addressed, to ensure that HCPs can effectively convey sensitivity and emotional understanding through displays of empathy (Macinowicz et al., 2010; Silverman & Kinnersley, 2010).

    - As outlined in the stress management service recommendations (see appendix 14), a patient-centred approach is advocated, primarily for the screening and case formulation processes. Building upon the concept of concordance, HCPs should ask patients what they want to achieve form the consultation (Swenson, Buell, Zettler, White, Ruston, & Lo, 2004), and where applicable offer treatment choices (Marinker, Blenkinsopp, Bond, Britten, Feely, & George, 1997), in order to move towards a more patient-centred approach. This is particularly pertinent as both studies and two exemplified that some patients were not offered a choice for stress management, and that they desperately wanted alternative treatments/therapies to be more readily available (e.g. pharmaceutical treatments vs. alternative treatments – massage, exercise, or financial advice).

    - Greater awareness on the patients' communication patterns would also need to be addressed. Studies have evidenced that patients dialogues are often altered due to their affective and cognitive states when stressed or depressed (Gregory, Peters, &Slovic, 2011), which can influence the decision making processes in consultations. Thus HCPs should be encouraged to also identify the need for follow-up calls, if and when a need is presented (Slovic, Finucane, Peters, & MacGregor, 2004).

Training Modality and Development

- The training modes would need to be socratic and facilitative, as it is likely that the HCPs would have experiences of patient-reported stress to reflect

upon, and would be worthwhile to explore, as it would shed light on their existing communication models utilised, knowledge, and confidence levels (Banning, 2005). However for those sections where the HCPs are taught brief forms of interventions a more didactic approach would be suited to impart the knowledge.

- The inclusion of role play would be integral to the training programme. It would allow the HCPs to practically apply the acquired knowledge, techniques and tools, in action scenarios (Martin & Chewning, 2011). Studies have found this training mode to be highly effective for a range of HCPs, and a range of health-related training programmes (Martin & Chewning, 2011).

- Top-up programmes (i.e. on-line training programmes) would be a future consideration, to ensure that the HCPs are supported throughout their practice (Sargeant, Curran, Ferrier, Allen, Kirby, & Ho, 2004). Such forms of training provision are both efficient and cost-effective in their administration, as they can be completed as and when required, minimising inconvenience to busy working schedules.

- However it would be essential to pilot all phases of the training, to ensure that the content, training length, and training modalities are effective to inform potential development of such training programmes (Bakker et al., 2010).Establishing and maintaining collaborative partnerships with service managers would also be crucial in ensuring that the training programme is tailored to the various service goals/targets and population demographics, etc.

Appendix 15a –Stress Management Training for Healthcare Professionals (HCPs) Overview

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Learning Objectives

- To learn more about stress (i.e. various definitions and typical forms of patient reported stress).
- To be knowledgeable about the various ways in which stress can influence wellbeing.
- How to screen/measure stress.
- To understand the various referral pathways.
- To learn about the stress management tools available.
    - Optional: Be able to teach patients the various stress management tools
- To be able to confidently and competently talk about stress and stress management with patients.
    - Optional: Application of brief psychological interventions.

Topic Overview

1. **Group Introduction**
    - Ascertain HCPs roles
    - Gage HCPs experiences of patients-reported stress
    - What are the learning objectives – add to predefined list to permit tailoring

2. **What is Stress?**
    - Group brainstorm
    - Terminology
    - Common stressors for patients
    - Theoretical frameworks/models (e.g. *stimulus response: demands and pressures, acute vs. chronic stressors / interactional models - importance of cognitive appraisal*)

3. **Effects of Stress**
    - Physiology –Overview of the neuro-endocrinological response
    - Behaviour – *Maladaptive health behaviours – smoking, poor diet, alcohol consumption...*
    - Psychological – stress vulnerability models (e.g. anxiety disorders and depression)

4. **Measuring Stress**
    - Scales – how to administer and calculate scores
    - Diaries – examples provided
    - Follow-ups – when, how often,
    - When to refer and risk management strategies (specific to HCP groups)

5. **Stress Management Tools**
    - Stress management service
    - Exercise – yoga
    - PMR
    - Biofeedback
    - Planning and prioritising
    - Basic CBT principles - cognitive restructuring
    - Referral to tertiary services
        - Job Centres
        - Citizens' Advice Bureau
        - Help with Finances
        - Parenting Groups
    - Tools available on the website and the smartphone application (dependant on the adopted service model)

6. **Talking about Stress**
    - Communication models
    - Displaying empathy
    - Body language (e.g. mirroring)
    - One-two-one vs. group sessions
    - Exploring treatment options (e.g. pharmaceutical and psychological therapies)
    - Being aware of stress related stigma and taboo - importance of concordance

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TASKS

A. Role play (based on average consultation time – 10 minutes)

- Typical scenario
    - Re-enact a past experience of patient reported stress
    - Aim: permit reflection on techniques utilised previously to permit a comparison between the new consultation tools taught.

- Talking about stress
    - Focus on the body language - Highlight the scope for potential bias during screening process, etc.
    - Risk management of disclosure

- Conducting a case formulation
    - Step-by-step
    - Utilisation of stress scales/diaries/etc.
    - Risk management (i.e. based on a highly stressed, borderline depressed individual).
    - Optional: Depending on the HCP group – Administer a group task – how to score scales

- How to use stress management tools
    - Basic biofeedback (i.e. using handouts and self-reflection on own stress response)
    - Progressive Muscle Relaxation (PMR)

- Diaries and how the extracts can be used to facilitate greater awareness on the stress-behaviour connection (templates will be provided in training packs)
- Leaflets (provided in training packs) – what sections to refer patients to, etc.
- Website/Phone apps (Links will be provided so HCPs can access them/refer on to patients).

- Referral Process
  - A range of different scenarios (i.e. financial stress/ CVD patient with high levels of stress…) would be provided – where would you refer patients (e.g. list of available services will be provided in training packs).

B. Reflection Task

- Do you feel more confident in dealing with patient reported stress?

- Prompt trainees to rate the following:

		1 Very Low	*2 Low*	*3 Moderate*	*4 High*	*5 Very High*
A	General knowledge on stress					
B	Knowledge regarding the effects of stress					
C	Knowledge regarding stress measures					
D	Knowledge regarding referral process					
E	General knowledge of stress management tools					
F	Confidence in talking about stress with patients					

- What is different now?
- How do you feel?
- Areas for development and future practice?
  - Prompt trainees to self-identify targets for practice

Section C: Professional Practice

AREA OF COMPETENCE: GENERIC PROFESSIONAL

Setting: NHS South West Essex (SWE) – Public Health Commissioning
Role: Trainee Health Psychologist

IMPLEMENT AND MAINTAIN SYSTEMS FOR LEGAL, ETHICAL AND PROFESSIONAL STANDARDS IN APPLIED PSYCHOLOGY

Practicing as a Trainee Health Psychologist I was always aware of the legal, professional and ethical standards. The British Psychological Society (BPS) code of conduct (2009) was used as a guide for my practice, ensuring that my conduct was in line with the four main principles outlined by the BPS (e.g. respect, competence, responsibility, and integrity). For example I established systems for security and control of information, ensuring that all of the participants involved in my research projects were treated with respect and maintaining the highest degree of confidentiality. My ability to maintain, review and develop these systems evolved whilst undertaking various research projects, service audits and evaluations.

One of the first projects conducted was the Cardiovascular Disease (CVD) Risk Assessment study. As it was the first team project to be completed for the Health Psychology Team I had to review the security measures in place for confidential data. Thus I had to ensure that there was secure access for all team members by allocating passwords to colleagues, to permit access to the shared folders and files. In addition as I was requested to select and work with an external contractor for the transcription of the digital recordings obtained from the focus groups. I had to review confidentiality agreements and contracts, as well as liaise with the service leads to ensure that the digital recordings and completed transcripts were uploaded and downloaded from a secure space, and again that files were password encrypted.

Despite having established and implemented comprehensive systems and security procedures for the collation, storage, and retrieval of participant confidential information; I later developed an electronic database for the paper-based participant information. This proved most efficacious when the office was undergoing renovation, as the paper versions could be re-allocated to another

secure storage unit, whilst still ensuring that an electronic version was retained. This file was assigned an individual password in the password protected shared folder.

Obtaining NHS ethical approval for my research project also encouraged me to review and assess the security systems employed to secure confidential participant data once a project was complete. Working closely with the Integrated Governance and the Research and Development (R&D) departments at NHS SWE exemplified the various archiving systems in place for confidential participant information collected from past research projects.

During the planning and conducting of research with participants, legal and ethical systems were incorporated into my activities. For example I ensured that for all projects conducted information sheets, consent forms, debriefing sheets and participant information sheets (e.g. separate document to record participants contact details) were designed, piloted and employed. There was always a strong emphasis on obtaining necessary permissions from the participants. Prior to undertaking the research and obtaining signed consent, it was ensured that the participants were fully informed and that they understood the scope of the research, confidentiality and withdrawal procedures was. Time and space was always given for participants to ask questions if they required further clarity and explanation.

Acting as a facilitator in focus groups or teaching sessions, I aimed to construct a safe environment for participants and trainees by explaining and emphasising the importance of maintaining group anonymity and complete confidentiality. I had to ensure that they were also made aware and understood the conditions in which confidentiality would be breached, and that I may need to contact other professionals for advice; should they be deemed as a risk to themselves or others. In those instances where I had to discuss certain cases with my supervisor, I would maintain total anonymity in supervision. When conducting the data collection phase for my research project (study 1), there were a few instances where some of these procedures were applicable, and they offered guidance to me as the lead researcher.

Consistent reviews of the British Psychological Society (BPS), the Division of Health Psychology (DHP), and the Health Professions Council (HPC) has assisted in maintaining and monitoring my professional practice. Regular supervision with my supervisor, a Chartered Health Psychologist has helped me greatly in evaluating my practice, to ensure that when faced with a new and or challenging scenario as a researcher, trainee, consultant and a teacher; I have complied with legal and ethical guidelines.

Furthermore by maintaining communication with my line manager and university supervisor, R&D department at NHS SWE and the local REC whilst conducting projects, ensured that I was adhering to professional standards. Despite some of the projects using non-NHS participants, and being evaluations or audits, I ensured that clients or myself liaised with the relevant stakeholders to ensure that the project was adhering to legal, ethical and professional standards. This was a consistent message delivered across my research methods training programme for PCT staff, where they were either in the planning and, or early implementation phases of research, service evaluation and audits.

I found that undertaking professional courses (e.g. CBT training, Research Ethics, Motivational Interviewing for Behaviour Change), attending conferences, seeking feedback from clients and colleagues helped me to reflect on my own practice, and thinking of ways in which I can further develop (i.e. making a concerted effort to minimise the use of technical terminology in my teaching sessions, seeking confidentiality agreements from clients/contractors, completing the Good Clinical Practice (GCP) training). I was fortunate that I worked in a Health Psychology Team, thus I was able to observe how my colleagues conducted their practice, and identify strengths and weaknesses in my own practice. Regular team meetings promoted debates on current practices within health psychology and public health, facilitating my professional development.

When delivering my teaching and training sessions to students and healthcare professionals I ensured that I highlighted the skills as well as the professional accreditation/s that one would have to possess; in order to conduct various forms of research or service provision. It was important that they understood their professional capacity, and what steps would have to be taken in order to deliver psychological therapies, for example.

Initially in my placement within the Health Improvement Directorate, my colleagues had misconceptions of my remit as a Trainee Health Psychologist (e.g. being able to deliver psychological therapy - CBT). I clearly defined my professional boundaries throughout my two year practice, consequently their perceptions changed, and they were able to utilise my skills as a researcher to assist in their projects (i.e. conduct or provide guidance on service evaluations/audits and conduct literature reviews).

Working within multidisciplinary teams during my placement I have learnt to identify the strengths and weaknesses of staff carrying out psychological work. The research methods training programme for the NHS staff at SWE, provided a platform to advise trainees regarding their professional development needs for conducting service evaluations, research and audits. Trainees were able to self-evaluate and identify whether they had the adequate skills to conduct large scale audits, and whether they needed more in-depth training regarding particular research methodologies. Often I was requested to offer one-to-one support and mentoring for such instances.

Whereas study two of my research project (A Qualitative Study Exploring Healthcare Professionals Views on Stress and Stress Management) exemplified that staff had strong training needs for stress management, especially in those services where their patients needed stress management interventions (i.e. CVD health improvement service). Consequently I was requested to design a stress management training programme for healthcare professionals to assist them in their practice with service users/patients reporting stress-related problems. Having a sound understanding of health psychology enabled me to review and evaluate my practice, as well as those colleagues I liaised and worked with; identifying innovative solutions to healthcare problems.

CONTRIBUTE TO THE CONTINUING DEVELOPMENT OF SELF AS A PROFESSIONAL APPLIED PSYCHOLOGIST

I used a range of reflectional tools to review my professional development (e.g. evaluation questionnaires, work objectives, my yearly gantt charts, and my university annual reviews). For example the gantt charts and work objectives

enabled me to reflect on individual projects and review their progress against my assigned deadlines; acknowledging the hurdles faced and the strategies employed, and their efficacy (i.e. using additional proxy measures in my consultancy project). Whereas completion of my practice logs helped me to monitor the strengths and weaknesses in my practice and professional development; identifying critical weaknesses and employing strategies to resolve them. For instance I sought a range of teaching and training opportunities (i.e. healthcare professional, undergraduate and postgraduate students) to enhance my professional development within this competence domain.

By undertaking a range of projects I identified areas for development, as well as my strengths. For example, when I was asked to design evaluation tools for PACTWIN and WhyTry I was not familiar scale development. I then sought advice from a statistician to learn more about the various stages I would need to undertake. However I was able to build on my skill base acquired whilst working as a learning assistant in 2003-2004 to design the format of the evaluation tools, which would promote engagement with such service users (i.e. the use of images to text ratio and multiple informant inclusion).

In addition, towards the end of my first year in my placement I was informed that my research project (study 2) would need NHS ethical approval. I had limited success in a past project MSc which required NHS ethics. I consequently sought support from the R&D department to familiarise myself with the protocol and procedures. Establishing this link was vital in my success of obtaining NHS ethical approval from a local Research Ethics Committee (REC) in January 2010.

I actively sought and pursued opportunities to enhance and advance my professional performance, by submitting individual and team projects for conferences (i.e. UK Public Health – UKPH conference 2010, International Critical Health Psychology - ICHP conference 2009). I did initially lack confidence in my ability to present at the ICHP; however by observing and consulting with my colleagues (also trainee health psychologists) I was encouraged and motivated to apply for such opportunities; which in turn increased my self-efficacy for completing such presentations. By attending conferences I was able to observe and reflect on various methods employed by my fellow colleagues, which

encouraged me to identify a more interactive approach in my sessions; where applicable (i.e. Postgraduate Health Psychology Conference, 2010).

Regular team and one-to-one meetings encouraged feedback from my work supervisor and manager, regarding my professional development. For example it was identified that I could develop my project management skills further, thus I was encouraged to manage projects (i.e. Bereavement Support Service Audit and the PACTWIN and WhyTry evaluation project).

I found university supervisions most useful as they encouraged me to be assertive in those instances where clients demanded certain projects to be delivered within un-realistic timescales. This was applicable when conducting my research methods consultancy project for NHS SWE. I was originally requested to deliver the training on both methodologies in a half-day session; however I felt that this was too ambitious within such a timescale. I had to negotiate and demonstrate that the sessions could be better delivered and more focused for trainees if the sessions were divided into the individual methodologies (i.e. qualitative and quantitative training sessions). The use of evaluation forms for this training programme acted as an evidence base for me to negotiate with the client various changes to the structure and content of the programme, as well as areas for me to improve as a trainer/teacher and make appropriate revisions to my professional practice (i.e. limit the use of technical jargon, develop more supplementary hand-outs for training packs).

Working on multidisciplinary projects (i.e. NHS SWE Pharmacy Needs Assessment, Bereavement Support Service Audit, NHS SWE Smoking Audit, PACTWIN and WhyTry evaluation project) allowed me to work and liaise with a range of specialised professionals. This proved most efficacious in those instances where I felt that I did not have the required expertise, as I could seek advice and consultation from these professionals who were suitably qualified to assist. This was most applicable to the Bereavement Support Service Audit and the NHS SWE Smoking Audit.

By seeking independent reviews of my work, such as my research proposal, I have been able to gain feedback and advice on areas to further develop. Understanding and synthesising the advice sought meant that I undertook additional readings

and enhanced my knowledge further. Comprehending and addressing areas of weakness in terms of knowledge, has illustrated that I can successfully integrate new material into my practice, and continual evolve and develop as a professional. Throughout supervision, being open to feedback and discussion regarding issues of best practice, has enabled further advancement of my skills to learn from constructive criticism.

By keeping a record of the conferences, the training and university workshops attended I was able to monitor my progression and areas of expertise. Thus when conducting regular reviews of the opportunities available to extend and develop my professional competencies; I was able to compare and prioritise my training needs. For example I found the university workshops provided for 'Delivering Consultancy' and 'Supervising Others' highly effective, as these were areas that I needed to further advance at the time. When I was given the responsibility to manage and supervise a work experience student at NHS SWE I was able to draw upon the skills acquired from the 'Supervising Others' workshop (e.g. supervision contract, supervision plans and logs). My effort for this endeavour was highly commending, demonstrating my ability to translate theory within my practice.

I believe that I have been able to promote health psychology and my ability to offer my skill set across a range of projects, demonstrating my ability to work with multiple stakeholders, from a range of backgrounds. The continual reflection and review of my practice has highlighted many areas of growth as a practicing Trainee Health Psychologist (i.e. teaching and training, project management, conducting and completing several large research projects). However recognising the need to consult and involve specialists has also proved to be most efficacious in enhancing my knowledge on novel areas of practice (i.e. NHS ethics application).

PROVIDING PSYCHOLOGICAL ADVICE AND GUIDANCE TO OTHERS

Throughout my placement I had a range of opportunities where I was consulted and requested to provide advice on research design, service evaluation, service design and health promotion activities. I was able to translate and apply health psychology principles and models in these instances, whereby I would

recommend the inclusion of additional health outcome measures, or the inclusion of psychological interventions. This was further demonstrated in the consultancy project, where the inclusion of alternative measures (i.e. changes in diet, observational measures to assess compliance, behaviour change - aggression, confidence, social interaction with peers, etc.) were suggested in light of the literature review findings. The use of sensitive and relevant measures is particularly important in 21st century healthcare provision, where greater pressure to evidence value for money is required due to economic constraints.

Due to the knowledge acquired throughout the consultancy project and having a sound understanding of the evaluation tools originally employed by the service co-ordinators (e.g. Children's Hope Scale) I was able to review their efficacy and recommend alternative tools to provide valid and reliable data, which would be ecologically grounded to the intervention objectives.

Similarly when I delivered my research methods training I was able to advise trainees regarding the range of alternative measures that they could utilise depending on their research, evaluation, and audit objectives (i.e. explorative or descriptive). For instance I was able to advocate evaluation models (Rootman, Goodstadt, Potvin, & Springett, 2001b; Bartholomew, Parcel, & Kok, 1998) used to evaluate health promotion initiatives. Thus in some instances I would recommend a stepped evaluation whereby the training phase for the service providers was evaluated, before intervention deployment. I was able to draw upon my MSc research, which provided an evidence base to support such an approach. Such guidance was well received and implemented into practice, demonstrating the efficacy of my advice and professional guidance, as well as my reflective practice.

This was further evidenced when providing psychological advice and guidance in my research methods training. In the CVD risk assessment study, I assisted in designing the CVD question list and used principles from the Health Belief Model (Rosenstock, 1966) to assess CVD awareness and explore the barriers and predictors associated with the utilisation of the CVD risk assessment. The findings generated, highlighted that a campaign to raise awareness on what CVD is was imperative to promote uptake of the CVD risk assessment amongst service users in NHS SWE. Hence in those cases where I was requested to provide one-to-one mentoring for staff conducting research I was able to reflect on such experiences

and direct trainees to review principles from social-cognitive theories, and apply suitable methodologies to suit their project objectives.

By attending conferences and reviewing journals such as 'Behavioural Medicine', 'Psychology and Health' and publications such as the BPS 'Psychologist'; I actively sought new sources of emerging knowledge and best practice (e.g. for stress management initiatives). However I was also able to integrate findings from the CVD and stroke research into my independent research proposal, as stress was a reoccurring theme in these studies, illustrating my ability to review and apply psychological knowledge from a range of sources, within my applied practice.

PROVIDING FEEDBACK TO CLIENTS

Throughout my practice I have had to provide feedback to clients, trainees and stakeholders. In each scenario I have had to be attentive and active in tailoring my feedback and conscious to employ suitable and relevant modes of communication. As well as ensuring that my practice was in accordance to the four principles outlined by the BPS (2009), in that I possessed the relevant knowledge and competence to advise clients.

Furthermore when conducting one of my consultancy projects I had to liaise with the programme administrator, in order to retrieve the evaluation data. This proved to be difficult as she encountered problems in data retrieval. I had to be sensitive to these difficulties when corresponding with the programme administrator. However as a researcher/consultant I had tight deadlines to abide to, in order to ensure a timely submission of the report. To avoid any possible discontent, I arranged face-to face meetings, and helped devise strategies with the programme administrator for swifter data retrieval (i.e. list of schools/facilitators to contact per week). By providing gantt charts to the programme administrator, I was able to highlight the need for a timely data submission. I found this to be extremely efficacious, as she was able to understand my urgency as well as have greater ownership for her actions. Maintaining a transparent and collaborative partnership, was integral to the success of the project management of this consultancy.

I became extremely conscious of using the correct modes of communication when providing feedback. I learnt early on in my placement that constructive criticism should preferably be given in face-to-face meetings, rather than email (if possible) to avoid possible discontent. Consequently when I was requested to review service evaluations and reports; I often requested a face-to-face meeting to provide feedback. I found that this was apt, as clients could ask questions, identify strategies to areas of weakness identified. However face-to-face meetings were not always feasible, thus I ensured when providing feedback via email or over the phone I would stress to clients that they could contact me should they require further clarification; maintaining open channels of communication.

My experience and competence in presenting feedback to clients in individual and group settings, has increased over the last two years. Presenting at national and international conferences, team meetings, steering group meetings, NHS ethics review meeting, and the Essex Local Pharmaceutical Committee (PNA project) has helped to enhance my ability to provide feedback to a range of healthcare professionals and academics.

Thus when providing feedback I have been conscious to maintain confidentiality and seek clearance for dissemination of reports, ensuring that I have satisfied legal and ethical requirements within my practice.

REFLECTION

I have significantly developed as a Health Psychologist in training. As a practitioner, researcher, consultant and lecturer within the field of health psychology I have enhanced several skills.

During my two year placement at NHS SWE I had the opportunity to work across a range of research projects. However I believe that I have become more assertive and confident in networking with colleagues to promote my skill set. As a result I have been successfully awarded with many teaching and training opportunities, which enabled me to secure a module leader post on MSc Health Psychology programme at City University (2011-2012). During this role I was able to reflect on my personal growth as a trainee as well as my ability to work as a practitioner-scientist.

I believe that working on several team projects, early in my practice allowed me to understand how projects were identified, implemented and applied within the NHS, in a public health setting. I was able to develop project management, and delegation skills, which proved to be most efficacious when working independently on my consultancy, research, and teaching projects.

Throughout all of the projects completed I have learnt to be dynamic in my practice, utilising a range of skills to suit the needs of clients, as well as being assertive in recognising my professional boundaries. Completing practice log has proven to be useful when reflecting on my practice, as they have often identified strengths and areas for development in my professional practice. I feel that the maintenance of logging my practice has and will help in achieving the best standards of practice through reflection.

I was fortunate that I was able to work in a Health Psychology Team as I was able to review and identify solutions to problems within the shared expertise of the team. This has highlighted the importance of working and liaising with other health psychologists. However I have also learnt the importance of liaising with professionals from other fields, applying health psychology across various settings. I feel that my research and practical experience over the last few years has enabled me to demonstrate generic professional competence as a trainee Health Psychologist. I also feel that I am equipped with the knowledge and skills to becoming a fully qualified Health Psychologist.

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AREA OF COMPETENCE: CONSULTANCY

SERVICE EVALUATION OF TWO PSYCHO-EDUCATIONAL INTERVENTIONS AIMED AT CHILDREN WITH LEARNING DIFFICULTIES AND BEHAVIOURAL PROBLEMS

SETTING: Public Health Commissioning – National Health Service South West Essex

CLIENTS:

- Deputy Director of Public Health
- Health Improvement Commissioning Manager

AIMS OF THE CONSULTANCY:

- To complete a service evaluation of the two interventions (PACTWIN and WhyTry) commissioned by NHS South West Essex since 2008.
- Devise evidence based recommendations for the two interventions to inform future commissioning.
- Disseminate findings to key stakeholders through the submission of the service evaluation report.

ASSESSING THE REQUESTS FOR CONSULTANCY

In February 2009 I was approached by the clients to attend a meeting to discuss a service evaluation. My expertise in delivering psychological interventions for children with learning difficulties and cognitive impairments, and service evaluation meant that I was approached for the consultancy project. The service consisted of two psycho-educational interventions called PACTWIN and WhyTry which were aimed at children with learning and behavioural difficulties. The two interventions had similar objectives, which were to raise self-esteem, hope, compliance, and to reduce anger. However the mode of delivery differed.

WhyTry was delivered in a school setting, across South West Essex to 336 children by trained facilitators that worked as Special Needs Assistants. There was an existing evidence base for WhyTry as it had been piloted across the United States of America (Alvarez & Anderson-Ketchmark, 2009), and empirical studies have

found school-based interventions to be most advantageous in increasing psychological and physical well-being (Felner, Brand, Adan, Mulhall, Flowers, Sartain, & DuBois, 1993). The central premise behind WhyTry is to teach social and emotional principles (i.e. resisting peer-pressure, obeying rules, and behavioural consequences) to children in a medium that promotes engagement, increasing understanding and recall, by using a series of visual analogies which are accompanied by music and practical tasks; using the major learning styles: visual, auditory, and kinaesthetic.

PACTWIN used concepts and tools from WhyTry, however it was delivered to family units in a non-academic setting to provide a holistic psycho-educational intervention. It was targeted at families with a child, or children with learning difficulties and behavioural problems. Evidence suggests such family-centred interventions can lead to better interactions within families, as they can promote greater awareness on the focus child's condition, whilst instilling adaptive coping mechanism in the siblings (Labato & Kao, 2002); thus exemplifying the efficacy of family based interventions for such conditions.

PACTWIN consisted of ten intervention sessions, which were an hour long. The three service user strands (1) parent/s/ carers, (2) sibling/s and (3) the focus child/ren had to attend these sessions. Families were referred through either schools or the paediatric units throughout NHS SWE. As a consequence the children were assessed and diagnosed prior to the intervention. The aim was to teach consistent messages/tools to the three service user strands simultaneously in a tailored medium (i.e. following rules, effective communication patterns, sharing, expressing praise) to address parenting skills, compliance, social skills and self-esteem.

The service evaluation had not been advertised or offered to anyone else. As I had been able to demonstrate the skills desired for the consultancy (appendix 1, *section 3.0*), in past team projects where I conducted service evaluations, research and audits, I had been headhunted by the clients, and requested to conduct the consultancy. The client expected the following input:

- A proposal outlining the evaluation (design, phases of evaluation, methods of data collection, data analysis, timescales)

- Project management of the service evaluation
- Data collection and data analysis (e.g. quantitative and qualitative as the data set consisted of both numerical and textual responses)
- Report write up with evidence based recommendations
- Regular updates and interim or draft report submissions
- Dissemination of findings to all stakeholders through the submission of the service evaluation report

In the initial meeting the service manager and one of the clients who was responsible for the commissioning of the services, were present. Both of the clients wanted to evaluate the services to inform future commissioning activities. I was provided with an overview of the interventions and requested to design a proposal for the service evaluation (i.e. assessment tools, phase of evaluation, proxy measures). Despite the service manager being present he did not indicate the number of service users (i.e. size of the evaluation), nor the fact that he had already administered evaluation tools and had an existing quantitative data set. Due to the service manager's limited availability I could not arrange an earlier meeting (i.e. telephone/one-to-one) to discuss the finer details (i.e. sample size, allocation of resources). As the client requested a draft proposal to be submitted within one month, I spent time on drafting the proposal with limited insight; and in fact version 1 of the proposal later became void, due to the service managers lack of detail in the initial meeting regarding the existing evaluation tools that had already been employed.

The contract was formally agreed by email, however alterations were made to the timescale and projected costings (appendix 1, *section 8.0*) due to changes in the proposal. Fortunately this did not affect the clients' expectations or consultant requirements as the service evaluation would still be completed by the given completion date (September 2009). As I worked for the public health commissioning directorate I was informed that I would not receive payment for this consultancy, as I would use my contracted work hours to complete this project.

Reflection

I was initially frustrated that the service manager had failed to stipulate details of the existing evaluation tool that had been deployed, in light of the discussion

surrounding evaluation design in the initial meeting. It meant that several revisions had to be made to the proposal. Despite this experience it was a useful process to undergo as it helped to clarify aims and resolve misunderstandings that had occurred between the client and the service manager (i.e. existence of evaluation tools). As a key responsibility was project management, I had to be assertive in designing a new proposal that incorporated the existing data to ensure the project was conducted and managed in a professional and timely manner.

The consultancy contract (appendix 1, *section 8.0*) provided an approximation of the number of days projected for the consultancy. Upon reflection I should have stipulated that any additional time allocated beyond the approximated 21 days would be chargeable at the contracted rate, despite the consultancy being unpaid. Hence when designing or reviewing future contracts I will ensure that such a clause is stated, for such modes of costing. This reinforced that I should be more assertive and confident to question or dispute finer details in contracts.

PLANNING CONSULTANCY

An 'expert model' of consultancy (Schein, 1999) was predominantly used. As the client defined the need, and then requested my expertise, as a consultant to identify the solutions for the service evaluation. This model also assumes that the client has adequate insight to know what kind of information or service they are seeking and that the consultant is able to provide the information. As the two interventions were based on principles of positive psychology and I had the knowledge of such interventions, my services were acquired

It became evident that the clients had a limited input in the management of the service, due to their professional boundaries. Hence the identification of another key stakeholder - the PACWTIN facilitator, was pivotal as it ensured that I had a direct lead to assist in the planning and operationalisation of the consultancy, as she was more knowledgeable regarding the feasibility and the practical logistics of the proposed actions in the proposal (i.e. when would be ideal to collect data from schools in respect to term dates, when and where to recruit participants).

I had to be proactive in arranging and finalising the implementation plans for the consultancy. However I was keen to employ a 'process model' of consultancy in the early planning stages, to ensure joint ownership of the solutions employed. I therefore had several brainstorming sessions with the service managers and the PACTWIN facilitator before finalising the proposal.

For example, both the PACTWIN facilitator and I had concerns regarding the tools used to collect the quantitative data. The assessment tools were not tailored for the young service users, who had a range of cognitive impairments, and some questions were deemed as inappropriate (e.g. questions regarding financial stability), and failed to assess some of the outcome measures (i.e. educational attainment, concentration levels, behavioural compliance). Thus I suggested two qualitative forms of assessment (Morgan, 1992a; Silverman, 2004; Merton, 2003) which would add greater context and act as proxy measures, in that the parents and the facilitators experiences of attending and delivering the service could be explored, as well obtaining their beliefs and opinions on the interventions impact on the children. We discussed the feasibility of the two assessments (1. Ethnography – observational study, 2. Focus groups with the parents and facilitators) and once the facilitator had confirmed that she could assist me in the planning and operationalisation of these qualitative evaluations, I notified the clients. As I had agreed to provide regular updates (i.e. one-to-one, telephone, email), as I felt that this was important to ensure I was satisfying their objectives and agendas.

Reflection

In this consultancy the provision of three services were given; designing the evaluation, conducting the service evaluation, and dissemination of findings. Thus the planning processes involved were different and so were the consultancy models, as the various stages required more or less input from the client. For example in the conducting and dissemination phase the 'expert model' was predominantly used, as I possessed the expertise to execute the relevant tasks.

However a process model was also used times; whereby the clients, stakeholders (e.g. PACTWIN facilitator) and I worked together. This proved to be efficacious when finalising the proposal, as we worked together to jointly identify solutions

(i.e. realistic dates for data collection, data analysis). I found this model to be crucial for the preliminary stages of the consultancy, as it facilitated joint ownership of the problem between the client/stakeholders and the consultant. As a consultant, I then felt confident when working within the expert model framework, as the process model had assisted in establishing a sound understanding of the clients needs.

ESTABILISH AND MAINTAIN WORKING RELATIONSHIPS WITH CLIENTS

I was fortunate that I worked with the clients, and that the service manager was present in the initial meeting. This helped to facilitate communication, as client was able to provide an introduction regarding my role in public health commissioning and my expertise as a trainee health psychologist. Despite the clients indicating that they wanted an expert model of consultancy to be employed, I suggested that I would send regular updates and interim reports as a means of monitoring and assessing the outcomes of the consultancy. Despite their initial reservation, they later appreciated this, especially during the planning stages as many unforeseen hurdles were faced (i.e. non-disclosure of existing evaluation measures, uncertainty regarding the need for NHS ethical approval) and we were able to agree on alternative ideas for the evaluation. Hence the utilisation of a process model proved to be efficacious in that there was transparency during the planning and implementation stages of the consultancy.

In the planning stages I urgently required a meeting with the service manager to discuss ideas for the proposal after the initial meeting, and he was unavailable for some time, it made the initial planning stages difficult. Fortunately I was able to identify and develop a strong relationship with the PACTWIN facilitator; who was more flexible in her availability, which aided swift correspondence; this proved to be pivotal in the execution of the consultancy.

While planning and conducting the evaluation I liaised with the clients and the stakeholders. We used a range of mediums (i.e. email, telephone and meetings), tailoring them to what was most convenient at the time. As the PACTWIN facilitator travelled a lot in her role, it often meant that she would check her emails in the afternoon. Thus for urgent matters I requested and obtained her

permission to contact her by telephone; with reflection this process facilitated swifter communication.

Reflection

The PACTWIN facilitator was not present in the initial meeting. Fortunately after some time it was brought to my attention that there was a facilitator, whose role would be to obtain the quantitative data, recruit participants, and provide the statistics. I used my own initiative to contact her directly and include her in future meetings and correspondence. This was imperative in determining the success of the evaluation. It was a key learning from this consultancy, that I should request a list of names, details regarding roles and responsibilities involved with any future consultancy projects, to avoid any potential delay.

CONDUCT CONSULTANCY

To ensure I conducted the evaluation in a legal and ethical manner and that had I clearance to proceed, I forwarded the proposal to the Integrated Governance Department at NHS SWE. Unfortunately due to the lengthy delay incurred as a result of this submission and feedback obtained, the ethnographic phase was no longer possible. Fortunately I had prepared a list of contingencies. As the focus groups could be retained; I decided to include the facilitators who administered the intervention, as well as the parents. The inclusion of this sample was justified as they would be able to discuss their views on any observational changes in the service users. Once I had obtained ethical clearance and the clients' approval I was able to proceed smoothly into the conducting phase of the consultancy.

Consequently I amended the gant chart in response to the new proposed evaluation plan. This was important as it meant that I was able to rearrange and manage my workload, to ascertain that I had sufficient time allocated to the project, and that my colleagues had advance notice of my availability in respect to team projects we were also managing. I obtained the quantitative data in July 2009, but as the data had not been prepared as requested (paired pre and post evaluation forms) I had to allocate more time for organising the data, so that I could begin scoring, and data entry. Due to the low number of paired and legible evaluation forms I had to alter the method of statistical analysis used.

I conducted the focus groups and submitted the recordings for transcription. Once the transcripts were obtained I checked them against the recordings, and then began the thematic analysis. This method was selected as it complimented the aims of the qualitative service evaluation, which was to explore the facilitators and parents beliefs and experiences of the two interventions, within a flexible framework, whilst providing a rich and detailed account (Braun & Clarke, 2006). Furthermore there was a vast amount of additional qualitative data from the open-ended feedback forms, which had to be synthesised with the focus group data in order to formulate the report which required additional time. However the flexibility of the thematic analysis, enabled the various qualitative data sets to be combined and synthesised into a comprehensive and yet concise account. Even though it was my responsibility to produce the report, and to ensure that the consultancy report met the clients' expectations, I submitted the draft report and made changes as per the clients' request. I submitted the final version (appendix 2) in August 2009 to all of the clients. Once I received the final clearance I was able to then disseminate the report to all of the stakeholders.

Reflection

Despite providing advance notice and a mock example of how the quantitative data was to be submitted, the facilitator failed to do so. I was very fortunate that I was able to allocate additional time and resources for this stage as (1) I had accounted for additional time allowance in my contingency planning (2) the client was able to fund transcription of the focus group recordings, and (3) the quantitative data set was smaller than anticipated. Hence I was able to submit the service evaluation report, service recommendations and disseminate the findings fifteen days ahead of schedule.

MONITOR THE CONSULTANCY

I provided regular updates to the clients and this process acted as a means to review the consultancy. It permitted reflection of the consultancy process and informed planning of the following stages.

For example, I sent draft focus group question lists to ensure I addressed the areas which were important to the clients in respect to the service evaluation. Despite the clients stipulating their satisfaction I prompted the client to consider other topics (i.e. questions regarding the evaluation process), in light of the quantitative data set I had obtained prior to the administration of the focus groups. The clients appreciated this as I was being assertive to address an unforeseen problem, and liaising with them. Thus continual monitoring of the various stages of consultancy facilitated reflection and revisions.

The employment of a gant chart, and ongoing revisions was useful in communicating and negotiating deadlines to the clients and stakeholders. This also allowed all parties involved in the consultancy to review and monitor the progress of the consultancy, which acted as an ideal evaluation marker for the overall project management.

Reflection

As an expert model was used predominantly throughout the consultancy, the forms of monitoring were consistent with this approach, as I had to be proactive in reviewing the progress and providing updates and alternative strategies to the client/s.

Upon reflection this consultancy required more project management than originally endeavoured, as the client was not aware of the evaluation tools being used already, hence their requests for me to identify evaluation tools was not required. Therefore I had to be creative in designing an evaluation proposal that would incorporate the existing data as well as provide a rich qualitative element, based on the clients' expectations. Monitoring and continual assessment of the project was a crucial action for me to implement.

EVALUATE THE IMPACT OF THE CONSULTANCY

As the client had assigned a final deadline for submission, this was one measure of success, which would provide an indicator of my project management skills. The

gant chart was a useful tool for me to gauge my progress. This self-evaluation process made me re-evaluate the progress and devise strategies where needed.

I devised a draft evaluation form, which I sent to the client to approve. This was an integral process for me, as I wanted to ensure that I had a comprehensive evaluation tool to assess the consultancy project, and that I had included measures/areas that were important to the client. The client was pleased that I had taken this action; which meant that she was familiar and welcoming of the evaluation process in the later stages of the consultancy. The feedback obtained was very positive and my role as a consultant was further extended to include additional responsibilities related to commissioning and management (i.e. gaps analysis, write a new service specification, design and pilot new evaluation tools) of the service that was evaluated.

Reflection

The process of designing and agreeing the evaluation method with the clients early on in the consultancy provided an indication as to the preferred form of evaluation, to minimise the risk of limited engagement with the evaluation process (Macdonald, 2006). Despite this, I was disappointed with the limited qualitative feedback the client provided; even though the feedback was very positive. For future consultancy evaluations I would add inversed items to minimise the chances of biased responses for the quantitative scales. However I would retain the evaluation markers I used (i.e. was the objective met, personal attributes, productivity and management, communication, etc), as I felt that these were comprehensive in evaluating all components of the consultancy, at the different levels (Eseryel, 2002).

SUMMARY AND OVERALL REFLECTION

This consultancy required me to use a range of skills as a consultant and flexibility in the way I conducted the consultancy, in respect to the various stages of the consultancy. Dryden (2004) stated that 'consultancy will rarely, if ever work in such a linear way. Flexibility is needed as we are faced with changing demands and agendas'. Compared to the early stages of the consultancy, I believe my confidence to be more flexible increased as the project progressed. This was

partly due to the clients preferred model of consultancy (i.e. expert model), as it became evident that they wanted less input in the logistical planning and conduct of the consultancy.

With reflection, I had initially relied too heavily on the clients setting the brief. I had to be quick in adapting to the changing scenarios faced with this project. The revision and finalisation of the proposal assisted the planning of the consultancy, as it assisted all stakeholders to gain clarification on the service evaluation model and timescales.

Due to the different roles the clients and stakeholders held, I had to learn how to negotiate my role with the various professionals. I developed a greater understanding and respect for the various professional boundaries, and the hierarchy within the various NHS structures. I had to be reflexive in communicating the demands that the clients had placed, in order to work collaboratively with the stakeholders; whilst ensuring that I understood their limitations and difficulties they faced in their efforts to help me achieve the desired goal (i.e. data collection). This meant that I had to mediate and use appropriate forms of communication (i.e. one-to-one meetings vs. emails).

Overall I believe that I developed very good alliances with everyone involved in this project, as well as further developing my skills to communicate with different healthcare professionals. This allowed me to continue working as a consultant in the following stages of implementing the recommendations exemplified from the service evaluation.

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Appendix 1 – Consultancy Contract

PACTWIN and WHYTRY Evaluation Contract

Contracting Client: XXXXXXXXX **Consultant:** Parmpreet Kalsi

1.0 BACKGROUND

PACTWIN and WHYTRY are two different psycho-educational interventions:

- PACTWIN is a holistic service, providing a psycho-social service for families who have children (aged 5-18 years) with learning difficulties and behavioural problems. The ten intervention sessions are delivered in the evenings to three key groups (parents/siblings/focus children), which aim to address parenting skills, communication skills, and self-esteem.

- WHYTRY is a school based intervention which focuses on overcoming challenges and improving outcomes in the areas of truancy, behaviour, and academics, for children aged 5-18 years with learning difficulties, behavioural problems, and social problems.

Problems in parent-child interactions, marital relationships, and family functioning were found to be common factors, in some families of children with attention-deficit/hyperactivity disorder (ADHD), and other behavioural difficulties (Cunningham, 2007; Labato & Kao, 2002). Relational difficulties in the families of children with ADHD can also adversely affect the child's interactions in other contexts (i.e. with peers, teachers, etc.); asserting the need for family-centered interventions to minimise this negative pattern. Labato and Kao (2002) successfully demonstrated that a family centred intervention led to better interactions within families, as the intervention raised awareness on the focus child's condition, whilst instilling adaptive coping mechanism in the siblings. Thus promoting the efficacy of family based interventions.

Furthermore empirical studies have found school based interventions are most advantageous in increasing psychological and physical well-being. Felner et al (1993) reported that such interventions which focused on developing supportive social interactions with peers and teachers, proved to be more effective in adjustment to school change and academic performance, compared to those interventions that just focused on coping and problem solving.

Thus school based and family based interventions provide supplementary tools to preventative healthcare intervention, with the potential to promote well-being.

2.0 OBJECTIVES

Tasks:

- To complete a service evaluation of the two interventions (PACTWIN and WHYTRY) commissioned by South West Essex PCT since 2008.
- Devise evidence based recommendations for the two interventions.
- Disseminate findings to key stakeholders.

3.0 CONSULTANT REQUIREMENTS

- Have advanced quantitative and qualitative research skills.

- Provide requested information, help problem solve barriers and ensure sustainability at the end of the project.
- Experience of positive psychology interventions/research and working with children with learning difficulties.

4.0 TIMEFRAME

April/May 2009	June 2009	July 2009	August 2009	September 2009
Submission of service evaluation proposal	Obtain approval from stakeholders and liaise with intervention coordinator to arrange data collection	Data Collection: Complete focus groups and ensure all of the quantitative raw data has been obtained	Qualitative and quantitative analysis to be completed and to be written up in a report format	Submission of FINAL service evaluation report

As the consultant is an employee with NHS South West Essex, typical work hours shall be allocated for all activities associated with this service evaluation. If in any case research activities (i.e. data collection – focus groups) exceed the employees typical weekly 22.5 hours, this time shall be redeemed as flexi-time.

5.0 CODE OF CONDUCT

The trainee health psychologist will carry out the service in accordance with the British Psychological Society.

6.0 INTELLECTUAL PROPERTY

The health psychologist shall be named on any publications arising from her work. This has be discussed and agreed. However the trust shall have intellectual property over the project and work produced.

7.0 CONFIDENTIALITY

During the course of the services the trainee health psychologist may have access to, gain knowledge of or be entrusted with information of a confidential nature. In signing this contract, the principal investigator agrees, unless expressly authorized by a senior authorized person to do so, will not disclose to any unauthorized person or organization any such confidential information. The trainee health psychologist agrees to store and process information in accordance with the Data Protection Act 1998.

8.0 PAYMENT

As the trainee health psychologist is an employee of NHS South West Essex, she will not receive additional payment for the duties carried out for this project. Travel expenses shall be reimbursed in accordance to trust policy. Costs associated with research activities such as printing transcription, room hire, etc, shall be charged to NHS South West Essex as the trust have commissioned the evaluation.

However the current fee that would be potentially charged is £300.00 per day for research consultancy. Estimating the workload of the project, an approximation of the potential number of days required to achieve the specified goals is provided below:

Qualitative Phase:

- Work with key stakeholders to recruit and identify participants – 3 days (spread over four weeks)
- Conduct 2 focus groups – 2 days
  - 1-day per focus group, including arranging the event with participants. Focus groups would be tape-recorded, with permission from participants, and transcribed verbatim.
- Analysis of focus group data – 5 days
  - 1-week for thematic analysis (including tape transcription and cross-validation of data interpretation).

Total days for focus groups and analysis = Approximately 10 days

Quantitative Phase:

- Analysis of collected pre and post measures using the most up to date version of the Statistical Package for the Social Sciences (SPSS) – 1 day (dependant on the form of data – inputted into Excel?)

Total days for quantitative data analysis = Approximately 1 day

Producing the report (full version and executive summary format for dissemination):

- Approximately 2-weeks to collate the final report, comprising of: introduction and project background; the intervention; design and methodology; data analysis; discussion of findings in relation to current knowledge within the area; service recommendations.

Total days for completion of final report = Approximately 10 days

Total duration for entire project = Approximately 21 days

Total cost - £6,300

9.0 CONTINGENCY STRATEGIES

If in the event the consultant can no longer complete the project due to unforeseen circumstances, arrangements for the assistant trainee health psychologist shall be actioned to ensure successful completion of the project. It is the consultants' duty to update fellow health psychologists about the status of the project.

Signature …… DATE …….

Consultant name ……

Signature…… DATE ……

Client name …….

A Service Evaluation for PACTWIN and WhyTry

Author:

Parmpreet Kalsi

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1.0 Introduction

1.1 Aim of the project

To evaluate two existing services which aim to promote positive well-being in South West Essex. Consequently evaluations shall be presented for PACTWIN, which offers psycho-social support to families with children who have learning and behavioural difficulties; and WhyTry which offers a school-based psycho-educational programme for children, adolescents and teenagers with behavioural problems.

1.2 Evidence for population interventions which promote positive well-being

Securing the well-being of children by protecting them from all forms of harm, and ensuring their developmental needs are responded to appropriately, are primary aims of Government policy (Framework for the Assessment of Children in Need and their Families, published by the Department of Health; 2000).

Consequently positive well-being interventions offer an instrument that can potentially reduce the prevalence of many common physical and mental disorders (Huppert 2004). As psychological well-being has been linked to a variety of physiological parameters; improving the psychological well-being of individuals with a disorder, not only reduces the symptoms of the disorder, it also initiates a spiral of processes (i.e. decrease morbidity and increase survival), as stipulated by Ryff and Singer (2000).

Positive psychology interventions that are aimed at children provide an opportunity to employ preventative mental health strategies, which have the potential to reduce future ill health. For example the Faculty of Public Health (2007) state that an estimated total economic cost of common mental health problems (stress, anxiety, and depression) is roughly £25 billion, made up of £13 billion in lost output caused by time off and sick pay, carers' time £4 billion, and public services expenditure on mental health of £8 billion.

Thus if positive psychology aimed at the younger generations can endeavour to equip children with better coping skills, reduce stress, increase self-esteem and hope, one could argue that these children may hopefully have a reduced risk of developing the common mental health problems that seem to be draining the UK's workforce and the national health service.

1.3 The interventions proposed for evaluation

Two positive psychology interventions have been offered in South West Essex, called WhyTry and PACTWIN. This service evaluation shall assess their impact. Both interventions have similar aims, which are to increase self-esteem and assist goal setting skills. However the target populations and the method of referral differ slightly between the two.

Both interventions shall be evaluated to assess their efficacy. Therefore the findings from this service evaluation will strategically aid how the programmes are designed, delivered and monitored for the next cohorts in the forthcoming

academic years. This report shall present the individual evaluation reports for each intervention, which shall provide evidence based recommendations for PACTWIN and WhyTry.

2.0 PACTWIN

2.1 Overview of intervention

This intervention has adopted a holistic approach in providing a psycho-educational service for families who have children (aged 5-18 years) with one or more of the following problems: learning difficulties, behavioural problems, poor social skills, developmental delay, low self esteem, family and social problems.

The intervention is run outside of school time, in the evenings. The family members are divided into three strands:

1. Parents
2. Siblings
3. Focus children

This strand segregation provides the opportunity to address the individual needs of the groups, which is crucial in providing a tailored approach for the individuals in the group. Service users are referred to PACTWIN by paediatrician clinics in South West Essex. Currently 61 parents, 34 focus children and 22 siblings have completed the PACTWIN programme, since September 2008.

2.2 Evidence for family-centred interventions

Cunningham (2007), reported that problems in parent-child interactions, marital relationships, family functioning, and parental adjustment were found to be common factors, in some families of children with attention-deficit/hyperactivity disorder (ADHD), and other behavioural difficulties (Labato & Kao, 2002). In addition it has been recognized that many of the factors contributing to relational difficulties in the families of children with ADHD adversely affect the child's interactions in other contexts (i.e. with peers, teachers, etc); asserting the need for family-centred interventions.

Labato and Kao (2002) successfully demonstrated that a family centred intervention led to better interactions within families, as the intervention raised awareness on the focus child's condition, whilst instilling adaptive coping mechanism in the siblings.

Hence such family-centred interventions offer tools and apparatus to empower effective parent-child interactions, whilst providing tailored support for the various family members.

2.3 Aims for service evaluation of PACTWIN

- Assess the impact of PACTWIN on all three of the strands, by utilising both a quantitative and qualitative methodology.
- Evaluate whether PACTWIN was successful in improving parent-child interactions, and what tools may have assisted, if any.
- Identify the interventions strengths and weaknesses, in response to service users' feedback.

- Provide evidence based recommendations for future PACTWIN interventions in South West Essex.

2.4 Quantitative Methodology

As numeric measures were utilised as apparatus to assess the impact of PACTWIN, a quantitative methodology was utilised to statistically compare the scores obtained from the pre and post phases of the intervention. As several scales were used, a summary of the measures utilised is provided below.

2.4a Summary of Evaluation Measures

The SOUL record offers a range of questionnaires designed to measure progress in different contexts with different client groups. Hence the SOUL record had been used by the project co-ordinators, to provide a numeric assessment of PACTWINs impact. The three quantitative measures which were analysed are listed below:

1. A parenting questionnaire was selected from the SOUL record instrument, to assess PACTWINs influence on the parent strand. It consisted of 21 items, assessing attitude, interpersonal skills, and practical factors (appendix1).
2. The young person's *Getting to Know You Questionnaire* selected from the SOUL record instrument was used for both the focus children and the siblings. This consisted of 20 items, assessing health, safety, enjoyment and pleasure in lives, perception of making a positive contribution, economic well-being, which address the five factors in the Every Child Matters paper (appendix 2).
3. The PACTWIN Course Evaluation was an independent measure; given to the two children stands at the end of the intervention. It consisted of 14 items, to ascertain what the children enjoyed the most or least, etc (appendix 3).

2.5 Quantitative Results

2.5a PACTWIN Parent Strand Results

Thirty-six paired responses for the parenting measure were analysed. *t*-tests were conducted on the pre and post means generated for each of the 21 items in the SOUL record parenting questionnaire[2].

The analysis revealed that for all of the 21 items there were increases between the pre and post arithmetic means, however only eleven of the items were statistically different ($p<0.05$). It was therefore apparent from these results that the parents had significantly increased in their parenting skills, and overall behaviour.

For example the parents had shown an increase in their self-reported: usage of appropriate discipline, ability to set clear boundaries for the children, time spent listening to their children, and looking for opportunities to praise members of the family. There was also an increase in the parents' perceptions of improved parenting, and they significantly felt that they got on well with their children.

[2] The summary table for the results can be found in appendix 4.

In addition the results had shown that the parents had shown significant increases in certain behavioural traits, as they had increased in their organisational skills, confidence as a person, their ability to exercise self-control, their positive regard for themselves, and their ability to cope with constructive criticism.

2.5b PACTWIN Children's Strand Results

Due to the low number of paired SOUL record responses collected for the focus children strand (*n=13*) and the sibling strand (*n=10*), these two data sets could not be statistically analysed.

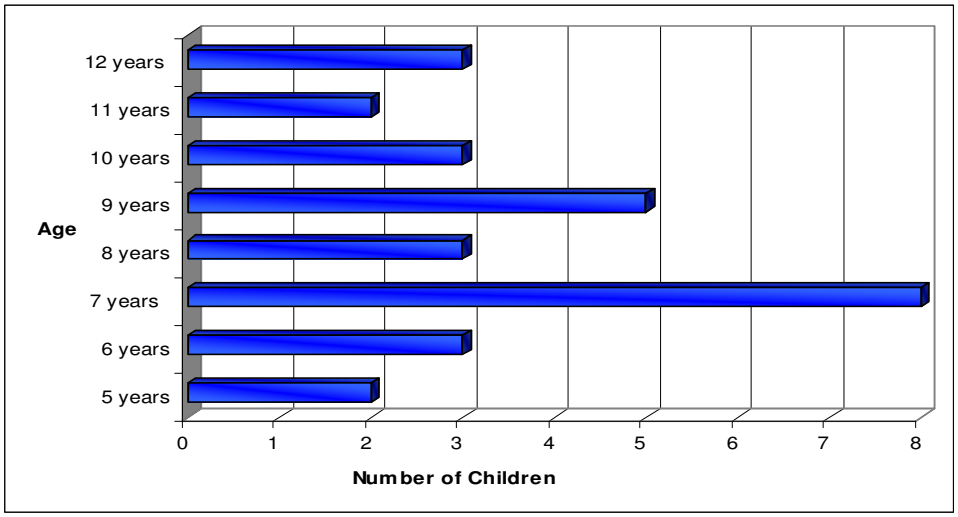
Therefore the course evaluation responses (appendix 3) were analysed, to provide a quantitative summary of the children's feedback of PACTWIN, as a total of 29 responses were collected from the two children strands. The textual responses retrieved were analysed by content analysis.

Content analysis involves the systematic identification and description of themes/ patterns in a qualitative data set. It then numerically describes the number of occurrences in the data set, by summating the number of occurrences a theme/pattern emerges.

Participants

A total of 29 (16 males, 13 females) children, from the sibling and focus children strands completed the questionnaire. The majority of the respondents were aged 7 years or 9 years of age, as illustrated in chart 1, and the age range for this data set was 5-12 years.

Chart 1 – Age dispersion of respondents



Children's perceptions of PACTWIN sessions

Chart 2 – Views on sessions being friendly

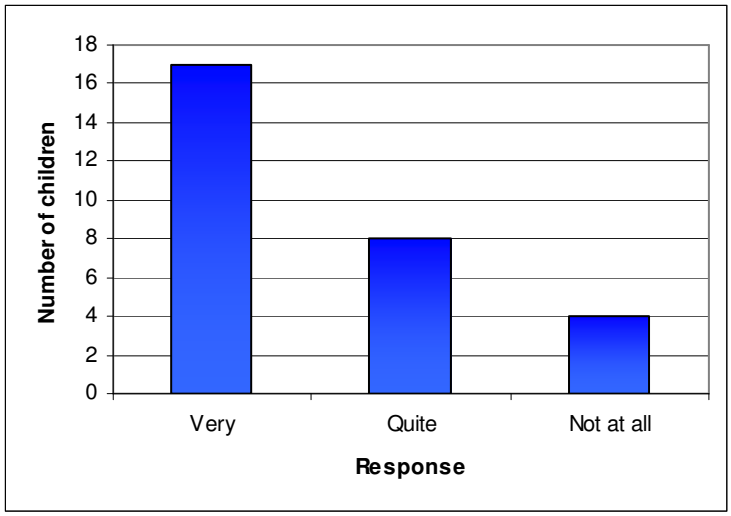


Chart 2 depicts that the vast majority of the children found the PACTWIN sessions to be very friendly; compared to the minority that had found them to be *not at all* friendly.

Chart 3 – Views on sessions being relaxed

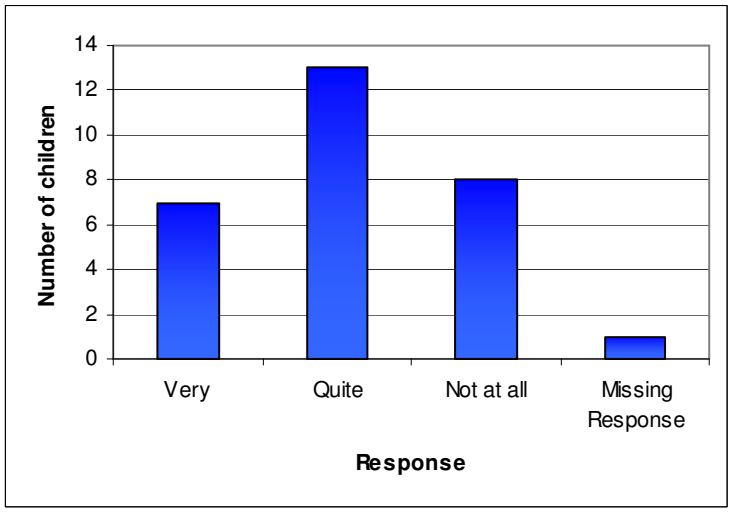
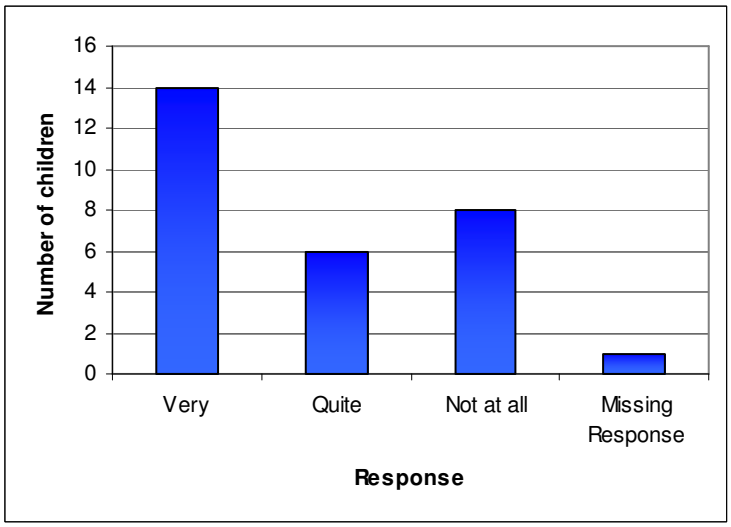


Chart 3 exemplifies that 13 of the respondents found the PACTWIN sessions to be *quite* relaxed. Despite this, 8 respondents deemed the sessions to not be relaxed.

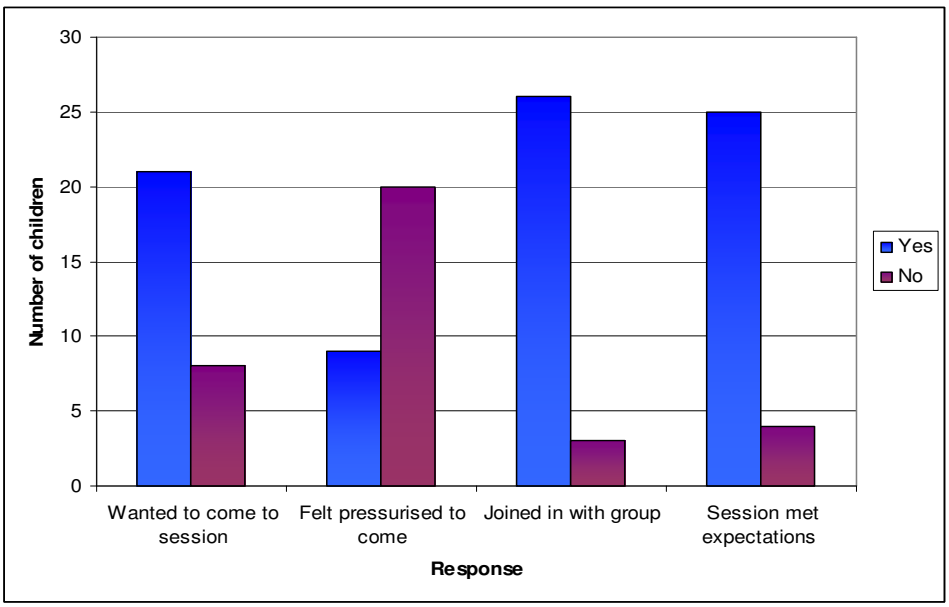
Chart 4 – Views on sessions being interesting



In addition, chart 4 reinforces that the majority of the respondents did find the sessions to be interesting, compared to the number of responses selected for *not at all*.

Chart 5 reveals that in all of the cases the majority of the children: wanted to attend the PACTWIN session, had joined in with the group, and felt that the session had met their expectations. Interestingly only a small minority indicated that they felt pressurised to attend the session. In fact the qualitative responses highlighted that the majority of the children wanted the programme to continue, indicating that the programme was well received by the service users in the sibling and focus children strands.

Chart 5 – Levels of children's engagement with PACTWIN



Children's most favoured PACTWIN tools

Table 1 - Content analysis summary : 'What children enjoyed the most'

Theme	Number of Respondents
Combining theory with practical tasks (making shields/ badges/masks, etc)	10
Activities – playing games, football, music	7
Food - pies/toast	6
Being with my friends	2
Emotional work/ *'everyone said their opinions'*	2
Everything	2
Opportunity to get out of the house *(focus child)*	1

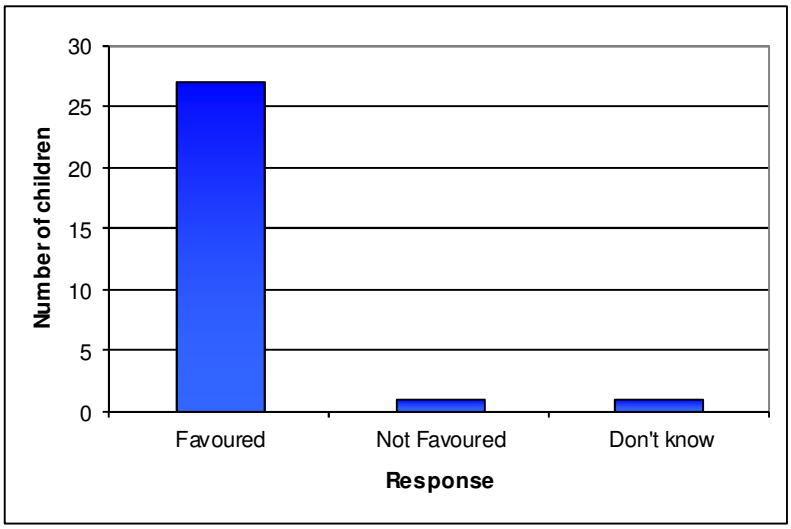
The content analysis revealed that the majority of the children enjoyed tasks which incorporated the theoretical principles of PACTWIN with practical tasks. For example ten respondents had stated that they most enjoyed the tasks where they had to make the shields (which is part of the defence mechanisms topic), the roller-coasters, masks, badges, etc, as stated in table 1.

In fact one respondent claimed that he could have potentially engaged better with the session which covered changing labels, if he/she was allowed to make the labels. Thus artwork and creative tasks were deemed to be effective by the children, as they were fun, whilst being informative. Furthermore, activities which incorporated games and food were also favoured.

Other respondents had also stated that they most enjoyed being able to interact and meet with friends at PACTWIN; as they had developed a support network of other children, who had similar experiences. It was further stated that they valued the opportunity that PACTWIN provided, to talk and express their emotions, suggesting that the relationships formed within the support network, facilitated this process of disclosure amongst the children.

For the vast majority, 27 of the respondents (93%), they were in favour of the rules, as illustrated in chart 6.

Chart 6 – Children's perceptions of the rules (a PACTWIN tool)



These respondents had stated that they favoured the rules, as they had led to changes in the family dynamics, and the parent-child interactions were deemed to be calmer, compared to pre PACTWIN. The quotes below reinforce this finding.

The rules make it more settled at home (statement from a sibling)

The rules are very good they help (statement from a focus child)

Children's least favoured PACTWIN tools

Table 2 - Content analysis summary for what children liked the least about PACTWIN

Theme	Number of Respondents
Not applicable	13
Talking about/making the rules	3
Disruptive children in the group/ People walking out	3
Missing responses	10

In response to the question that explored what the children liked the least about PACTWIN, the content analysis revealed that the majority of the respondents were satisfied with PACTWIN, and had stated that that question was not applicable (as summarised in table 2). A minority of respondents had disclosed that they did not like making the rules (despite later affirming that they were

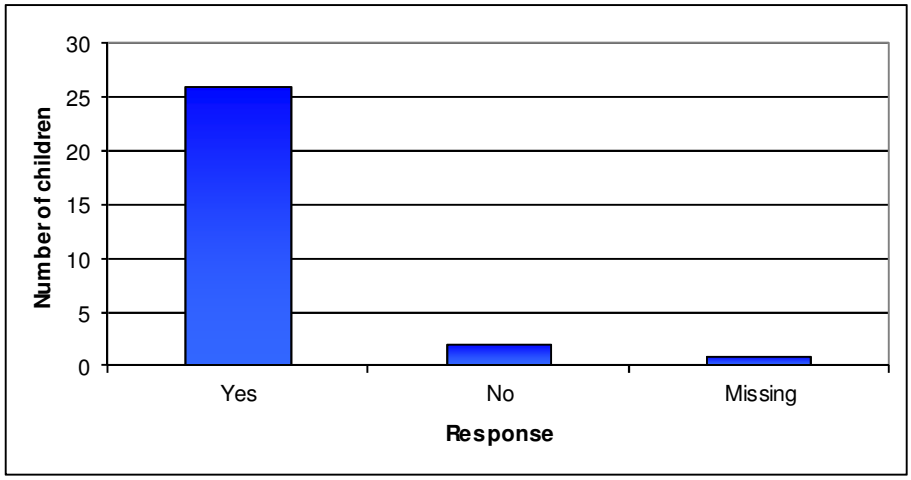
useful), nor did they like the disruption caused by some of other the children in the group.

Children's perception of PACTWINs influence on the parent-child interactions

26 respondents disclosed that things were better at home at the post phase of the intervention; as pictorially represented in chart 7. This finding seems to be consistent with the results obtained regarding the rules (PACTWIN tool), as it appears that the rules have enabled changes to be translated into the family context, assisting parent-child interactions. The quote below shows that the parent and child seem to be more aware of each other's responses, and can use the boundary tool, to potentially alter maladaptive behaviour in the child.

It's helped because I get a warning which helps

Chart 7 – Response to 'are things better at home'



Children's recommendations for PACTWIN

Table 3 - Content analysis summary: children's recommendations for PACTWIN

Theme	Number of respondents
Already satisfied	9
Cartooning club	4
Artwork (drawing/painting)	4
Play outside/football	3
Writing a book/creative writing/reading	3
Food - cooking	2
Emotional work	2
More games	1

Some children wanted the PACTWIN sessions to include more cartooning (PACTWIN tool), artwork, and outdoor activities. Table 3 provides a summary for the other suggestions and their relevant numeric occurrences, obtained from the content analysis. Despite this, nine respondents were satisfied with the sessions, and one respondent disclosed that they were *'quite happy with it all ready*'. One

focus child stated that they wanted the PACTWIN sessions to be ongoing, and not suddenly stop after the programme was complete.

It is important to acknowledge that PACTWIN was a big factor in the children's lives, and that overall they were pleased with the structure and activities. The quote "*I would like to still visit"* asserts the children's desire for ongoing PACTWIN sessions.

2.6 Qualitative Methodology

To obtain greater depth, a qualitative methodology was adopted. One focus group was carried out with the each of the following groups: (1) PACTWIN parents, and (2) PACTWIN facilitators.

Each focus group lasted approximately 1 hour and consisted of 4-6 people. A letter of invitation was distributed to the parents that had attended PACTWIN, and the PACTWIN facilitators. Those individuals that accepted the invitation then took part in the corresponding two focus groups.

Consent and information sheets were provided to participants before they took part in the focus group. At the end of the focus group participants were given a debriefing form that provided information on the purpose of this evaluation, and contact details of lead researcher.

All focus-groups were voice recorded and transcribed. The data obtained from the focus groups were subjected to thematic analysis. Thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data. It minimally organizes and describes a data set in rich detail. Some of the advantages of this analysis method are listed as follows:

- Flexibility
- Relatively easy and quick method to do
- Results are generally accessible to educated general public
- Useful method for working with participants as collaborators
- Can usefully summarize key features of a large body of data, and/or offer a 'thick description' of the data set
- Can generate unanticipated insights
- Can be useful for producing qualitative analyses suited to informing policy development

The transcripts were analysed and reoccurring themes were identified. The themes were categorised as subordinate themes and then sub themes. The methodology employed had high validity as similar themes were identified by myself, and another trainee Health Psychologist who cross-checked the analysis.

2.7 Qualitative Results

2.7a Results for PACTWIN Parents

From the focus group that was conducted with the PACTWIN parents, five subordinate themes were identified within the data set.

In addition the feedback obtained from the two questionnaires (PACTWIN Course Evaluation - *appendix 5;* Journal Evaluation Form – *appendix 6*) administered to PACTWIN parents at the end of the intervention, was also thematically analysed (as the questions elicited textual responses). The findings were then incorporated into the qualitative results obtained from the focus groups, as similar themes had emerged.

Table 4 provides a summary of the identified subordinate themes and sub-themes. Each of the themes have been evidenced and discussed below in detail.

Table 4 – Summary table of subordinate themes and sub-themes for the PACTWIN parents qualitative data set.

Super-ordinate Themes	Sub-ordinate themes
1. Support	Parent's network
	Role of the facilitators
	Family cohesion
	Children's network
2. Pitch	Tailoring
	Referral pathways
	How to market the service
	Raise awareness
3. Consistency	Top ups
	Consistent message
4. Empowerment	Changes in parents
	Changes in the focus children.
5. Tools	Reflective tools
	Rules
	Massage
	Self-esteem lecture
	Practical sharing tasks

1. Support

This theme consisted of four sub-themes, which are: *parent's network, role of the facilitators, family cohesion,* and *children's network.* It highlights how PACTWIN offered support to the service users in the various strands.

Parent's network

The parents that attended PACTWIN consistently stated that the intervention was vital for them, as it enabled a support network for the parents to be developed; due to their shared understanding of their experiences and emotions, in response to their child's behaviour.

You realise that you're not alone and you're not a bad parent as everyone keeps telling you… That support around you it was a good thing for me.

The participants verbalised that they no longer felt isolated, as this network of parents with shared insight provided a platform where they could openly discuss their struggles and successes every week; which was crucial for these parents to do[3]. Parents valued this weekly opportunity to talk openly; as they were able to address the negative comments that had been said to them about their parenting skills by people around them (i.e. school staff, grandparents, etc).

You seem to be very isolated when you've got a child that behaves the way my child does… but to know that you're not alone… we sat and cried…tantrums and everything… you don't feel embarrassed, because you know that everybody's been there.

All of the participants deemed PACTWIN to be effective for them as they had formed this integral support network.

Role of the facilitators

The facilitators provided another support mechanism for the parents, which was delivered in a sensitive and effective manner. The facilitators were able to create an environment that was inviting, relaxed and friendly, whist also being informative and interesting[4]. Thus parents felt comfortable to open up and share their experiences with the group. This was vital as the parents valued the opportunity to openly reflect on their experiences which was cathartic for them and useful for other parents to learn from and/or empathise with.

The facilitators are absolutely fantastic, they are not condescending, it's all very friendly, really lovely atmosphere.

Family cohesion

The intervention was found to be effective as there was support for all of the family (parents, focus children and siblings). This permitted a holistic stance to be adopted, as the family dynamics and behaviour were reflected upon by all members; increasing awareness on each of the family member's actions and consequences.

It wasn't just the fact that he had the problem… it affected the whole family… it was how to deal with not just him, but to make everyone cope better with it… the children came out with it much more better, they were happier because they could talk about their feelings more and we learnt different ways to approach it.

Children's network

Participants also described how PACTWIN supported both the focus children and the siblings, as they had developed their own network of friends and support through the intervention (also validated from the quantitative results obtained

[3] This finding was also generated in the thematic analysis of the textual responses collected from the Parents Feedback on PACTWIN Questionnaire (appendix 5).
[4] This finding was also validated through the quantitative measure retrieved from the Parents Feedback on PACTWIN Questionnaire (appendix 5) and the focus group data.

from the Children's Feedback Questionnaire), enhancing their social skills. The quote below exemplifies how PACTWIN encouraged the children to verbally communicate and how the children valued this.

They liked to go every week because they enjoyed being with the children, and having people there to talk to.

PACTWIN was deemed as useful for the focus children in particular, as it was common for these children to not have a social network outside school. Therefore being introduced to a new set of children through PACTWIN was beneficial, as it encouraged them to enhance and develop their social skills in a new context, empowering them to develop new relationships whilst learn a new set of skills.

The social aspect for the kids I think was brilliant… all of a sudden they've got this place where they were going and there were able then to interact with other children, they loved it.

2. <u>Pitch</u>

This theme consistently emerged in the data set, and four of the sub-themes identified are: *tailoring, referral pathways, how to market the service,* and *raise awareness.* It describes how the material in PACTWIN could be more tailored for some strands, as well as how the participants wanted the service to be marketed.

<u>Tailoring</u>

Despite the positive responses for PACTWIN, it appeared that there were some improvements that the participants felt could be made. For example the participants described how the intervention tools were not appropriate for all of the service users due to age variation in the children groups, as evidenced by the quote below.

He didn't mind going… because there were other teenagers there, but then they stopped coming so he was the only teenager there so he felt like it was very childish, a lot of the games were younger based that they did… maybe offer a little bit more for a child of his age.

Participants stated the importance of group dynamics for all three strands (parents, siblings and focus children). The quote below describes how some children did not *'gel'* in the group, causing disruption to the sessions; consequently affecting the delivery of the intervention for that group. Hence ensuring that the service users in the various strands are some what cohesive, is crucial, highlighting the importance of tailoring.

There were two children round the same age and you know like all children with ADHD, they rub each other off… but these children didn't return and he did really, really well, and he much improved.

<u>Referral pathways</u>

Some of the parents in this sample described difficulties in being referred to PACTWIN, as they were not aware of the service until a professional (GP, health visitor, etc) had made them aware of it.

I only heard about it through a health visitor when I phoned up for my youngest child, she's not the one that had the problem… the child that had the problem I got no help with at all… but she thought it would be ideal for us to go as a family.

One parent was in fact an employee in a local school, and she described her confusion regarding the referral pathways for PACTWIN when she was confronted with families that would benefit from PACTWIN.

We've suggested perhaps putting them on a parenting course, but I don't know if we as a school can request that they go or whether they have to go to via a GP, I think it's all quite confusing.

However not all of the parents had experienced problems in gaining access to the service, as their GP was knowledgeable of the service and was able to facilitate the referral process for the programme.

I had been told by somebody that they did parenting classes so I asked my GP if I could be referred… and that's how I got on it.

<u>How to market the service</u>

Consequently it became apparent that the parents felt greater efforts should be taken to raise awareness of the service for parents and school staff to be aware of the programme, as they have benefited from it, and they think it is applicable to similar families who need assistance.

It's not widely known (PACTWIN) because I work in a school and you know most of the services that are available... It would help the teachers if they knew what way to point somebody (PACTWIN), instead of having a dead end.

PACTWIN isn't spoken about or talked about as a support group… it's a shame because I think there would be more people out there that could do with being able to request it or ask for help.

However the participants felt that the method used to advertise PACTWIN would be instrumental in whether the service would be accepted, or rejected by potential service users. They wanted the support element to be emphasised, as that would be positively received, compared to parenting classes which could elicit negative responses; in light of the negative comments they have experienced as parents of a child/ren with behavioural difficulties.

Whenever I suggested to parents that it might be useful to them… not that they are bad parents a lot of them take it negatively… so I think if it just explains it's there as a support.

A leaflet; short and concise in format, was suggested as a medium to raise awareness for PACTWIN, as it could be disseminated to other parents, in order to advertise the service. Doctor surgeries and schools were thought to be ideal places for the leaflets to be placed. However some of the participants also revealed that word of mouth has been used in the past; with a extremely successful outcomes.

On the other hand, parents recommended that having an experienced PACTWIN parent attend one session, would help encourage other parents to attend the

service, as well as alleviate any fears in parents new to the programme, in the early weeks of the intervention. In addition it was suggested that quotes from experienced PACTWIN parents, could be included in the leaflet, in order to encourage uptake of PACTWIN.

I would happily sit in front of another parent as a professional and say I've been on them, they're a good thing and I would definitely big it up because I thought it was great.

Raise awareness

Participants provided examples of how key stakeholders in the children's lives lacked awareness regarding the behavioural difficulties experienced by the focus children. For example parents felt that some school staff needed training in this area, which would enable the school staff to signpost families to PACTWIN if the need was identified, etc.

If every teacher was given a little bit of training on what sort of things to pick up he/she could talk to the child's parent about this course.

However participants also wanted a session delivered by a professional, for other family members/friends to come along and gain insight on the focus children's behaviour; as the parents are often confronted with resistance from their own family members.

My mum don't believe there's anything wrong (with the focus child)… they don't want to ask us… it would be better coming from a professional.

On the other hand, PACTWIN had successfully increased knowledge in parents, regarding relevant services available to them and their families. One parent was able to utilise other services for his child after PACTWIN had finished, ensuring that the focus child was able to socialise with other children after school.

3. Consistency

The theme consistency emerged in the data set in various contexts. Two of the sub-themes identified are: *top ups* and *consistent message.* This theme expresses the participants' desire for top-up sessions to assist with PACTWIN maintenance, and need for PACTWIN consistency across key stakeholders.

Top ups

This sub-theme was expressed in two levels; as the participants felt it would be ideal if top-up sessions could be provided for parents and the children.

One of the parents expressed how she had to return to PACTWIN and complete a second course as she had *slipped-back* and needed to learn, and apply the PACTWIN tools again with her family. Despite finding the second course as helpful, she and the other parents felt that top-up sessions (i.e. monthly[5]) could be a useful alternative to re-starting the course again.

[5] 62% of the respondents of the Parents Feedback on PACTWIN Questionnaire (appendix 5) wanted the top-up sessions to be monthly, compared to fortnightly or every 2 months.

I found it ever so helpful because I think after a few years you do tend to slip back…
If I went monthly… I wouldn't have had to do the second course.

Other parents acknowledged that implementing PACTWIN is an ongoing endeavour, especially as the needs of the children are likely to change as they continue to develop, and other challenges may arise, etc. Hence the top-ups could provide a mechanism to reinforce the material delivered in PACTWIN.

You have to be consistent, it's not going to work within two or three days, it's going to be something that's going to be on going for a long time.

It was reported that the children were *upset*, and thought they were being punished when the intervention finished, as they no longer had contact with their new network of friends, nor did they get an opportunity to attend PACTWIN. In addition the parents described how the children were often excited to show others their successes in light of the PACTWIN programme. This in itself is an important dynamic as this process could help to raise self-esteem.

Hence top-ups for the children were deemed as crucial to ensure that the PACTWIN tools are practised and maintained, as the children do not have the cues or prompts that the parents had to refer to when needed. Hence consistency in the application of PACTWIN is vital, and top-ups would help facilitate this process.

It's quite easy for children to fall back… as an adult you know yourself - I'm slacking here, I can read my manual or I can speak to someone… but I think the children they can't and it's up to us to build them back up.

It is important to acknowledge that parents on the recent cohort had been offered the monthly support meetings, which were valued and favoured. Despite this it was suggested that the children should also come along to monthly meetings where the top-ups could be delivered for the children, which would also enable the parents to attend frequently, as they can't always attend due to the lack of childcare facilities.

Alternatively some said that they wanted a drop in centre, or telephone support to permit ongoing support[6]. Whereas others felt that an online support forum for the parents would also be ideal for those times of need. The online forum would enable parents to capitalise on the support network they have formed from PACTWIN, which is ideal, as they already feel comfortable to express their feelings among each other as they have established rapports. However this network could also potentially act as a reinforcement of the PACTWIN tools and knowledge as parents could recall and suggest tools to use.

<u>Consistent message</u>

The parents reinforced the efficacy of PACTWIN as it adopted a holistic approach to educating and empowering every member in the family. Parents claimed that when the majority of the main caregivers (mother, father, grandparents, etc) for

[6] These two suggestions were identified in the thematic analysis of the textual responses collected from the Parents Feedback on PACTWIN Questionnaire (appendix 5).

the children, attended PACTWIN they could maintain the consistency in the application of tools between themselves, reinforcing the change in their behaviour for the children.

We all need to be singing from the same sheet.

The fact that the intervention activated a shared understanding between the family (parents, siblings, focus children) was a positive for the parents, as they felt that their interactions had a shared meaning and structure for all members. The PACTWIN rule tool was identified as a tool that enabled this mechanism.

The good thing was, when they were talking to us, the adults… they were also talking to the children about the same thing… when they came back they wanted to talk about what they'd learnt and obviously ask us questions and we could ask them and they were quite happy to along with it, and then try it at home to see if it worked.

However parents felt that the consistency in the PACTWIN application was jeopardised at times, as school staff were unable to maintain the same message.

As a parent I would really build up my son to get him into school… then they'd be one teacher that would say something… Just ruin the day… he's like why do I bother coming to school.

The quote below asserts that even maintenance of one PACTWIN tool could assist in the consistent delivery of PACTWIN.

You do it at home… it's got to be reinforced at school because they spend the majority of their time there, even if they (school staff) only learn descriptive praise…

One parent in fact described how she informed her child's learning support assistant (LSA) to use a PACTWIN tool (rules and reminders) and how this collaborative work was fruitful. Despite this need to consistently apply PACTWIN tools in schools, parents did have fears. Consequently the potential delivery of PACTWIN in schools needs to be applied tactfully to ensure inclusion rather exclusion.

4. Empowerment

This theme reinforces the efficacy of PACTWIN for the children and the parents, by outlining the changes PACTWIN facilitated. Consequently, it consists of two sub-themes which are: *changes in parents* and *changes in the focus children.*

Changes in parents

All of the participants describe how PACTWIN made them assess, identify and change their behaviour when interacting with their children and how this led to evident changes in the family's behaviour overall. Parents describe how this made them feel empowered as they knew that simple changes in their behaviour led to vast differences in the family's behaviour.

She's better, her paddies are less frequent and she is better when she's warned… I feel that we as parents have gained more out of it, to learn to be a bit more calm …you realise that if I scream and shout, then she is going to get worse, which she does and now where I'm calm, she stays calmer.

The parents also describe how PACTWIN has built a flexible toolbox for them to use; utilising different tools at various times when needed. The quote below also shows how they are confident in their ability to select and change tools, as and when required.

Some of them worked… we've changed different things and we can always revert back to it if it doesn't always work… were all happy about that… it's definitely built a framework for those coping skills.

Consequently the parents seem to be more confident in their parenting skills and their interactions within their family. This was also validated from the thematic analysis conducted on the textual responses of Parents Feedback on PACTWIN Questionnaire (appendix 5) and the quantitative results obtained from the SOUL record Parenting Questionnaire (appendix 1).

<u>Changes in the focus children</u>

Parents reported a range of changes in the focus children. The quote below exemplifies how a parent retrieved good feedback about their child from school regarding their child's academic progress; both during and after the PACTWIN intervention.

It's helped my youngest boy… he's gone up a grade in school, he's won some awards at school, so I think it's had a big effect on him to be honest with you.

Parents also reported that their children had enhanced communication skills compared to pre-PACTWIN, as they found that the focus children were conversing more within the family, and at school.

Furthermore the quote below reflects how self-esteem had increased in the children, and how this led to changes in concentration and confidence levels. Hence PACTWIN appears to influence these parameters in a positive manner.

They do come out very much better in themselves and think more highly of themselves.

Social skills were also reportedly modified due to the intervention, and this change was identified by both the parents and the reports from school staff. The following quote below, exemplifies how modified social interactions were evident, even in non-PACTWIN contexts, and how mixing with the other children was useful to enhance, and perpetuate this skill.

After PACTWIN had finished I spoke to the teacher… she was saying that her (focus child) interaction was much better, she seems much happier at break time. She has new friends and she enjoyed school so it's definitely a positive effect of PACTWIN.

Furthermore the children's disruptive behaviour had reduced as the children were calmer as a result of PACTWIN.

My daughter's outbursts are much more isolated now, before they were quite continuous, but she does calm down much quicker now than what she did before PACTWIN.

5. Tools

This theme explores the efficacy of the various PACTWIN tools, and justifications the parents stated. The sub-themes are: *reflective tools, rules, massage, self-esteem lecture,* and *practical sharing tasks.*

Reflective tools

The parents were able to identify specific PACTWIN tools that assisted themselves or their children. Specific examples have been provided and discussed.

Parents found reflective tools to be most effective for themselves, as it made them identify how their behaviour led to certain actions/responses in people around them. Consequently parents felt enabled to modify their behaviour as a result of the reflective tools. Thus, the parents wanted to use the evaluation measures, to reflect on their progress, to compare their pre-PACTWIN and post-PACTWIN measures, to guide their efforts for future development.

A good thing would be to once you've filled in your second one (post evaluation form), get given back your first one… you can see the then the difference.

The reflective journal was identified as a tool that really assisted this reflection process in the parents, as well as providing tips and prompts which acted as reminders for alternative tools they could use, accompanied by the action plan which helped to plan the use of these tools and strategies.

It gives you different tips and techniques… you could tick on whether you shouted today…which then reminded you to use descriptive praise. That's what I found was good… that you were prompted and reminded with homework, just the reflectiveness of it. That's why the journals were fantastic

Some parents found the journal to be so useful, that they wanted extra pages that they could use during the holiday periods. One parent stated that she would like a weekly summary sheet to be incorporated into the journal, to permit a weekly reflection; assisting in the identification of any incidents that occurred and how they dealt with them. Thus, blank templates of the journal pages were suggested, so parents' could make their own copies, to use when and often how they like. These suggestions were extracted from the thematic analysis conducted on the Parent Journal Feedback (appendix 6).

Rules

The rules and consequences were favoured by the majority of the parents as they were successfully implemented with positive outcomes. Additionally all of the family members were taught how to apply the rules, which meant that the practical application in the family was understood by all, as well as maintaining a consistent message (as previously discussed in the consistency theme).

Massage

Massage was also identified as a useful tool for both the children and the parents as they enjoyed it, and it aided their future interactions.

I liked the massage they taught you different massages which the kids liked to do.

We massage each other a few nights a week.

Self-esteem lecture

A few of the parents identified the self-esteem lecture delivered by Dr Puvanendran to be effective due to the content, and that it was delivered by him. They valued his commitment to them and their needs. Those parents that had had the lecture suggested that timing was crucial; as too early on in the course they may have not found it as effective. Consequently they suggested that it should be delivered in week two or three of the intervention.

However as some parents did not have this session they requested that they would like to have an opportunity to attend a future session. Hence all of the parents recommended the self-esteem lecture for future PACTWIN cohorts.

Self-esteem by Dr Puva… that was really, really interesting…it actually gives you a bit more morale… it cements the course a bit more.

Practical Sharing Tasks

Parents described how the children enjoyed the toast and how they were able to see that children had successfully learnt the objective of this simple but effective task; as children were demonstrating sharing skills in a range of contexts.

He was allowed to bring his chocolate spread or his jam… and they had to share it, which then taught him sharing, taking it in turns and forming a line…

2. 7b PACTWIN Facilitators

Overall three subordinate themes were identified within the data set generated from the focus group conducted with the PACTWIN facilitators. The subordinate themes and sub-themes are summarised in table 5. Each of the themes have been evidenced and explored in detail.

Table 5 – Summary table of subordinate themes and sub-themes for the PACTWIN facilitators qualitative data set.

Super-ordinate Themes	Sub-ordinate themes
1. Resource Management	Co-facilitation
	Base
	Planning
	Project co-ordination
	Time management
2. Structure	Tailoring
	Training
	Materials and tools
	Collaboration
	Evaluation
3. Empowerment	Parents
	Facilitators
	Family cohesion
	Children

1. Resource Management

Resource management was a re-emerging theme that constantly appeared in the data set. This theme explores some of the barriers the facilitators faced in PACTWIN delivery, and their suggestions for overcoming these barriers in future PACTWIN delivery. Five sub-themes were identified: *co-facilitation, base, planning, project co-ordination,* and *time management.*

Co–facilitation

The quote below illustrates how the current structure is successful due to co-facilitation per PACTWIN strand (parents, siblings, and focus children).

The actual structure, as it stands I think is potentially going to be very successful, coz we work as a team of six, having two trained facilitators for each group, that works really well.

This was further justified by a participant's explanation of how co-facilitation allows the co-facilitators to designate their time accordingly, when a group has a child with more complex needs, and who needs more attention.

Additionally, it was emphasised that the skills and knowledge of the individual co-facilitators should be carefully assessed and allocated between the various strands. To ensure they can deal with disruptive/challenging behaviour, which can affect the delivery of the session for the other children; potentially confounding the efficacy of PACTWIN for those sub-groups.

Base

This sub-theme was referenced by the facilitators several times in the data set. The quote below describes the typical routine the facilitators have per PACTWIN session. It portrays how they often struggled to manage the routine activities within the time allocated, and how not having a secure/permanent base caused difficulties.

Our time is from 6.30pm to 8.00pm - we get there by 6.00pm. We get out the tea, coffee-making facilities… eventually they (service users) get taken off to the different groups. We try to finish up as near to 8.00pm but then, at 8.00pm we're washing up putting classrooms back, because the next day the classrooms… need to be taught in.

The current location hindered the desired delivery of sessions, as some parents found the school setting daunting, whereas the open and formal layout of a library did not provide the privacy or nurturing environment, required by the individual strands to focus on the specific PACTWIN activities.

Consequently a permanent base with three rooms to run each group, adequate storage, and outdoor space would enable the facilitators to run the PACTWIN sessions effectively and efficiently. Facilitators did communicate that they currently had a part-time base with three rooms and storage, but where anxious as they did not know how long they would have this facility.

A central area that we all went to… A dedicated centre that you weren't going to have to pack away and pack up. A base with three adjoining rooms… and outdoor space.

Planning

Facilitators expressed that they desired planning time desperately, as it would allow the session structures per week to follow on more consistently, as each session was different for each strand, due to the various differences that emerged in the service users needs. Some facilitators actually felt that this much needed preparation time, would allow the PACTWIN programme to be delivered in an effective manner, more so for the children's groups; which requires some improving, despite its success.

We need us getting together and planning what we're going to do, so we're all doing the same thing and knowing what we're doing, as opposed to just coming in and seeing how it goes…

Planning time between the various strand co-facilitators would be useful as the facilitator describes in the following quote. Verification between the parent co-facilitators, and the children facilitators would enable tailoring for those families who may be struggling in some aspects (i.e. as a focus child may benefit from a tool the parents may need more practice with, etc).

Some communication with the people working with the children, with the parents… a bit of a switch over at coffee time…with a little bit of sharing of what is coming from the children.

Project co-ordination

Facilitators valued the support of the project co-ordinator, and felt that the project co-ordinator's role could be expanded (as described below) to aid their delivery of the PACTWIN sessions. Furthermore, it was suggested that frequent meetings between the project co-ordinator, and the facilitators would increase awareness about the progress of the family units attending, which could allow allocation of additional support to the families if and when identified by the facilitators.

The beauty of having a full-time coordinator - she can actually have it really planned in detail, all the resources ready… everybody has that 15 minutes meeting with her before… they've got the detail of the programme the week before so you know what you're going in to do with the children.

Time management

Facilitators felt that they currently could not offer the service they wanted to, as they were not full-time staff. They felt that full-time facilitator positions would permit PACTWIN to function more effectively.

If we get the right infrastructure, the right quality of staff, the…you know full-time staff…this could be fantastic!

Facilitators often had full-time jobs during week, alongside their PACTWIN roles. In some instances where staff numbers were low, some facilitators often had to work two PACTWIN sessions per week, in the evenings. Hence the facilitators felt that PACTWIN was having a unexpected impact on their time, and existing commitments.

In fact, the majority of the facilitators were required to work in non-PACTWIN hours, as some parents wanted to speak to the facilitators after the session had finished.

If a parent wanted to speak to the facilitator… it was probably getting on for 8.15/8.30…so where, maybe, a coordinator could then make arrangements to see this parent at their home…

Whereas some parents required more one-to-one meetings, for facilitators to really gage how they were progressing, and to be able to help appropriately where the needs were more complex.

You did need to have quite a detailed talk to the parents and unpick things, to really get a fuller picture.

Home-visits were identified as a supplementary tool, which would allow greater time to be allocated for this process, as well as providing the opportunity for PACTWIN to be given to those families that cannot attend the sessions. Thus facilitators felt that this service could not be delivered currently, as more full-time staff would be needed. They felt powerless to provide PACTWIN effectively, in those cases where non-PACTWIN hours were required.

We don't get that opportunity…if those children are not at my school that I work in, I don't see them…in the home or in school… that's where full-time persons… a small team could do a lot of that extra work because just the group is not enough.

The participants claimed that the full-time facilitator positions would not only allow better PACTWIN delivery, it would also assist in eradicating some of the complexities that they were currently facing with pay. Furthermore, full-time staff would be able to work in the evenings during school-term times, and not have to worry about the consequences as the quote describes below.

My school's not going to allow me to take time off, cos' I've worked two hours Monday evening, I can't go in late Tuesday morning…

2. <u>Structure</u>

This theme has five sub-themes, which identify weaknesses and strengths in the PACTWIN programme. These sub-themes are: *tailoring, training, materials and tools, collaboration,* and *evaluation.*

<u>Tailoring</u>

The participants mentioned that the current PACTWIN structure was limited in its potential as the PACTWIN sessions were not age appropriate for the children, as there were children aged from five to fourteen years of age in the same group.

Facilitators disclosed that vast age variance was not only a factor that needed to be addressed; as PACTWIN was not for everybody, as some children benefited, whereas a small minority did not. One facilitator felt that the family's needs must be addressed before PACTWIN delivery to ensure it is appropriate for all the strands, and to provide additional support.

The families with the less complex issues…seem to succeed… The ones that have got more complex needs underneath, they're the ones who perhaps don't have so much success and need ongoing support and tracking.

The siblings group was identified specifically by the participants, as they had experienced great variance in the behavioural needs, and thought that an overall risk assessment of each family would help minimise this variance in the sibling groups, as well the other strands. As it would permit facilitator resources to be utilised well (i.e. allocate additional facilitators for the groups).

…we had real extremes in the sibling group. You had children in that group who should have been in the focus group!…you had the opposite end – very meek and quiet and looked as if they'd really been put upon for many years…it was really difficult to get that middle road when addressing the needs of the group…

Despite the need for modifications, the facilitators felt that the parent strand has been working well, and that this programme is still providing a service that caters for the family holistically, and children do seem to enjoy PACTWIN, and behavioural changes are evident in all three strands (evidenced in the empowerment theme).

I think we're getting there really with the parents, but I think the children there's a long way to go in the sense of making it <u>really</u> good.

<u>Training</u>

Facilitators understood the importance of training for the PACTWIN facilitators, and stated that all of the facilitators should be equipped with the knowledge they acquired through the PACTWIN training (including the theories and WhyTry principles). However they suggested that the training was extremely detailed. Hence efforts would be appreciated if it could be condensed in to a *bite-size* format, as it elicited unnecessary anxiety.

There was a lot to absorb… an awful lot of information to get your head round…

Despite this, it was communicated that the training could be modified to include extra topics, as add-ons to the current PACTWIN training content. Facilitators felt that they needed more training so to be more equipped in working with the various PACTWIN strands, and that on-the-job training would be apt for such training.

I totally enjoyed being with the focus children and I could probably go to the siblings but I wouldn't be able to go into the parenting because I haven't been trained… so to know the whole thing

The facilitators felt that being able to work and move around between the strands, would also permit tailoring to see how all the family members were being affected by PACTWIN. Providing greater insight for the facilitators on those families who needed more help.

They also wanted training on behavioural management, and basic restraint. For example, they felt that they needed to be more confident when confronted with challenging behaviour in a group. Suggestions for post training top-ups were recommended. As the facilitators were also WhyTry trained, and were given WhyTry top-up training sessions. Their comparative statements (as quoted below) assert their intention for PACTWIN top-up sessions to be offered.

We've had top-ups with WhyTry… which have been brilliant because it's through those reminders… It's kept you thinking… I'm going back and doing more and more…that should be the same with PACTWIN.

<u>Materials and tools</u>

Specific PACTWIN tools were identified by the facilitators that had been shown to be efficacious with the various PACTWIN strands. Consequently they stated that future PACTWIN cohorts should be given the same tools.

For example the children were fond of the toast, as they enjoyed sharing, and interacting with each other, through a medium they all enjoyed - food. In fact the thematic analysis of the Children's PACTWIN Questionnaire (appendix 3), revealed that the majority of the children enjoyed the tasks that involved food. Facilitators found these tasks to be successful in instilling the social skills, as the children showed increased sharing skills as PACTWIN progressed.

Furthermore the cartooning was found to be effective, especially for engaging with those children that had shown some early resistance. Therefore using fun activities such as drawing when delivering the PACTWIN principles (i.e. changing the labels) has been proven to be a suitable medium in engaging with the children, whilst permitting greater understanding in the ideology of the principles (i.e. being able to attribute new labels). This finding was consistent with the Children's PACTWIN Questionnaire (appendix 3), increasing validity for this factor.

Cartooning worked fantastic. One of the siblings did not engage each week but when he did the cartooning and when we talked about changing our labels… he did fantastic.

Whereas the facilitators identified that the reflective journal for the parents was an extremely good tool; thus were keen to develop to the journal as some parents had identified some modifications that would be useful (as outlined in the PACTWIN parents qualitative report). In fact the quote below shows how passionate the facilitators are in developing this tool, as it would be a big risk to not provide this modified tool to the future cohorts, as they have seen how efficacious it was for the PACTWIN parents so far.

We've got lots of ideas to improve it, you must get a really good journal in place…If we haven't got it ready, it is going to jeopardise PACTWIN and we mustn't lose the momentum!

Descriptive praise and rule setting were also found to be effective for all three strands, as the quotes below describe. As positive outcomes in the parents and children's behaviour were visible, reinforcing PACTWINs efficacy.

Having rules… actually setting up a sort of respectful relationship with the children and the parents it encourages a great deal of communication, and respectful communication, and acknowledging feelings and understanding each other's point of view.

Hence facilitators were keen to express their desire to work with the project co-ordinators to *'tweak'* PACTWIN, to provide additional tools that would help address some areas that are not yet covered. As well as develop an observation sheet for all three strands, which would act as a record of progress for the service users and the facilitators; permitting the identification of complex needs, for example, which could facilitate the allocation of additional support.

<u>Collaboration</u>

The facilitators communicated that the PACTWIN principles could be further reinforced by establishing partnerships with schools, so that the principles could be practiced in this setting, other than just at home or at the PACTWIN sessions. This would offer consistency in upholding elements of the PACTWIN tools, such as descriptive praise or implementation of the rules assigned[7].

Understanding boundaries and consequences… instilling that into them… that's going on at home as well… but not always at school.

[7] This further evidenced in the PACTWIN parents qualitative results section.

Evaluation

Facilitators felt that they did not have sufficient training on evaluation tools, and would have liked it to increase their confidence in using and evaluative tool. Despite this they did understand the purpose of measuring the impact of PACTWIN, and how the current measure (SOUL record) was not ideal, as the list of questions were not age-appropriate for the children.

We may need to look at a better evaluation but it's about being able to quantify it…and of course, with SOUL record you can. But I personally thought that the list of questions wasn't very good for children in primary school.

In addition they also felt that the pre and post measures were not as informative; as they were not sensitive to gage the impact of PACTWIN, as the measures could be confounded by the children's mood, which can be rather variable, for example. Hence an ongoing measure could be more apt in assessing the impact of PACTWIN.

Do a short one… continuous… take notes… that's all really important, not just leave it for the beginning and the end.

The facilitators suggested that the evaluation must use language and concepts that can be comprehended by the children. Using an interactive tool, would be ideal to engage with the children, as it would be visual, as well as auditory. However as PACTWIN does not have a secure base, an interactive tool would currently not be accessible for use, in the context it is currently delivered in.

How you'd do it with PACTWIN… it depends on the venue…they'd only have one computer and all that kind of stuff. That's why you need a dedicated centre!

Despite this, facilitators stated that simply using a colourful presentation format for the evaluation, and maybe presenting it in a game format, would encourage the children to be more involved. It was also recommended that the evaluation should include questions that could prompt for specific examples of how the children perceive their behaviour to have changed, and whether had smiled, and what led to that, etc. Some suggested that if the observation sheet could be developed as a tool for future cohorts, that could be included as part of the evaluation to assess the progress of the three strands.

It's all about making learning fun and making it accessible to children. They're not going to want to do something that looks boring. They're going to do something that is fun

3. Empowerment

This theme describes the facilitators' views on how PACTWIN led to positive outcomes across the various strands. Four sub-themes were identified for this theme, which are: *parents, facilitators, family cohesion* and *children.*

Parents

The parents appeared to become calmer as a result of PACTWIN. The facilitators reports disclosed during the focus group, were consistent with the parents self-reported changes in the focus group they took part in. Thus validating the changes identified by the facilitators in the parents, pre and post PACTWIN. As the quote below illustrates facilitators found that the parents no longer felt isolated, as they were able to develop a support network amongst the PACTWIN parent.

They think they're the only ones that have got this dysfunctional family and I think it's quite a relief when they come… and they see other families having similar difficulties to them… they don't feel so alone and isolated.

Facilitators were able to see how the parents felt empowered, as they had a new support network and a selection of tools that they could take with them and implement with ease within their families, with positive outcomes.

Facilitators

Facilitators felt empowered as they were able to confidently, and effectively deal with challenging scenarios they faced during PACTWIN sessions, as described in the quote below. Highlighting how PACTWIN facilitation has impacted them, as individuals and as facilitators.

One parent that came on the first evening wouldn't even join the group…by the end of the course she was able to join in with discussions, that for us was a huge achievement for us and for her…

However facilitators did feel that they needed to be acknowledged by senior management, as they often offered more time to PACTWIN that was not initially agreed, and have had to work in difficult conditions, often having to improvise with the venue and lack of resources given, etc.

Other than the total dedication and commitment of the staff from the time go and given a lot of their, without exception, a lot of their own time…I don't think that is realised actually…

Family cohesion

The facilitators all felt that PACTWIN was successful in creating family cohesion, and improving the interactions between all of the family members. As stated below, PACTWIN was able to bestow tools, assisting resolution between family members, leading to a more supportive family dynamic.

A child that came to the group made a choice to go back and live with Mum… through PACTWIN. They're actually going to start a family unit again through both of them attending the group.

However the facilitators' recognised that this was only possible as the intervention was holistic in its approach, working on all levels of the family to provide some sort of increased understanding and unity, which led to increased positive well-being.

Massage was one mechanism that led to increased interaction, whilst adding meaning for the parents and children, compared to the routine daily interactions that they were used to, as this was framed differently.

The massage is very important as well. Quite often, just the touching's not done…they thoroughly enjoyed it, parents and children…

PACTWIN was deemed advantageous as it did not place emphasis on just the focus child. Hence facilitators felt that all of the family members learnt something, and reflected on themselves permitting future growth. Accordingly the siblings felt that they had focus, which often is not the case in such instances, depending on the need of the focus child. Facilitators deemed the consistent retention of all three strands for the past cohorts, as testament to the usefulness of PACTWIN.

Because I think the thread running through the whole thing… meant that just because they weren't the focus person… they weren't going to go under the radar.

Children

The participants were extremely confident that they had seen significant changes in all of the children attending PACTWIN. For example despite some children being resistant to initially attending the programme, as it progressed they all had engaged, and were unhappy when the programme finished. Additionally, in terms of behavioural changes the quote below describes how at least half the children had increased confidence, self-esteem and manners. This was further stressed, as the children demonstrated increased listening skills during PACTWIN sessions.

There was a considerable change…50% of the children if not higher…
Yeah we saw a change in the group, their confidence… self-esteem, manners…

Precise examples were given of other instances where the children's behaviour had shown adjustment academically and socially, as portrayed in the quote below. The fact this child had been excluded from a social sport (football), and had progressed so well, that he was able to partake, asserts the effectiveness of the PACTWIN model.

His reading level had gone up two slots - he's actually improved academically…
he'd been excluded from football and now he was attending football regularly
The change has been phenomenal in the children…

2.8 PACTWIN Service Recommendations

Structure

- The holistic approach of the service is crucial, as this evaluation has emphasised changes in the parenting skills tend to translate into behavioural changes in the children (i.e. reduction in over activity, and impulsivity, non-compliance, and aggression).

- It is important to develop partnerships with schools to raise awareness of PACTWIN and the range of behavioural needs the family and the focus

child have, so that school staff can identify such problems, efficiently and provide effective help. Highlighting the need for collaborative work.

- As support was influential for all three PACTWIN strands, it would be ideal to provide monthly top-up sessions, to reinforce PACTWIN maintenance, whilst offering a medium of support for both parents and the children. Whereas alternative support mediums (i.e. an online forum, drop in centre or telephone support) would also be useful for parents with more complex needs.

- The programme is currently functioning well for the parent strand. However efforts are required to tailor the programme for the two children strands, as the results revealed vast age variances and behavioural needs, especially in the sibling strand. Hence completion of a risk assessment for each family, in the early stages of the intervention, and an ongoing observation sheet per session could facilitate tailoring (i.e. allocation of age appropriate tasks).

- It would be ideal to offer additional sessions in the PACTWIN programme. For example where experienced PACTWIN service users could attend in weeks 1 or 2, to act as mentors; and potentially assist in minimising any initial anxiety in new service users. As well as providing an educational session for friends and family members to attend, in order to raise their awareness on the needs of the family, and how they could assist in ensuring consistency of PACTWIN.

- In addition it would be important to incorporate the self-esteem lecture, delivered by Dr Puva into the PACTWIN syllabus; ideally in weeks 3 or 4 in the session outline, as it was found to be very useful for the parents.

Tools

- The interactive tools/tasks incorporated into PACTWIN were extremely useful in engaging with children. Thus efforts should be made to ensure that theoretical principles are taught and delivered in an interactive way, as currently completed for the toast task (promotes sharing), making the shields (defence mechanisms), cartooning, etc.

- PACTWIN should continue to build on the rules principle. As both the quantitative results (obtained from the children), and the qualitative results (obtained from the parents and facilitators), have verified it to be a highly effective tool, in developing better parent-child interactions, creating greater understanding in the families.

- The reflective journal was instrumental in PACTWIN being successful for the parent strand, as the qualitative feedback exemplified from the Parent Journal Feedback (appendix 6), and the parent focus group results. Hence the priority for further development of this tool must be acknowledged (i.e. template sheets, weekly reflection sheets, etc), as without this tool the parents disclosed that they would not have been able to reflect on their family dynamics, and their parental behaviour

efficiently, which could have hindered the practical implementation of the PACTWIN principles.

- It would also be apt to use the facilitators as key developers in designing the new journal as they have valuable insight on what tools to include, or not.

- Massage was identified as an effective tool by the parents and the facilitators, as it assisted in enhancing the parent-child interactions, as well providing a kinaesthetic medium to facilitate engagement between parent and child.

Resource management

- It would be imperative to secure a PACTWIN base, with three adjoining rooms, outdoor space and suitable storage to ensure that the three strands can run as intended, providing the necessary privacy to facilitate disclosure, and better resource management.
- Facilitators currently tend to have full-time jobs, and cannot provide greater time allocation to PACTWIN as it requires. Hence it would be ideal to invest in a team of full-time PACTWIN staff, so that they could cater for those families that require home-visits, etc. This would also allow facilitators to allocate time for pre-session planning which was desperately needed, to enable tailoring.

- It was evident that the parents and facilitators recognised the need for consistent PACTWIN maintenance and delivery. Hence it would be advisable to use partnerships with schools to permit greater PACTWIN collaboration, so that learning support assistants (LSAs) have greater awareness of PACTWIN children and some PACTWIN tools to permit consistency for the child (i.e. use of rules, descriptive praise, etc).

Training

- It would be ideal to provide *bite-size* training, as the material was too vast to learn efficiently. It is imperative that top-up sessions are offered to facilitators, as provided for WhyTry, as it would act as a reminder for PACTWIN tools, in a condensed format.

- Additional topics on behavioural management should be included in the training, as the facilitators felt that they needed more training on how to deal with challenging situations and basic restraint management.

- On-the-job training should be used to provide facilitators with the varied skill-set to work with all three PACTWIN strands. As facilitators felt that they could gain more insight on the family dynamics, by moving around the various PACTWIN strands, which they could not currently achieve when just working with one strand.

Evaluation

- As evidenced by this evaluation, it is important to utilize multiple informants in the assessment of the intervention, as it provides greater content and contextual validity, by allowing the identification of those measures which are of greatest importance to the families, such as adaptive measures:

    - ◊ The completion of tasks and daily living,
    - ◊ Participation in social and recreational activities,
    - ◊ Social relationships with siblings and parents.

- It would be worthwhile to use another set of measures to assess the interventions impact, as the questions for the children were not suitable, and the children struggled to engage with the evaluation process. For example children could be asked to evidence examples of change (i.e. are things calmer at home? If so how…, etc) to provide a more ecological insight.

- However, it is vital to ensure that any alternative evaluation measures are colourful and interactive; to maximise potential engagement from the children.
- Furthermore case notes should be used by facilitators to track each child's progress, which would facilitate better tailoring, the identification of complex needs, etc. As well as offering an ecological measure, with higher reliability compared to the just pre and post measures which can be confounded by uncontrollable factors. A weekly observational sheet for each strand may also be useful.

- Alternatively a Parenting Stress Index could be used to assess how PACTWIN affects coping skills in parents. As parents who felt they had more control over their child's behaviour, reported lower scores on the parenting stress index.

- It is imperative that future PACTWIN evaluations should include the following measures listed below; and that agreements are made between schools to provide such data for the children attending PACTWIN at the times stipulated.

    - ◊ Attendance rates 3 months pre and post intervention, and reasons for absence.
    - ◊ Fixed term exclusion rates 3 months pre and post intervention
    - ◊ Number of disciplinary actions for the student/s undergoing the interventions for 3 months pre and post intervention
    - ◊ Drop out rates for the programme – Students who dropped out and/or students excluded from the programme, and the justifications for this.
    - ◊ SEN status for the focus child.

Marketing and Referral Pathways

- Greater efforts should be made to raise PACTWIN awareness amongst key stakeholders (i.e. potential service users, school staff, health care professionals, etc), so that people can access the service readily, as some service users did not know that the service existed.

- Leaflets were deemed as a suitable medium to raise awareness in potential service users. However attention to the wording and content is of great importance, as the parents suggested that the support element should be emphasised, more so than parenting training element.

3.0 WhyTry

3.1 Overview

The WhyTry Program is a strength-based approach, which aims to help youth overcome their challenges and improve outcomes in the areas of truancy, behaviour, and academics. It is based on solution focused brief therapy, social and emotional intelligence, and multi-sensory learning. The aims are to teach social and emotional principles to youth in a medium that promotes engagement, increasing understanding and recall. This is accomplished by using a series of visual analogies, which address a set of principles, such as resisting peer-pressure, obeying rules, and behavioural consequences. Each visual is accompanied by music and practical tasks that promote the multi-sensory approach of WhyTry, by using the major learning styles: visual, auditory, and kinaesthetic. WhyTry has reduced truancy, improved academics, and changed the climate of schools throughout the United States, in a variety of contexts.

This intervention has been used in South West Essex, in the United Kingdom, with children/adolescents/teenagers with one or more of the following problems: learning difficulties, behavioural problems, poor social skills, developmental delay, low self esteem, family and social problems. Currently 336 children (241 boys and 95 girls) have completed WhyTry. This was delivered in 50 groups and 45 one-to-one sessions. Projections for the forthcoming academic term show that a further 270 children will access the programme, bringing the total to 606 service users in South West Essex. Children are currently referred to the programme by school staff, as WhyTry is delivered during school time, and in the school setting.

3.2 Evidence for school based interventions

Empirical studies have found school based interventions to be most advantageous in increasing psychological and physical well-being. Felner et al (1993) reported that such interventions which focused on developing supportive social interactions with peers and teachers, proved to be more effective in adjustment to school change and academic performance, compared to those interventions that just focused on coping and problem solving. Whereas a meta-analysis conducted on studies which had evaluated school based interventions for children with ADHD, found school-based interventions to be clearly effective in reducing ADHD-related behaviours; whilst emphasising the importance for such interventions to provide consistent, ongoing support to maintain the positive effects of a chosen intervention (DuPaul and Eckert, 1997). Thus school based interventions provide a supplementary tool to preventative healthcare intervention, with the potential to promote well-being.

3.3 Aims of service evaluation for WhyTry

- Assess the impact of WhyTry on the children by utilising both a quantitative and qualitative methodology.
- Evaluate whether WhyTry was successful in adapting children's behavioural outcomes (i.e. anger, self-esteem, hope, and school bonding and commitment levels) and what tools may have assisted, if any.
- Provide evidence based recommendations for future WhyTry interventions in South West Essex.

3.4 Quantitative methodology

As numeric measures were utilised as apparatus to assess the impact of WhyTry a quantitative methodology was utilised to statistically compare the scores obtained pre and post intervention. As several scales were used, a summary of the measures utilised is provided below.

3.4a Summary of Evaluation Measures

Four measures were used to evaluate whether the intervention led to any changes in anger, self-esteem, hope, and school bonding and commitment levels.

The *Prevention Planning Survey* (appendix 7) was used as a measure to assess anger levels in the service users. It is a 12 question self-report questionnaire on respondents' experience and management of anger *(i.e. When I get angry I slam doors/ I make sarcastic remarks / etc)*.

The *Children's Hope Scale* (appendix 8) was used as a measure of hope and positive thinking (Snyder et al, 1997). This is a 6 item self-report questionnaire assessing children's (ages 8–19) dispositional hope. The measure assesses two components of hope: agency (ability to initiate and sustain action towards goals) and pathways (capacity to find a means to carry out goals), as well as assessing problem solving, decision-making abilities, and self-attributions.

Self-esteem was measured by the *Rosenberg Self-esteem Scale* (appendix 9). It is a 10 item self reported questionnaire that assesses self-esteem *(i.e. I am able to do things as well as most other people; I do not have much to be proud of; I take a positive attitude toward myself, etc).* This tool has high validity, and has been found to be effective for assessing self-esteem in adolescents.

The *Student Survey of Risk and Protective Factors – School Bonding/Commitment* (appendix 10), was used to assess school bonding/commitment, in terms of school attendance and engagement with school activities. The self-reported questionnaire has nine items *(i.e. how often do you feel that the school work you are assigned is meaningful and important; how interesting are most of your courses to you; during the LAST FOUR WEEKS,... how many whole days have you missed because you skipped or cut, etc).* This tool has high validity, and has been found to be effective for assessing this construct in adolescents.

3.5 Quantitative Results

Twenty-seven paired responses for WhyTry service users were analysed. *t*-tests were conducted on the pre and post means generated for each of the four measures used to assess anger, self-esteem, hope, and school bonding and commitment levels.

The analysis revealed that for self-esteem, hope, and school bonding and commitment levels there were increases in the means from the pre measures and post measures, and a reduction in anger levels. However not all of these were statistically significant, as summarised in table 6. There was a statistically significant increase in the in self-esteem ($p<0.05$). Thus the quantitative results revealed that WhyTry has led to significant changes in self-esteem in the service users.

Table 6 – Summary table for WhyTry quantitative results

Measure	Pre mean	Post mean	Significance (p<.05)
Anger	2.3	2.2	N
Hope	20.1	23.2	N
Self-esteem	**2.5**	**2.8**	**Y**
School bonding and commitment	3.67	3.72	N

3.6 Qualitative Methodology

To obtain greater depth for the service evaluation, a qualitative methodology was adopted. Therefore one focus group was carried out with the WhyTry facilitators, to obtain their feedback on WhyTry as a service, and whether WhyTry has affected the service users in their anger, self-esteem, hope, and school bonding and commitment levels.

The focus group lasted approximately 1 hour and consisted of 4 people. A letter of invitation was distributed to the WhyTry facilitators. Those individuals that accepted the invitation then took part in the focus group.

Consent and information sheets were provided to participants before they took part in the focus group. At the end of the focus group participants were given a debriefing form that consisted of information on the purpose of this evaluation, and contact details of investigator.

The focus-group was voice recorded and transcribed. The data obtained from the focus group was subjected to thematic analysis.

Thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data. It minimally organizes and describes a data set in rich detail. Some of the advantages of this analysis method are listed as follows:

- Flexibility
- Relatively easy and quick method to do
- Results are generally accessible to educated general public
- Useful method for working with participants as collaborators
- Can usefully summarize key features of a large body of data, and/or offer a 'thick description' of the data set
- Can generate unanticipated insights
- Allows for social as well as psychological interpretations of data
- Can be useful for producing qualitative analyses suited to informing policy development

The transcript was analysed and reoccurring themes were identified. The themes were categorised as subordinate themes and then sub-themes. The methodology employed had high validity as similar themes were identified by myself and another trainee Health Psychologist.

3.7 Qualitative Results

3.7a Results for WhyTry Facilitators

Three themes were identified within the data set retrieved from the focus group conducted with the WhyTry facilitators. The subordinate themes and sub-themes are summarised in table 7.

Table 7 – Summary table of subordinate themes and sub-themes for the WhyTry facilitators qualitative data set.

Super-ordinate Themes	Sub-ordinate themes
1. Structure	Applicability
	Evaluation
	Resources
2. Collaboration	Facilitator support group
	Partnerships
	Raise awareness
3. Mechanism for change	Changes in children
	Reality ride
	Defence mechanisms and hurdles
	Inclusion

1. Structure

It became evident that the structure of WhyTry was positively received as the quote indicates below.

I thought it was absolutely brilliant.

This statement was justified by facilitators' reviews of WhyTry, and it's applicability for the service users. The three sub-themes identified for this theme are: *applicability, evaluation,* and *resources.* Each sub-theme is discussed below.

Applicability

Overall the facilitators felt that WhyTry was a successful instrument to use, as it was not rigid in its applicability. They felt confident to select the tools which were deemed suitable for the children. Therefore its flexibility was appealing for the facilitators, which made them more accepting of the intervention, and motivated to use it.

It is not dogmatic, rigid and inflexible. Whatever you need at that time, you bring in what you need as you go along…

They also believed that WhyTry was a tailored package that was appropriate for all ages and behavioural needs. Hence they gave WhyTry glowing reviews, as they could use the materials with ease and confidence.

It's fantastic, it's relevant, it hits all the right spots and you can adapt it to the different age groups of the children.

Consequently the facilitators thought WhyTry was suitable for all school children, not just those children with behavioural problems; as its principles were deemed transferable to all the children, as they tend to experience the same emotional and behavioural response as described in WhyTry *reality-ride* ideology, despite variation in the stimulus.

Hence facilitators felt that WhyTry could be used effectively across the school populations, which could assist in developing consistency for the children. In fact, two facilitators had evidenced this suggestion. As they had incorporated WhyTry into a summer school programme for children without behavioural difficulties, and reported a positive result; asserting the applicability and transferability of the WhyTry materials.

Every single child has those issues at some point or another…every single person actually…we could actually identify…I remember when I down the slippery slope! We did summer school and we did an introduction into WhyTry for all respective year sixes that were coming up…It was really successful.

Not only was WhyTry applicable for all ages, the facilitators recommended that it should be used transitionally, from primary school (the basic WhyTry principles), leading into secondary school.

There's enough materials in WhyTry for the children to develop the principles in primary school from the age eight… when they're in secondary school then there can be just a little bit more of a sophisticated approach to building on it, rather than just be 10 weeks and finish…it's actually a way of thinking…it's problem solving, it's strategies, its life skills…

The WhyTry materials were also found to be efficacious as the tools were able to gage the children's attention, as they were interactive and fun, due to it's multi-sensory approach. Therefore the mediums utilised for the WhyTry materials are highly effective, in warranting the engagement with the tasks and WhyTry principles.

They were interested and motivated by the activities so they did tend to concentrate… you were able to engage them…quicker and for longer than you would do with other things…

<u>Evaluation</u>

Despite the efficacy of the WhyTry materials, the facilitators did not find the evaluation tools fitting for the target population, and for assessing the desired outcome measures (self-esteem, school bonding and commitment, anger and hope levels). They sensed the children's lack of comprehension in response to the questions posed, as the children found the evaluation confusing and some of the questions to be repetitive. Facilitators described how the children were resistant to the evaluation, and did not want to complete it.

I do find a lot of the questions; the children don't seem to understand.

Facilitators felt that the measures were not effective in ascertaining whether there had been changes in the outcomes being evaluated (self-esteem, hope, school bonding and commitment, and anger levels), as they had seen distinct changes in the children (referenced in detail in the mechanisms for change

theme), that the measures were unable to identify and address. Thus a tracking log for each child was deemed as a more ecological measure.

Suggestions were also made to re-design the evaluation. Such as asking the children to self-report instances where they felt they were more confident, happy, etc. They also wanted the evaluation to be more child-friendly, by using language they can understand, and using more fun and interactive mediums (i.e. colourful, a game format), as utilised in the WhyTry material; to ensure that the children will be engaged with the evaluation.

Bring self-esteem down into words they understand
What made you feel good today? Did you do anything that made you feel good? Did you smile today in school…even bringing it down to that… did you have a happy day…

Resources

The WhyTry resources were favoured by the facilitators, as the quotes below assert. The interactive tools were preferred as they could be used when needed, ensuring the children's engagement. The facilitators felt that they had a *ready made toolbox* that they could utilise efficiently.

You had CDs you had music…in terms of the teaching resource it was brilliant - it had everything…posters…

The training was judged to be extremely successful as the facilitator's quote highlights below. This facilitated an increased uptake and usage of WhyTry in the facilitators. The training top-ups were extremely appreciated by the facilitators as they acted as reminders, whilst assisting in enhancing their knowledge base. Hence the WhyTry programme was well received by the facilitators.

I've been on masses of courses over the years - and it was one of the very few courses that I've been on that you came away and thought, wow! I haven't been given things like that…I thought it was excellent.

Although the training and resources were deemed as advantageous, the facilitators wanted planning time, in order to plan their sessions further, when they had varied needs in the groups, or topics that they felt less confident with (i.e. some of the metaphors).

It's a brilliant training; however you've still got to do lots of preparation and learning with the materials…and that takes time.

2. Collaboration

This theme describes the need for greater collaborative work, to ensure greater awareness and acceptance of WhyTry. Three sub-themes were identified for the collaboration theme: *facilitator support group, partnerships,* and *raise awareness.*

Facilitator support group

The participants described how they felt supported as the facilitators had developed a support network, as there was a high number of WhyTry trained facilitators. Hence the facilitators felt that they could capitalise on an on-line support network, by simply emailing queries amongst each other; as they had done so in the past.

There are enough people to talk to and get support from.

Partnerships

Participants believed that WhyTry implementation could be assisted by developing partnerships across and within schools, which would encourage consistent WhyTry delivery. As increased school staff involvement could potentially lead to better WhyTry language and maintenance for the children. In the quote below the facilitator suggests that this added consistency, could possibly lead to more evident changes in the children.

If more WhyTry language could have been used I think we would have seen…significantly more concentrating and self-esteem…

The facilitators recognised that this could only be made possible, if the senior management in the schools facilitated this process, as they currently struggled to find an opportunity to use it within their current roles within the schools, due to limited WhyTry time-allocation in the schools. In fact, the quote below asserts just how crucial it is to develop partnerships with senior management for WhyTry, as it can permit increased acceptance and emphasis on WhyTry, within schools.

We did end up getting a senior member of staff to go on that training and he come away, absolutely… he opened the doors. He's done the training; it's more on board in our school.

As timing was identified as an instrumental factor, it was suggested that the inset days would be apt for training, and increasing WhyTry awareness. So staff would not feel guilty when spending work-time for the training. Hence, the inset day would provide a tool to facilitate greater WhyTry uptake.

Raise awareness

Facilitators acknowledged that awareness needs to be increased for WhyTry, and that senior members need to be involved in the training, so that the knowledge base can be developed, to foster potential WhyTry growth.

Senior members of staff need to be given more opportunity to get involved in it or, see what's going on because it did take us a long time to get if off the ground…

The dissemination of WhyTry literature would also help in engaging with key stakeholders, to increase their awareness of WhyTry and other referral pathways for interventions such as PACTWIN.

Given more spiel about what it's about, more documentation, more literature…

3. Mechanisms for change

This theme consists of four sub-themes, which highlight the efficacious tools that were identified by the facilitators. Each of the following sub-themes are discussed and evidenced below: *changes in children, reality ride, defence mechanisms and hurdles,* and *inclusion*.

Changes in Children

Facilitators were confident that WhyTry was an apt resource in increasing behavioural skills, such as goal setting, self-esteem, concentration, academic achievement and school attendance. These shall be evidenced and discussed in turn below.

All of the facilitators agreed that WhyTry had led to increased self-esteem in the majority of students. This was further validated from the statistically significant increase in the quantitative measure of self-esteem. The qualitative data was able to specifically identify the WhyTry label task as a key determinate of this increase in self-esteem, and how this increase enabled other outcomes to adjust.

A lot of these children…have got low self-esteem and… they're very sensitive to criticism because it immediately stirs up those feelings. A lot of these children don't access learning because of it and if you can increase their self-esteem and their self-worth, they're much more likely to access learning and to deal with the everyday challenges.

WhyTry facilitators were able to identify that increased concentration levels in the children were associated with increased academic achievement in some of the children. A specific example was evidenced by a facilitator, where a child on the WhyTry programme had shown correlated progress in his concentration levels, and his ability to complete larger amounts of work in his English class.

Additionally WhyTry led to increased attendance rates in the children, as they were keen to come into school, as they looked forward to the WhyTry sessions. This was a substantial alteration, as these children were often challenging, and hard to retain in such programmes. But as they enjoyed it so much, they were more dedicated and involved, and sad when the programme finished.

I think if there wasn't WhyTry, they probably wouldn't have been in school that afternoon!

Reality ride

This WhyTry tool was deemed as most effective for engaging and facilitating changes in the children. This example identified from the data set, exemplifies how it has helped this child significantly, as the child can self identify the early stages of a negative behavioural response. This is an empowering resource, as he can stop the perpetuation of this negative behavioural cycle.

He has been on WhyTry… he was such an aggressive young man…before we'd have to empty a classroom and leave him in it…because he was so aggressive. He is now still quite an aggressive little boy but he'd come over and say I'm on the red

ride…and he knows… He can identify that he's not where he should be…I'm on the grey ride now…no, I want to get back on the… and that's a huge thing!

As the ideology was transferable to other individuals, and the facilitators had recognised the potential for this tool, they suggested that the reality ride model should be placed in the children's planners, so that they can utilise it when needed, as it would act as a visual reminder. As well as increasing WhyTry understanding and application within schools.

Defence mechanisms and hurdles

These two tools led to reduced resistance in the children perceptions of their behaviour. The quote below highlights how increased self-awareness about their behaviour, led to increased confidence in themselves and their actions.

They didn't realise how they react to things, and that they can actually change that and make a difference…and change other people's perceptions of them…and I think that's been really good… that boosted their confidence… We also added elements of, the hurdles…

Inclusion

The facilitators valued that WhyTry focused on inclusion for these children rather than exclusion, as it placed emphasis on the children, and their positive well-being, whilst acknowledging the importance of social inclusion.

The number of children that are excluded or taken out of lessons…This is something constructive and positive to help that child to be valued, as an individual…to actually make some choices about how they behave or how they're supported… I think it's a great thing, but it would be lovely to see it in every school.

Therefore WhyTry was seen as an effective programme for the service users. However greater collaborative work is needed to ensure it is implemented to its full potential.

3.8 WhyTry Service Recommendations

Structure

- Overall, the WhyTry structure seems to be most advantageous, as the tools and resources are applicable for the current population it has been used for; which was facilitated by the multi-sensory approach of WhyTry, and the *ready-made toolbox* of resources.
- In addition the WhyTry ideologies (i.e. reality ride) are transferable to the wider population of children in South West Essex, as two facilitators demonstrated in a recent summer school programme. Thus, the wider implementation of WhyTry (i.e. inclusion of the reality ride visual in students planners), would not only benefit the wider population in South West Essex, it would also add more consistency to the WhyTry implementation; which is integral for such interventions, in order to maintain the positive effects for such programmes.
- The current WhyTry training material has been very effective, and the valuable training top-up sessions must be maintained, as this has encouraged increased WhyTry uptake and maintenance among facilitators.

Raise Awareness

- Efforts should be made to develop partnerships with school, to raise WhyTry awareness, which could encourage more commitment to WhyTry amongst staff. As some facilitators have experienced resistance to WhyTry implementation. Consequently these partnerships could aid greater time allocation for facilitators to complete WhyTry implementation and planning.
- Facilitators suggested that inset days should be used to deliver and disseminate information on WhyTry to raise awareness amongst school staff, to encourage greater commitment to the programme.

Evaluation

- Future WhyTry evaluations should include multiple informants, in order to provide greater content and contextual validity, as evidenced by the inclusion of facilitator feedback in this service evaluation. For example, the quantitative measures did not detect increases in all of the behavioural outcomes assessed, but the facilitator reports evidenced changes in these measures (i.e. concentration and school commitment).
- It would be worthwhile to use another set of measures to assess the interventions impact, as the questions are not suitable for the children, and the children struggled to engage with the evaluation process. For example children could be asked to evidence examples of 'where they felt more confident', etc; to provide a more ecological insight.
- However, it is vital to ensure that any alternative evaluation measures are colourful and interactive; to maximise potential engagement from the children.
- Furthermore case notes should be used by facilitators to track each child's progress, which would offer an ecological measure with higher reliability, compared to just the pre and post measures, which can be confounded by uncontrollable factors. A weekly observational sheet for each child may also be useful.

- It is imperative that future WhyTry evaluations should include the following measures listed below; and that agreements are maintained between schools to provide such data for the children attending WhyTry.

    - ◊ Attendance rates 3 months pre and post intervention, and reasons for absence.
    - ◊ Fixed term exclusion rates 3 months pre and post intervention
    - ◊ Number of disciplinary actions for the student/s undergoing the interventions for 3 months pre and post intervention
    - ◊ Drop out rates for the programme – Students who dropped out and/or students excluded from the programme, and the reasons for this.
    - ◊ SEN status for the focus child.

4.0 Conclusion

The service evaluations of PACTWIN and WhyTry have shown the strengths and weakness the interventions, and areas for action. Both interventions have shown that the service users developed enhanced behavioural and social skills. Hence interventions such as PACTWIN and WhyTry, provide a medium for preventative mental and physical health; which have the potential to elicit long-lasting beneficial effects on individuals and their families, such as better parent-child interactions (Huppert 2004).

However the need for greater planning in the evaluation tools selected to assess the efficacy of the interventions, is an area of extreme importance. For example the quantitative measures selected for both interventions were not ideal for the service users, as the questions were not relevant and the language was too complicated. Furthermore staff should be more proactive in the evaluation process, to ensure that all measures are collected (i.e. both pre and post), and that they are aware of how to calculate scores from the measures utilised. Therefore designing a suitable evaluation framework is of great importance for future PACTWIN and WhyTry evaluations.

REPORT APPENDICIES AVAILABLE UPON REQUEST

REQUEST FROM AUTHOR

AREA OF COMPETENCE: TEACHING AND TRAINING

TRAINING TOPIC: Introduction to Research Methods

SETTING: NHS South West Essex

TARGET GROUP: NHS South West Essex staff

DESCRIPTION OF WORK: To train staff on research methods and how various research methodologies can assist evidence based practice (i.e. evaluating health improvement interventions, patient satisfaction).

PLAN AND DESIGN TRAINING PROGRAMMES THAT ENABLE STUDENTS TO LEARN ABOUT PSYCHOLOGICAL KNOWLEDGE, SKILLS, AND PRACTICES

Clinical governance has become a means of assuring an efficient and effective health and social service for the population (McKenna, Cutliffe, & McKenna, 1999), and a key component of clinical governance is evidence based practice (Department of Health and Social Security, 1999). Consequently NHS service providers are increasingly being requested to illustrate evidence based practice in their work, whether it is in their service design or service evaluations. An understanding of quantitative and qualitative research methodologies can offer assistance in the comprehension of research papers, meta-analysis, and the design of service evaluations. As a major component of my role as a trainee health psychologist in the public health directorate was to conduct research and service evaluations, I was requested to design a training programme for NHS South West Essex staff (i.e. health improvement practitioners, service managers, nurses). The aim was to provide a basic overview of both quantitative and qualitative research methodologies, as issues regarding service evaluation design and research design were often an area for consulatation.

I designed a preliminary training plan (appendix 1), which addressed key topics such as defining a research question, factors researchers must consider, an overview of quantitative and qualitative methodologies, methods of analysis, and a list of key readings. This was sent to the Health Psychology Team Leader to ensure the teaching plan met her requirements. She expressed her approval with the content and structure and had requested the training to be delivered as a half-day session. However from past training experiences, I felt that this would be too optimistic as there was a lot of material to cover which would require more

time allocation. As a result I managed to negotiate that the training could be delivered as a full-day session which would be adequate to cover both quantitative and qualitative methodologies, and designed the training material (appendix 2). It was also agreed that it could act as a pilot training scheme, before offering it to all NHS South West Essex staff. Changes to the training plan were made over time, facilitating reflection and several reviews with fellow colleagues. Completion of the session outline was apt in organising the session structure and identifying areas where tasks would be optimal.

DELIVERING THE TRAINING PROGRAMME

I had selected and booked a suitable training venue based on the several requirements identified (i.e. room capacity, table and seating facilities, projector screen, flip-chart). I had printed the handouts in advance, to ensure trainees had their individual training packs (e.g. glossary, training slides, consent form template) (appendix 2) to use during and after the training as a form of reference. I arrived early to set up the slides and to ensure that my requests for the table layout and refreshments had been implemented highlighting the importance of time management and pre-planning.

The pilot session (version 1) was delivered to health improvement staff, as they often sought advice from the Health Psychology Team regarding service evaluation, designing questionnaires, and conducting qualitative research. Furthermore as the service managers had requested such training in the past, and due to the size of the team, they were selected as the pilot group. The teaching plan was successfully adhered to. The introductory section of the training (e.g. introduction – name, job role, past experience in research, and learning objective for the session?) was instrumental in how I pitched the training, as there was a vast spectrum of research experience amongst the trainees. Hence I was able to add more detail for those attendees who were undertaking postgraduate study and had requested particular coverage of how to design questionnaires; compared to those health improvement service co-ordinators who had limited research experience, but required more guidance on what outcomes measures to select for the service evaluation, for example.

I was aware that the majority the trainees probably were, or had faced pressure to complete evaluations or audits, and in some cases may have lacked the confidence in completing such projects. In my consultative role as a trainee health psychologist, specialising in designing and completing service evaluations and research, many of the clients I had worked with were often anxious regarding service evaluations, audits and research. Consequently I wanted to empower the trainees with confidence and a sound understanding of the various methodologies that are available to them. Hence I developed a glossary with the technical terminology defined in a non-jargon format (appendix 2 – hand-out 1), which I then used as a reference tool in the training session during the summary phases. Practical tasks were also used to illustrate theoretical principles in a fun and interactive manner (i.e. normal distribution based on shoe size, within design – maths test before and after break, and counterbalancing – changing the order of the maths test questions). The inclusion of various tasks accommodated for the various learning styles in the group (Honey & Mumford, 2000).

Staff were prompted to translate the acquired information into their own work projects. For example after the questionnaire design section, I requested individuals (i.e. with the specific learning objective for questionnaire design) to list their questions on the flip chart, which then the group critiqued in respect to wording, response format; once again putting theory into practice and prompting peer learning.

PLANNING AND IMPLEMENTING ASSESSMENT PROCEDURES FOR THE TRAINING PROGRAMME

The training did not entail any formal assessment, but mini assessments were administered during the training session to ascertain comprehension of the material. For instance, example studies were described and the group would be prompted to identify and justify the type of design used (see appendix 2 - presentation slides). Whereas some of the other tasks prompted the group as a whole to identify questions to include in a qualitative question list, for example. However to stimulate debate once I had listed the questions on the flipchart I then encouraged the group to critique the wording of the questions, as well as the order of questions stated. During the delivery of this task I was able to identify

changes in the groups' knowledge, which illustrated their comprehension and skill development in this area.

This form of assessment was a quick, efficient and cost effective medium, which suited the nature of the training and the assigned learning objectives. It also stimulated thought and interest to encourage further exploration into research for those undertaking postgraduate study or embarking on a research/ evaluations/ audits (appendix 3).

EVALUATE THE TRAINING PROGRAMME

Review of past evaluation forms I had used in previous teaching/training sessions prompted several revisions. Individuals were requested to rate various aspects of the training session on a 1-4 likert scale. As the learning objective was a central component of the workshop I included it into the evaluation for the audience to rate how well they thought the training session satisfied the learning aim, as well as retaining the existing options which assessed the content, structure, communication skills, etc. However as the inclusion of the open-ended questions proved to be most insightful in past evaluations, that section was retained.

Overall the evaluation exemplified that the sessions were deemed very positively (appendix 3). Attendees valued that the training shed more light on health psychology and the role of the health psychology team, as well as how they could benefit from the type of work the team conduct. Most importantly the feedback revealed that attendees felt empowered after the training, as they could identify the applicability and transference of the acquired knowledge into their roles and work/academic projects. The tasks seemed to be instrumental in aiding this process as it required a higher level of cognitive processing (i.e. semantic level), as well as making the sessions interactive.

Despite this, some individuals stated that the training was slightly complex as they had no experience in research evaluation, and that there was a lot of information to comprehend in one session, and that a series of workshops could be an alternative. Such feedback provided an evidence base to review how the training could be delivered in the future, and areas of modification (e.g. half day

workshops per methodology vs. the full day workshop for both methodologies). Thus the piloting of this training programme proved crucial to the subsequent development and growth of this training programme.

SUMMARY AND REFLECTION

I discussed the evaluation with the Health Psychology Team leader, and we both agreed that the training was worthwhile to offer to NHS staff as the majority of the group stated that the training was applicable and transferable to their work. However as some trainees stated that the training was not that relevant, we decided that the training should be advertised to NHS staff who are undertaking academic qualifications or research. Furthermore as some trainees thought the session covered a lot of information and some trainees found the different methodologies to be more relevant than others, it was decided that the training could be divided into half day sessions, focusing on either quantitative or qualitative research methods.

Before delivering the new training sessions (version 2) a new training plan was designed, ensuring that a suitable amount of tasks were included, as they played an instrumental in role facilitating learning and were well received by trainees. Additional hand-outs were designed (e.g. worked examples of analysis and separate glossary sheets), and new training venue was selected which was more spacious for future training sessions, as this was identified as an area of improvement in previous evaluations.

Originally I was anxious that the training programme would be too optimistic in achieving the desired learning outcome, based on the group's varied knowledge of research methods and the limited time allocation. However by devising the new version of the training programme and better marketing of the training, I feel that the training has significantly developed, becoming more tailored suited to the learning objectives, as well as the trainees' learning aims.

I am much more confident when delivering the training, and I can allow suitable time allocation for each of the methodologies compared to before. Furthermore trainees have acted upon the acquired knowledge from the training, to now plan and conduct their evaluations/research projects. Consequently demonstrating my

ability to tailor my teaching style and content in respect to the audience and their knowledge base. As well as highlighting how such training can raise awareness about service evaluations for NHS service providers, and that having basic knowledge about research methods can assist and empower them to allocate greater thought about service evaluation design; in turn potentially improving service provision for service users. Hence I have taken measures to liaise with the training department to continue providing the training with the addition of new workshops (i.e. how to conduct focus groups).

From a public health psychology perspective this training programme has proved most useful. It has exemplified that there is a need to build and enhance healthcare professionals' knowledge on service evaluations and research to promote evidence based practice; especially with tighter NHS budgets. The need to demonstrate value for money and cost effectiveness has never been greater; thus relying on effective evaluation measures to ensure that key services are retained within public health

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Appendix 1 – Training Plan

Training topic: Research Methods Workshop

Date of lecture: 19th and 28th May 2009

Time of lecture: 9.00a.m. - 3.30p.m. (6 hours and 30 minutes)

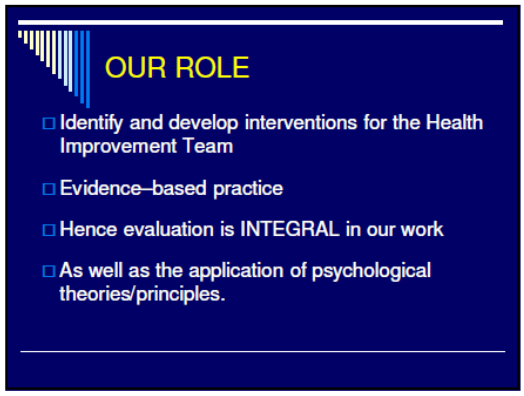
Attendees: Community Health Improvement Directorate staff (smoking cessation advisors, obesity prevention service manager, etc)

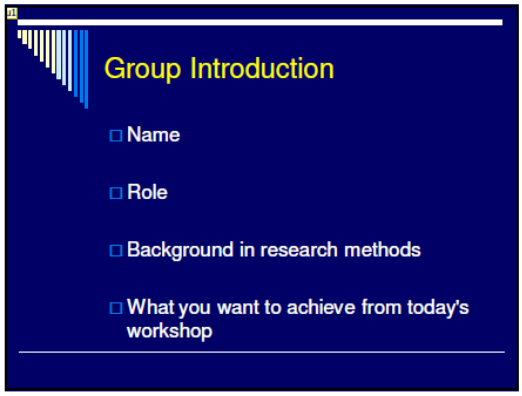
Aim of workshop: To understand the purpose of evaluating health improvement interventions, and how various research methodologies can assist in this area of enquiry.

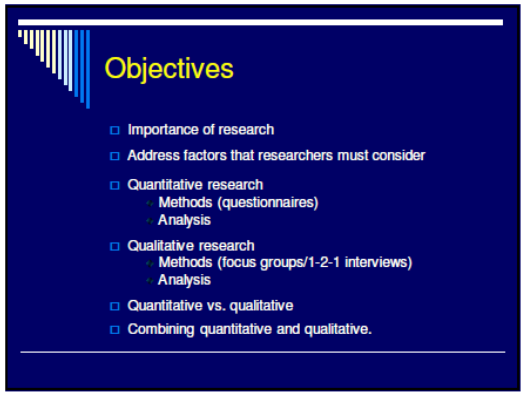
Training session - 9.00a.m. - 3.30p.m
Introductions and brainstorm learning objectives ▪ (Build rapport, ascertain whether any prior research methods training, list on flip chart individual learning objectives to permit tailoring of session) **Importance of research** ▪ (Answer to a question, theory development, evaluation of service/ intervention, etc) **Factors that researchers must consider** ▪ (Ethics, time, budget, research question, etc)
BREAK - 10.15 - 10.30
Quantitative Methods ▪ **Quantitative methods of data collection - How to design a questionnaire** (closed vs. open questions, wording of questions, response types, questionnaire length, etc) ▪ **Quantitative methods of analysis** (Hypothesis testing, normal distribution and generalising findings need for large samples, parametric testing, non-parametric testing, t-test, ANOVAs, correlation)
BREAK - 12.30 - 1.15
Qualitative Methods **Qualitative methods of data collection** (Question lists – TASK – design a question list in respect to current projects, etc/ focus groups, one-to-one interviews, ethnography, etc) **Qualitative methods of analysis** (Thematic analysis, content analysis, discourse analysis, grounded theory, interpretive phenomenological analysis, TASK – based on study titles identify method of analysis, TASK – identify themes and sub-themes in text)
BREAK 2.30 – 2.45
Qualitative verses Quantitative (Brainstormed with group, talk through table, discuss with group) **Combining quantitative and qualitative methods** (Efficacy of both methods can be combined, applied to questionnaire data sets which staff often have, i.e. open responses – content analysis, closed responses – averages or statistics) **Feedback and evaluation**

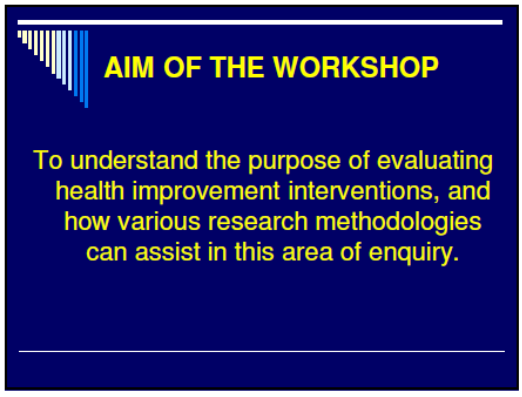
Appendix 2 – Full day Research Methods Workshop Training Pack

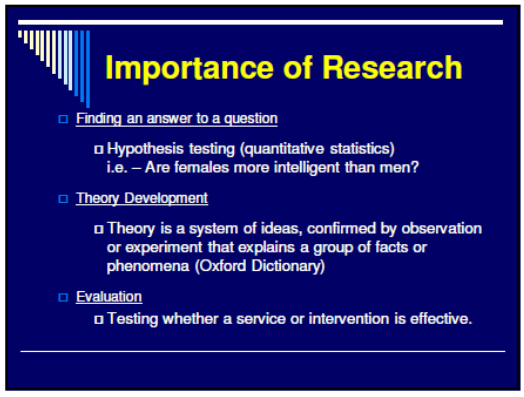
Slides











Factors that researchers must consider

The Research Question

It determines:

- the methodology is employed
- the design
- the sample size

Q – Is the research question researchable and realistic?

S – specific
M – measurable
A – attainable/ achievable
R – relevant
T – time-based

A research question must not be too broad or narrow.

The Research Question

Independent variable (IV): a variable that is manipulated

Dependant variable (DV): outcome variable

Example :

A study exploring the effects of alcohol (IV) on reaction times for braking (DV) in a car simulation.

A study measuring the affects of NRT on smoking cessation

Time Span

- This cannot often be controlled (Heptinstall, 2000)
- Time frames are vital for research, but they can affect the method and design employed.

Quantitative - large samples = more time for data collection

Qualitative - fewer subjects = analysis is time consuming

Funding

- Budgets influence the measures and designs used in a research study.
- i.e. biochemical measures are costly.
- The time span of a study also determines the level of cost a study may incur.

i.e. longitudinal studies.

Access to Participants

- How many?
- Particular group is to be researched?

  i.e. GP's
  - approach GP practices
  - questionnaires could be posted to them
- Need to consider alternative methods to recruit subjects, if response rates are low, and a particular sample size is required *(identified by power analysis).*
  - Use financial incentives to recruit subjects. However this is dependant on the financial funding available.
  - Employ marketing companies to recruit participants.

Power Analysis

Statistical test which computes the ideal sample sizes, in order to have a good chance of detecting the expected results (Cohen, 1988).

How to Carry Out a Power Analysis

It is very cumbersome to calculate by hand.
G*Power – free programme
nQuery Advisor – programme has to be bought

Ethics

- Not all of the projects undertaken within the NHS are classed as "research".
- You do **NOT** need NHS ethical approval/NHS REC if your study is an audit or service evaluation.

Resources

Defining Research leaflet
http://www.nres.npsa.nhs.uk/applicants/apply/research-in-the-nhs/

Ethics

- NHS ethics committee
  - Meet once a month.
  - CORREC forms and supplementary forms need to be submitted one month prior to the meeting.
  - Plan ahead if you need ethical approval.
- BPS Code of ethics

Ensure that participants are:
- Not harmed physically or psychologically
- Not deceived
- Informed consent/assent is obtained
- Data remains confidential
- Participants have the right to withdraw at any time
- Protection of vulnerable people – children, mentally ill peopl etc

Ethics Cont'd- Legal Considerations

- Research Governance Framework
- Health and Social Care Act, 2001 (section 11)
- Data Protection Act, 1998
- Sex Discrimination Act, 1975
- Race Relations Act, 1976
- Equal Pay Acts, 1983
- Disability Discrimination Act, 1995
- Human Rights Act, 1998

Ethics Cont'd- Reasons for rejection

- Personal profiting from research
- Wasting participants time
- Complex participant information sheets (see information sheet template)
- Upsetting participants with lack of debrief or referral procedure (see debriefing form template)

Hence it is important to have strong research question/proposal

BREAK

15 minutes

Quantitative Research

Quantitative Research

- Relies heavily on numerical data.
- Methods used - questionnaires, and controlled experiments (i.e. randomised controlled trials).
- Explore questions such as *what*, *where*, *when*, and *how*.

Quantitative Research Methods

Questionnaire

- Efficient method to obtain factual information.
- Maintains *evidence based approach* as they can be statistically analysed.

How to Design Questionnaires

Wording

- Use short and simple sentences - Ask for only one piece of information at a time

"Please rate the content in the smoking cessation service leaflet"
vs.
...and poster"

- Ask precise questions - reduce ambiguity, give a time reference…
- Use language that your target population will understand – average reading age.
- Use pictures if aimed at children.
- Keep the length short and brief - less inclination to complete long questionnaires.

BIAS

- Social Desirability - *The tendency of respondents to reply in a manner that will be viewed favourably by others.*

i.e. over reporting "good" behaviour
or
underreporting "bad" behaviour

- **Solution???**

… use two questions instead of one, placed in different sections of the questionnaire.

Cont'd

- **Sensitive issues (i.e. cheating)**

1. *Numbered card approach*:
   "Please tick 1> of the following items which correspond to how completed your examination in the past."
2. *Everybody approach*:
   "As we all know, most medical students have copied other students' answers in exams. Would you agree that…?"
3. *Other people approach*:
   "John copies answers in a degree exam… Do you feel John is wrong?... Have you considered doing the above?"

Cont'd

Format of responses

Open Questions	Closed Questions/Forced choice
•Allows exploration regarding an issue/s. •Responses not 'as' pre-determined compared to forced choice/closed questions. •Respondents can formulate their own answers •Use *thematic* and/or *content analysis* to extract emerging themes.	•Easy and quick to fill in •Minimise discrimination against the less literate (in self administered questionnaire •Easy to code, record, and analyse results quantitatively •Easy to report results

Example of closed responses

Choice of categories

What is your marital status?
( ) married
( ) divorced

Likert Scale

How much do you like chocolate?
very much much neutral little very little

Differential Scale

How would you rate this training?
extremely dull 1 2 3 4 5 very interesting

Checklist

Circle the brands you like.
Cadbury's
Thornton's

Ranking

Please rank the above (1- favorite 3- least favorite)

Length of Questionnaire

- No exact consensus
- Short simple questionnaires usually attract higher response rates compared to long complex ones (Dorman et al., 1997)
- N.B. dependant on method of administration?

Order of Questions

- Go from:
  - general to particular
  - easy to difficult
  - factual to abstract
- Start with:
  - closed format questions
  - questions relevant to the main subject

Avoid starting of with demographic and personal questions

Rapport

- Introduction
- Personalised letter
  - explain purpose
  - statement of confidentiality
  - parties responsible for research
  - thank respondents

Quantitative Analysis Methods

Hypothesis Testing

Quantitative research tests specific hypotheses.

Thus relies on statistical and inferential tests, to prove or disprove these hypotheses (Ogden, 2000).

Main purpose to test whether a difference between two or more scores is/are statistically different

Hypothesis Testing

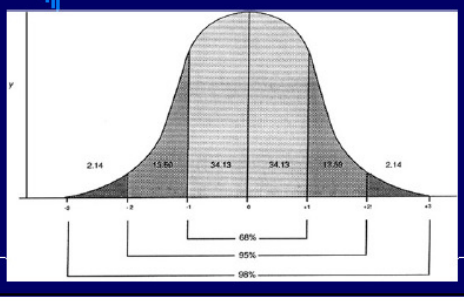
Null hypothesis
there is no difference between two scores
(occurred by chance, not statistically different)

Alternative hypothesis
there is a difference between two scores
(did not occur by chance, there is a statistical difference)

Parametric & Non-parametric Statistics

- Parametric
  - A set of statistical tests that are based on the assumption that the *population distributions are normal.*
  - Rely on large homogenous samples:
    - Homogeneity of variance
    - Minimise skew in respect to the normal distribution Example of parametric tests: t-tests, ANOVA, correlations, regression
- Non-parametric
  - A set of statistical tests that *do not assume that the population distributions are normal.*
  - AKA distribution-free tests
  - Example of non-parametric tests: Mann-Whitney, Wilcoxon, Friedman's test

Normal Distribution



GROUP TASK

- Arrange yourself into a line in order of shoe size
- Read out your shoe size
- Calculate the average shoe size
- Stand in separate lines for each shoe size

Are you a skewed population?
OR
Are you a normally distributed population?

Parametric & Non-parametric Statistics Cont'd

- Many measurements (psychological to biological phenomena), have a distribution of scores depicting the bell-shaped curve.
- The normal distribution also arises in many areas of statistics.
  - i.e. Comparison between the sample mean and the population mean
- The normal distribution is the most widely used in statistics - many statistical tests are based on the assumption of normality.

Evidence Based Practise

Study statistically validates the effectiveness of an intervention (in contrast to the control group), and similar studies have replicated the research findings…

… one can infer the efficacy of that intervention, and a relationship between the independent and dependent variable/s.

Allowing theory development

Therefore quantitative studies can validate theories, and consequently statistically prove or disprove an association between certain variables.

Design

- Independent/between group
  - Two groups
  - Those who had coffee in the break vs. those who did not in a maths task.
  - Comparison between the two group means.
- Within group
  - One big group
  - Maths test before chocolate
  - Maths after chocolate
  - Comparison between the before and after scores

Overview of Commonly Used Quantitative Statistics

Parametric Test

***t*-tests**

Compares the difference between two group means to determine whether that difference is statistically significant (more than just chance $p<0.05$).

Overview of Commonly Used Quantitative Statistics

Parametric Test

→ **Comparison between the two groups = independent samples t-test**

i.e. Alcohol study and RT for braking

Group 1 – no alcohol – control group

Group 2 – 250ml of alcohol - experimental group

→ **1 group of participants undergo the two condition = paired sample t-test**

i.e. Alcohol study and RT for braking

BEFORE: 10 Participants undergo test – no alcohol – control/baseline measure

AFTER: Same 10 participants undergo the same test – 250ml of alcohol – experimental measure

- **Non parametric version:**
  - Mann Whitney U (between groups)
  - Wilcoxon Rank Sum Test (within group)

Overview of Commonly Used Quantitative Statistics

Parametric Test

- ANOVA
  - determines the significance of differences among several group means for one or more IVs (Coleman, 2003).
  - ANOVA is univariate (one dependant variable)

Example

Alcohol (IV) and RT for braking (DV) (*t* test)

Add another IV i.e. Caffeine vs. Alcohol and RT for braking (same DV)

Or

NRT vs. group therapy for smoking cessation rates

Overview of Commonly Used Quantitative Statistics

Parametric/non-parametric Test

Correlation

- The correlation is one of the most common and most useful statistics.
- It is a single number that describes the degree of relationship between two variables.
- **Example**

  Want to examine the relationship between 2 variables:

  Height (in inches) and IQ (IQ score)

Hypothesis: the taller a person is, the higher the IQ score will be.

Overview of Commonly Used Quantitative Statistics Cont'd

Positive slope (/)

=

the higher scores on one variable tend to be paired with higher scores on the other.

i.e. the taller one is the higher the IQ.

Pearson Product Moment Correlation/ Pearson's r

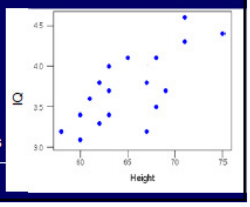
- designated by "r".

- It reflects the degree of linear relationship between two variables (ranges from +1 to -1).
- A correlation of +1 means that there is a perfect positive linear relationship between variables.

i.e. correlation score (r=. 73) – there is a strong positive relationship between height and IQ.

Worked e.g.:

www.socialresearchmethods.net/kb/statcrr



BREAK

45 minutes

Qualitative Methods

Qualitative Research

- Qualitative methodology encompasses a range of techniques:

i.e. Interviews, focus groups, narratives, texts (diary), observations-ethnography.

- To explore health and illness concepts and experiences (Marks & Yardley, 2004), from a varied participant groups (Ogden, 2000).

Cont'd

- Requires smaller - focused samples, rather than large random samples (as required in quantitative research).
- This form of study provides access to subjects' beliefs and opinions.

i.e. Aim to understand the experience of having diabetes.

- Quantitative methods would be insufficient, as responding to pre-determined questions would not provide an accurate insight into the area of study (Chamberlain, 2004).

Cont'd

Commonly used methods

Focus groups (6+/- 2 people)
1-2-1 interviews (1 person)

Common factor

Question lists (structured, semi structured)
Specific materials/cues – pictures/photos/etc

Task

Create a question list (6-10 questions) for:

Study A
Exploring the barriers for healthy eating

Study B
Exploring the experience of lifestyle changes

Qualitative Analysis

Themes and categories are derived from the subjects' responses (Ogden, 2000; Richie & Lewis, 2003)

The method aim of the research determines what method of analysis
The method of analysis determines how the themes/patterns are found

Methods of Analysis

Thematic analysis
Content analysis
Interpretative Phenomenological Analysis – IPA
Grounded Theory
Discourse Analysis

Overview of Qualitative Analysis Methods

Thematic analysis

Systematic identification of themes and or patterns in a qualitative data set.

Content analysis

Involves systematically identifying themes or patterns in a qualitative data set. It numerically describes the number of occurrences for the themes identified.

Interpretative Phenomenological Analysis – IPA

This method provides insights into how a person, in a given context, makes sense of a phenomenon/event/experience.

Overview of Qualitative Analysis Methods – cont'd

Grounded Theory

One has to follow a set of clearly defined procedures for inductively (codes are derived from the data set) developing and verifying theory from qualitative data.

Discourse Analysis

Encompasses a wide variety of methods for analysing the social origins and functions of talk and text.

i.e. may explore pauses, intonation, pitch in a conversation between a GP and patient

Task

- What methods of analysis would be suitable for:

Study A

Exploring the effects of being diagnosed with type 1 diabetes in adolescence.

Study B

Exploring interactions between smokers and cessation advisors.

Task

Identify themes and sub themes in a given text

Quantitative vs. Qualitative

Quantitative vs. Qualitative

	Quantitative	Qualitative
Strengths	✓ Permits generalisations due to large sample and statistical analysis. ✓ Easy to administrator – not in person.	✓ Explores topics in great depth. ✓ Small sample size. ✓Achieve greater ecological validity?
Weaknesses	x Cause and effect – does not explain the dynamics or mechanisms. x Need large sample sizes.	x Hard to generalise. x Time consuming analysis. x May be deemed as subjective?

Combining Quant' & Qual' Methods

- Efficacy of both types of study can be combined (O'Cathain et al., 2007)
- Each method has its utility, and compliments different areas of enquiry. All are necessary to complete a picture
- Thus quantitative research can be used to statistically test the reliability of a treatment
- Theories can be validated through replication (Michie & Abraham, 2004)
- Whereas the reflexive nature of qualitative research contributes directly to the understanding of contemporary issues and theory (Richie & Lewis, 2003)

Cont'd

Pragmatist Philosophical Approach

"aim of inquiry is not to seek a truth that is independent from human experience, but to achieve a better, richer experience (scientific analysis, artistic exploration, or any productive combination of these different approaches)."
Maxcy, (2003).

Recommended References/Services

Quantitative

- Andy Field (2005). Discovering Statistics Using SPSS (Introducing Statistical Methods S.) (2nd Edition) (Paperback). SAGE Publications.
- SPSS

Qualitative

- Carla Willig (2008). Introducing Qualitative Research in Psychology (Paperback)
- Transcription services - ********

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Appendix 2 – Full day Research Methods Workshop Training Pack

HANDOUT 1 - Glossary of Terms

Alternative hypothesis: there is a difference between two scores (did not occur by chance, there is a statistical difference).
Between subjects' design/Independent samples: term which describes a research design, where different groups of participants are tested under different treatment conditions. Also known as: independent samples t test.
Content analysis: involves systematically identifying and describing themes or patterns in a qualitative data set. However it numerically describes the number of occurrences in the data set.
Control group/placebo group: a term used in experimental design. It describes the group of participants that are not exposed to the manipulation of the independent variable. Consequently this group provides a baseline against which to evaluate the **effects of the treatment/ intervention.**
Dependant variable (DV): outcome variable.
Discourse analysis: encompasses a wide variety of methods for analysing the social origins and functions of talk and text. (i.e. may explore pauses, intonation, pitch in a conversation between a GP and patient).
Experimental group: a group of participants exposed to the independent variable in order to examine the causal effect of the treatment on the dependant variable. Compare with control group.
Focus Group: A small group selected from a wider population, and an open discussion is used to obtain very rich data, by accessing members' opinions and beliefs about a particular subject or area. This method is commonly used in psychosocial research and or market research.
Grounded theory: one has to follow a set of clearly defined procedures for inductively (codes are derived from the data set) developing and verifying theory from qualitative data.
Independent variable (IV): a variable that is manipulated
Interpretative Phenomenological Analysis (IPA): this method provides insights into how a given person, in a given context, makes sense of a given phenomenon/event/experience. It has its theoretical origins in phenomenology.
Mean: in descriptive statistics, it is the average value, calculated (for a finite set of scores) by adding the scores together and then dividing the total number of scores. Most common measure of central tendency.
Median: used in descriptive statistics. It is a measure of central tendency that is the middle value of the set of scores arranged in order of magnitude, or the mean of the two middle scores (in the event of an even number set of scores, as there is no single middle score).
Mode: in descriptive statistics, this is another measure of central tendency, which is the most frequently occurring score/s among a collection of scores.
Non-parametric: statistical tests that do not assume that the population distributions are normal. Examples of non-parametric tests: Mann-Whitney, Wilcoxon, Friedman's test.
Null hypothesis: there is no difference between two scores (occurred by chance, not statistically different).
Parametric: statistical tests that are based on the assumption that the population distributions are normal. Examples of parametric tests: t-tests, ANOVA, correlations, regression.

Phenomenology and Phenomenological methods: study of the content or essential characteristics of subjective experience and a varied and loosely defined set of interpretive, qualitative and theoretical methods designed for that purpose.
Qualitative methods/research: the aim of these methods is not to identify universally applicable laws, but to develop insights, which are meaningful and useful to particular groups of people, such as patients, participants in a study, or people in similar situations, health care workers, etc. Hence this type of research deliberately seeks to investigate how context and interpretation influence our experience and understanding of the world. This can be achieved by collecting contextualised data, often in real world settings and in the natural language of the participants. It can also encourage reflection on the social and subjective processes influencing the interpretations that are constructed.

- Commonly used qualitative analysis: Grounded theory, interpretive phenomenological analysis (IPA), thematic analysis, content analysis, discourse analysis.
- Commonly used qualitative methods: focus groups, one-to-one interviews, transcripts, observations.

Quantitative methods/research: these methods are capable of generating data in a numerical form suitable for testing quantitative laws and theories that are assumed to be universal to all human beings. The data produced by such methods have properties that allow the use of statistical hypotheses (null vs. alternative hypothesis) based on the results of experiments, randomised controlled trials, observational studies, etc.

- Commonly used quantitative analysis: t tests, ANOVA, MANOVA, correlation analysis, regression, Mann-Whitney U, Wilcoxon signed rank test.
- Commonly used quantitative methods: questionnaires, experiments, randomised control trials (RCT)

Randomised control trial (RCT): an experimental design in which participants are randomly allocated either to a new intervention/treatment or to a control condition.
Thematic analysis: involves systematically identifying and describing themes or patterns in a qualitative data set.
Within-subjects design/Paired samples: any research design, where the same participants are tested under different treatment conditions. Also known as: related scores t test, repeated measures ANOVA.

Appendix 2 – Full day Research Methods Workshop Training Pack

HANDOUT 2 – Ethics forms templates

Information Sheet Template

Title of study _____

Section A

- Introduction about self: i.e. I am a Trainee Health Psychologist working for South West Essex PCT…
- Invitation: I would like to invite you to participate in research that I am carrying out
- Purpose of the information sheet: Before you make a decision about participating, please read the information sheet and understand why the research is being done and what it will involve.

Section B

- What is the purpose of the study?
- Why has the participant been chosen?
- What does the participant have to do?
- Expenses and payment?
- Will the participant's information be kept confidential?
- What will happen to the findings?
- What are the possible benefits of taking part?
- Does the participant have to take part?

Section C

Contact details for the researcher/s, and team leader.
Thank the participant.

Consent Form Template

Title of study _____

- I confirm that I have read and understood the information sheet for the above study and have had an opportunity to ask questions.

  I understand the responses I give will be treated as confidential, my contact details will always remain separate from the data and I will only be recognised by my participant number.
- I understand that participation in this study is entirely voluntary and refusal to take part involves no penalty and I may withdraw from the study at any point during the focus group/questionnaire/etc.

I understand that standardized debriefing will take place once the focus group has taken place. The debriefing will include the purpose of the study, background research and the design of the study so that I can recognize my contribution to the research.

By signing this form I am stating that I am over 18 years of age, and that I understand the above information and consent to participate in this study being conducted by an employee of South West Essex PCT.

Participant Number:

Signature: _____ Signature: _____

(of participant) (of researcher)

Today's Date: _____ Today's Date: _____

Debriefing Form Template

Title of study _____

Section A

- Thank the participant for their participation
- State the aim of the study
- State how the results from the study will be practically applied
- Give some facts about i.e. Stroke - whatever the area of focus was of the study
- Justify the importance of the research
- Provide advice about whom and how to contact someone if the participant has been affected by taking part in this research.

Section B

- Sources of information – Charity – i.e. British Heart Foundation
- Contact Details – for advice/lodge a complaint (PALS), etc.
    - Researcher/ research team

Thank the participant

Declaration: …The …… Team declare that the information provided above is in accordance to the best of our knowledge.

Appendix 2 – Full day Research Methods Workshop Training Pack

HANDOUT 3- Practical Tips for Conducting Patient and Public Focus Groups

Step 1 – Do you need a focus group?

- Ascertain whether a focus group needs to be conducted.
- Refer back to you research question.
- Review what the aims of the research project are, and whether they still compliment a qualitative methodology.
- Accordingly devise a list of questions which help provide information to inform your research question/research objectives.
- Turn the uncertainty into a positive by making a list of ideas in the following format:

If I knew……, I could…..

e.g. If I knew what information patients needed, I could re-write their information leaflets

Step 2- Plan the focus groups

- Identify the major objectives of the focus group. Don't be afraid to be ambitious. You can get a lot of rich information from focus groups.
- Carefully develop 10-13 questions (for 1.5 hours session). Speak to the people you are planning to invite to get a feel for the issues.
- An ideal size is 6 (plus or minus 2) people per group.
- The amount of groups depends on your objectives. If you have a very specific objective, e.g. to gain an understanding of CHD patients' opinions on a new leaflet, 3-4 groups would be enough. If you have a more general objective, e.g. to understand CHD patients lifestyle following rehab, a minimum of 12 groups would be needed.
- Speak to people who need the information generated from the focus groups, to get a good understanding for the projects scope.
- Focus groups are multiple interviews so the same principles of interviewing apply.
- Find a suitable venue, easy access and airy.
- About 3 days before the group, call the people who have said they are coming to remind them about the group.
- Organise nice refreshments.
- Plan a way to record the group – audio, video or if not possible ask someone to take notes. Avoid taking notes yourself as this can affect rapport between yourself and the participants.

Step 3 – Facilitating the focus groups

- Have refreshments and let people start to gel naturally.
- However serve refreshment before and after the focus group as this can hinder the quality of the audiotape.
- Give everyone a name badge.
- Introduce the objectives of the focus groups.
- Explain how it will be recorded and obtain consent.
- Spend 5 minutes setting a few short ground rules, e.g. keep focused (you can even ask someone to be the person to interject if the group goes off focus).

- Carefully ask each question, using a flipchart to record responses if it feels it is needed.
- Ensure even participation. If one or two people are dominating, bring the others into the discussion, e.g. 'Thanks, we've heard a lot from…..I was wondering if the others share that opinion or do you have anything else to add.
- Do not enter into the debate. Your role is to listen and gather information. Do not give any judgements.
- Ensure the discussion is group-centred rather than facilitator-centred. The group should interact directly with each other, rather than in turn via the facilitator. But remain alert so that you can provide leadership and guide the group when needed (e.g. group discussions – researcher directs the questioning and the responses are made to the interviewer).
- If a group member shares something difficult or sensitive, give them space but also invite others to share their experience…

e.g. 'I'm sure other people in the group can identify with that experience…..pause and look around. Ask them how they solved or coped with that issue to keep the discussion solution-focused.

- Close session and inform group how you will feed back your findings to them

Step 4 –After the focus groups

- Make notes of any observation that occurred to you.
- Transcribe the recording (there are many transcription services available to assist with this – prices depend on the duration of the recording and how swiftly the transcript is requested).

Appendix 3 – Summary Evaluation Form

1. How would you rate the following:

	1 Poor	2 Satisfactory	3 Good	4 Excellent
How well did the workshop satisfy the learning objective: To understand the purpose of evaluating health improvement interventions, and how various research methodologies can assist in this area of enquiry.		5%	27%	68%
The speaker's communication skills			23%	77%
The speaker's enthusiasm			18%	82%
Content of slides			41%	59%
Relevancy of the lecture			32%	68%
Quality of the handouts			18%	73%
The organisation of the lecture material			36%	64%
The speakers ability to explain the points coherently and clearly		5%	23%	73%
The relevancy of the tasks		5%	32%	64%

2. Please state what you found most useful from the lecture?

- It was useful to refresh my knowledge of quantitative and qualitative research methods. There was a lot of useful and clear information with examples of how to apply it to our working life.
- Putting theory into practice
- Lots of information presented clearly and concisely
- It clarified the difference between quantitative and qualitative methods, enabling me to use both in the future.
- The explanation of the different methods of research
- An understanding of the concepts of methodologies, using the two research methods was fully covered.
- The material was explained in a clear and logical manner
- Information on qualitative explained clearly
- General understanding of different research methods
- The differences between qualitative and qualitative methods. Clear explanations
- Methods for use in projects I am currently working on. A sense of 'filling in the gaps' in my evaluation knowledge.
- Qualitative research section.
- The refresher of the different methods and how best used in what situations and certain outcomes.
- Tasks
- The value of qualitative and quantitative studies

- Excellent overview of qualitative and quantitative research methods that was relevant to the projects we are involved in.
- Evaluating qualitative research
- Reviewing the types of tests i.e. ANOVA, *t* tests, and what they represent.
- Examples were always great and add relevance.
- How it was related back to our various roles and the positive effect it could potentially have upon our service.
- How research methods can be involved in my work.

3. Are there any other ways the lecture could have been improved?

- No (x5)
- Would have preferred qualitative stuff in the morning – I lost focus a bit after lunch
- Simplified slightly if possible
- Good examples were given there was more focus on smoking. I would have appreciated more focus on obesity preventions as well.
- Having a go at analysing some quantitative data
- Over a longer period of time. It's a very heavy session.
- Wording/phrases/jargon

4. Additional comments

- Overall a good balance of depth and breadth of information. There was a lot of information and in enough detail
- Good informative day venue was too small (room) otherwise the day was very useful.
- Parm was excellent. She was very confident, had a clear understanding about the subject, and she made the material very accessible. Very well developed teaching skills! Parm also answered any questions with clarity and confidence.
- Very good. Enjoyable. Learned a lot
- Well presented
- A large volume of factual information
- Possibly other workshops going into more detail on certain aspects covered in this training day.
- The presentation was very ambitious about introducing people to methodology of research, statistics, evaluation, sampling, questionnaire design within a one day timescale.
- Too much info in too a short period of time
- Too much information in one session if you have no background in this area.
- I really enjoyed this training day it was very informative and a great opportunity to find out a bit more about the health psychology team and how they can help us with our evaluations.
- Good and very relevant session
- How to contact team for future advice/help if need to use services who to contact for info/advice if to use or not/prices/etc was good.
- If possible it would be good to have someone available to hold discussion groups if people wanted to start up a project.
- Having no background knowledge of research methods I found the training hard to understand at times.

Overall, how would you rate this event?

1- unacceptable	2- needs work	3- Fair	4- Good	5- Very Good	6- Excellent	7- Outstanding
		4.5%	9%	32%	50%	4.5%

One sentence to sum up your views of the research methods workshop.

- (x3)Very informative and useful as well as applicable.
- Lots of information presented in a clear and concise manner
- A good informative day kept my attention and improved my knowledge of research-excellent.
- Day was very informative and the material was well covered and will be used effectively.
- This was a very insightful and beneficial refresher on research methods – thank you to all involved.
- The qualitative research methods will help me to fully understand what is going on with my clients.
- A lot of information to take in but very interesting.
- Delivery of a vast amount of information, but very helpful
- Biggest improvement for me was the new knowledge gained for use in my field of work and to use in a specific project I am currently running.
- Overall a really good experience – it is such an interesting area – but very complicated especially if not used regularly. Need to bring info back and reflect on how I can apply to evaluation forms. Good to get an understanding of what your team do and how we can work together.
- Tasks were most effective method of getting points over.
- Thinking about what and how we can use this in out work.
- Quite a lot to pack in one day. Would be useful to break it down further.
- I feel more confident in using qualitative research methods particularly in how we can apply it in the cooking skills evaluation.
- Personally I found this effective as a recap of what I've done before; really a quick overview of a lot of work /information.
- Learning how to analyse qualitative data was useful, as I didn't know this before. Extremely useful course.
- Refreshed knowledge to my current role and the work we do as a service.

Thank you for your time.

AREA OF COMPETENCE: TEACHING AND TRAINING

TEACHING TOPIC: Stress and Health

SETTING: City University, London

TARGET GROUP: MSc Health Psychology students

DESCRIPTION OF WORK: To teach MSc students the application of behavioural medicine within a public health setting to tackle health inequalities in deprived communities, applying a biopsychosocial (Engel, 1977) translation.

PLANNING AND DESIGNING THE TRAINING PROGRAMMES

Research shows that stress can affect health related behaviours as well physiological outcomes. Models such as the biopsychosocial model (Engel, 1977) and the determinants of health model (Dahlgren & Whitehead, 1991) acknowledge that health is an outcome of many factors (i.e. psychology, biology, economical and societal). Health promotion aims to empower individuals with increased knowledge and access to services to improve wellbeing. Studies have shown deprivation and stress to be closely correlated, which in turn can increase greater health inequalities (i.e. higher risk of cardiovascular disease due to excessive smoking and poor diet which are often mediated by stress) (McEwen & Seeman, 1999; Steptoe & Marmot, 2002). As I explored the experience of stress amongst deprived populations which had significant health inequalities in my doctoral research, I was asked by the module convenor at City University for the Health Promotion module to present the rationale for my research to MSc students.

The module convenor was to deliver part 1 of the session, on cross-sectional comparisons between inequalities and inequities in health; and I was to deliver part 2 of the session. I provided the module convenor with a draft teaching plan (appendix 1), to ensure that the material met the aims of the session. I also used this opportunity to ascertain whether I could design and implement practical tasks, which were aimed to highlight a bottom-up approach for tailored health promotion and service development, as well as practically applying the ideas from the lecture to facilitate applied learning.

Completion of the session outline was apt in organising the session structure, and ensuring that it flowed logically, and that it addressed the key learning aims. As I

had completed the MSc programme I was familiar with the MSc course modules and their content. I was able to prioritise relevant topics based on my knowledge of what the students would have learnt from the modules. For example students had already covered stress management tools, hence I reduced the time allocation for this section, and developed handouts for the students as an additional form of reference. Therefore I was proactive in ensuring that the materials for the lecture would meet the students' needs in light of the module objectives and the course content.

Riding and Sadler-Smith, (1997) postulate that there are various cognitive styles for learning. They define cognitive style as an individual's consistent approach to organising and processing information during learning. Two of the cognitive styles proposed are 'verbal' and 'imagery'. It is postulated that trainers should design well balanced material, with a dual mode of textual and pictorial/diagrammatic presentation of information to promote engagement (Ormrod, 2008). Hence the combined format of pictorial and textual information was used in the teaching material (appendix 2).

DELIVERING THE TRAINING PROGRAMME

I ascertained that the required equipment (i.e. projector, computer) would be available prior to the teaching session as I had designed a PowerPoint presentation, and that the relevant handouts were printed for the students. It was agreed that upon arrival I would meet with the module convenor to set up my slides and the video camera, to ensure that the session was ready to proceed on time highlighting the importance of time management and pre-planning.

The lecture was delivered to nineteen MSc students. The teaching plan was generally adhered to, however as the module convenor's session had overrun by ten minutes, I had to reduce the time allocated for task B and change it to a group brainstorming task, rather a sub-group task.

I used the feedback from previous training sessions to ensure that I made the session more proactive by prompting the students for suggestions prior to providing definitions. However I also reflected on my own experiences of attending teaching/training sessions to guide my teaching style. Supporting

Greenwood's (1998) suggestion; that reflection-before-action is ideal to reduce the chances of errors; emphasising the importance of preparation and the re-evaluation of experiences, to inform future practice.

The students were encouraged to ask questions and to work in small groups for task A. This encouraged them to work together and impart ideas, as well enabling me to provide tailored support to those students/groups that required it, on a one-to-one basis. It also encouraged students to ask me questions in reference to the tasks, and I purposively fed back some of the questions to the group as a whole to prompt peer-learning.

PLANNING AND IMPLEMENTING ASSESSMENT PROCEDURES FOR THE TRAINING PROGRAMME

The tasks designed provided students with a 'hands on learning' approach, as they had to design questions for the proposed focus group; highlighting how the questions can either enrich or limit the data retrieved. Whereas task B required students to make strategic recommendations from the example data set (appendix 3); illustrating the role of an applied health psychologist within public health commissioning.

Hence the tasks supported Kolb's (1984) ideology that learning is the process whereby knowledge is created through the transformation of experience (1984, p. 38). Kolb's model of experiential learning promotes engagement with the learner/s, and employs several learning and planning processes, such as goal setting, experimenting, observing, reviewing, and action. The tasks successfully enabled these various learning and planning processes to be implemented, both on an individual, sub-group and whole group basis.

I was not required to design a formal assessment. However as I was able to design the tasks, I used this as a tool to gage and assess the students comprehension of the material. The tasks were a quick, efficient and cost effective medium to achieve the desired aims, as well as encouraging the students to apply the ideas/concepts covered in the teaching session.

The division of the class into four sub-groups was also beneficial as it encouraged them to critically evaluate the suggestions identified by each of the groups, promoting peer-learning. The division also meant that I could move around the groups to provide extra support to those that required it, as well as familiarising myself with ideas/concepts to explore further in the feedback process in respect to the assigned learning outcomes.

EVALUATE THE TRAINING PROGRAMME

I designed an evaluation form (appendix 4) by reviewing past evaluation forms from teaching/training sessions I attended. Students were requested to rate various aspects of the training session on an one to four likert scale, and were also probed to identify what they found most and least useful from the session in two open ended questions, upon conclusion of the teaching session.

The evaluation exemplified that the session was received very positively (appendix 4). Students valued the insight I was able to provide regarding applied health psychology within public health as a Trainee Health Psychologist. However a few students suggested that greater time allocation should have been made for task B (see appendix 3: *Devise service recommendations from an example data set task).* Despite this, the students indicated that it did not distract from the teaching skill, and were glad that I still included task B (appendix 3), and that I changed the format of the task to ensure it could be used in the session.

Overall I feel that I was able to present the main themes of the session in a logical and coherent manner as evidenced from the evaluation feedback. The evaluation summary was sent to the module convenor who was also present during my training session. The results were discussed with the module convenor. I was invited to offer further sessions in the future (appendix 5). However it was agreed that additional time allocation would be required to ensure that both tasks could be administered as initially proposed. Going fourth I was more assertive in ensuring that I requested the appropriate teaching session time, in light of the proposed teaching plan content.

SUMMARY AND REFLECTION

The feedback for the session was positive and I have consequently been invited to deliver the teaching session on several occasions (appendix 5). It was rewarding to learn that I was able to provide the students with insight on applied health psychology within public health, and the type of work health psychologists complete within this area. The use of colour added value to the theoretical description of the various stress models (General Adaptive Syndrome, Selye, 1956), which has exemplified the importance of using various presentation skills to aid teaching and the audiences' comprehension. Consequently I have made a concerted effort to acknowledge what worked well for the audience based on the evaluation feedback and purposively maintained and developed these aspects for future sessions.

Despite this a few students did suggest areas of improvement such as the use of additional diagrams and more interactive tasks. Upon reflection I would have used a more interactive approach in the early stages of the session by using brainstorming tasks as a means to facilitate engagement. As well as it providing a valuable opportunity to ascertain the students learning aims which could have permitted further tailoring of the teaching session. However I have been able to now ensure that this is a central component in the very beginning of my sessions, as I am offered longer teaching sessions.

This was an important learning as I have become more assertive in requesting greater time allocation for the following teaching sessions, in respect to the content and structure of the teaching sessions. Thus ensuring that I can make the sessions more interactive which is important to students, as well as meeting the learning objectives. Upon reflection of all of the teaching sessions delivered since the original stress and health lecture, I have identified growth in my teaching style (appendix 5), as I have become more confident to change and omit slides in the presentation in response to the audiences' learning aims. As well as being more creative in the presentation design for future sessions, by using less text on the slides and the inclusion of more tasks and debates/discussions. I believe that I have developed a distinct teaching style; exemplifying my professional development within the teaching and training competence (appendix 5).

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Appendix 1 - Teaching Plan

Lecture topic: Stress and Health: Biopsychosocial Translation
Date of lecture: 6th February 2009
Time of lecture: 2.00-5.00pm (3 hours)
Attendees: 19 students on the Masters in Health Psychology Programme at City University.

Teaching session: 2.00-4.50pm

2.00-3.00pm - Part 1 – Delivered by Module Convenor
Lecture aims:
- Introduction on health promotion perspective
- Examples of health inequalities and health inequities.
- Concluded with "Biopsychosocial translation of inequalities" example (image depicting how inequities can affect health and psychological wellbeing)

BREAK – 20 mins

3.20- 4.50pm - Part 2 – Delivered by Parmpreet Kalsi
Lecture aims:
- *How do inequalities and inequities translate into ill health and stress?*
- *Health inequalities in NHS South West Essex – translated into the biopsychosocial model (i.e. limited job opportunities, deprived status can elicit stress which can affect health/ deprived at risk of CVD can be at increased risk from elevated stress levels).*
- *Highlighting the importance of stress management in a public health setting context*
- *How principles from social marketing can be applied to assist the development of a stress campaign.*

1. ***Examples of health inequalities in NHS South West Essex*** *(10 mins)*
   - *Biopsychosocial translation of inequalities*
   - *The indirect affect of stress on lifestyle*
2. ***Definitions of stress*** *(10 mins)*
   - *Prompt examples from group*
   - *Examples highlighting the subjectivity of defining stress*
   - *A theoretical model of stress - Transactional Model of Stress & Coping (Lazarus, 1966; Antonovsky, 1979) – exemplifies scope for intervention.*
3. ***Stress and health – the direct affects of the stress response*** *(20 mins)*
   - *General Adaptation Syndrome, (Selye, 1956)*
   - *Coronary heart disease and stress*
   - *Psychoneuroimmunology*
4. ***The role of stress management*** *(10 minutes)*
   - *Brief examples of stress management tools and interventions (group had previously covered this in a previous module).*
   - *The application of theory in practice*
5. ***Social marketing*** *(5 minutes)*
   - *Brief introduction on social marketing principles*
   - *How these assist the tailoring of services and health promotion*
6. ***Engage with residents in South West Essex to inform the design of a stress management service*** *(5 mins)*
   - *Implementation of some social marketing principles in needs assessment to assist design of stress management services in South West Essex*
   - *Elements of a PAR approach*
7. ***Tasks*** *(15 minutes)*

   Task A
   - *Design a question list for the needs assessment for a stress management service focus groups*

   Task B
   - *Devise service recommendations from a example data set, by comparing the data generated for group 1 (18-39 male) and group 2 (40-59 female).*

EVALUATION *(5 mins)*

Appendix 2 – Teaching slides

Stress and Health:
The Application of Health Promotion Principles

Parmpreet K. Marway
BSc, MSc, DPysch Student

My Role

- Stage 2 student
- Work for South West Essex PCT
- Health Psychology Team – Part of the Health Improvement Directorate.
- Areas of focus:
  - Research
  - Evidence based practice
  - Evaluation

Biopsychosocial Translation of Inequalities

OBSERVATION OF SOCIAL INEQUALITY

- Education/literacy
- Cultura/gender
- Housing
- Income
- Social comparisons

↓

EXPERIENCE OF INEQUALITY

- Inequity
- Limited opportunity
- Employment instability
- Social Segregation
- Low self-esteem

STRESS

CHANGES IN BEHAVIOUR AND BIOLOGICAL TRIGGERS

POTENTIAL DISEASE DEVELOPMENT

Health Inequities in SW Essex

- There is a 10 year difference in life expectancy between Brentwood, Basildon and Wickford.
- The average reading age is 12 years.

Example of Health Inequalities In Relation To Deprived Areas

- Higher levels of obese and overweight people in Thurrock and Basildon.
- This is significantly higher than the national average.
- However it is significantly lower in Brentwood.

Indices of Multiple Deprivation 2007 for MSOAs South West Essex

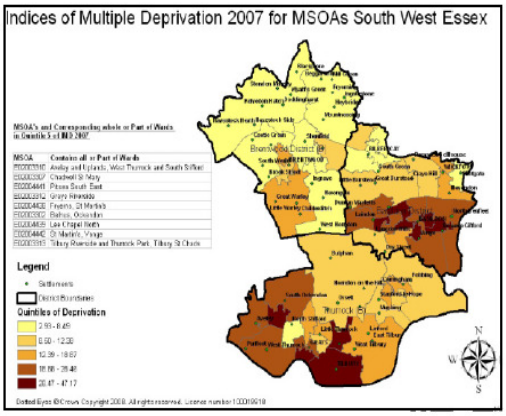
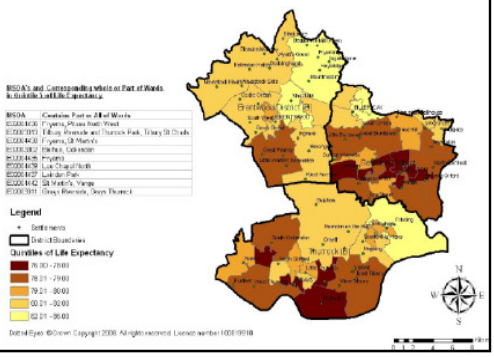


Figure 2: Life expectancy at birth in South West Essex



Lifestyle & Health

(the indirect affect on health)

- Health Survey for England (2006)
  - Highlighted significant differences in lifestyle behaviours across SW Essex.
  - i.e. deprived areas = unhealthy lifestyles
- Lifestyle is influenced by deprivation and stress.
- Marmot et al (1991) & Baer et al (1987):
  - Identified that stress can increase the amount of risky behaviours individuals' undertake, compared to controls.
  - i.e. excessive smoking, overeating, etc.

The impact of lifestyle on the risk of disease is very significant.

STRESS

Definition 1

Psychological and physical strain or tension generated by physical, emotional, social, economic or occupational circumstances, events, or experiences that are difficult to manage or endure.

Coleman (2003)

Definition 2

Strain *(external or internal)* resulting from demands that exceed the resources that a person has to deal with the demands.

Marks et al (2005)

Transactional Model of Stress & Coping

(Lazarus, 1966; Antonovsky, 1979)

It is a framework for evaluating the processes of coping with stressful events

- *Primary Appraisal*
  - is a person's judgment about the significance of an event (i.e. whether it is stressful, controllable, challenging or irrelevant)
- *Second Appraisal*
  - is an assessment of people's coping resources and options. i.e. it evaluates what one can do about the situation.

What does this tell us?

- There are two levels of intervention

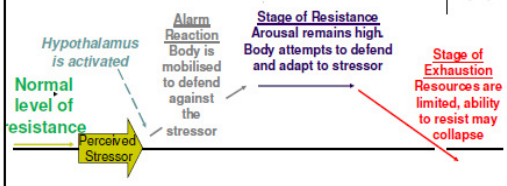
1) Address the appraisal process

2) Equip people with coping skills
   - Raise self efficacy

Stress & Health

(the direct affect on health)

Physiological Response



General Adaptation Syndrome, (GAS)

Selye (1956)

Physiological Response – Cont'd

Despite the variation in stressors, the endocrine physiology/stress response remains the same

(Baum et al, 1982; Ciaranello, 1983)

Physiological Response – Cont'd

- **Alarm Reaction:**
  - Immediate reaction to a stressor.
  - The *sympathetic nervous system* is activated (table 1).

  i.e. *Body prepares for a physical response:*
  - *increased cardiac output*
  - *pumping oxygenated blood and nutrients to muscles so that the body can respond effectively to the stressor.*

Table 1 – Physiological changes elicited by increased sympathetic Nervous System.

Physiological Changes activated by Sympathetic Nervous System
Increased Blood Volume. Spleen releases stored blood, increasing blood volume and blood pressure. Red bone marrow stimulation increases blood cells production.
Increased Energy Production. Glycogen in the liver is converted into glucose which is released into the blood, encouraging the release of fatty acids and glycerol. This process is stimulated by adrenaline.
Increased Heart Rate. Adrenal medulla stimulation releases epinephrine (adrenaline), a hormone, which leads to increased cardiac output and blood pressure.
Increased Blood Flow to Muscles. Vasodilatation of arteries/ increased internal diameter caused by adrenaline.
Increased Sweat Gland Activity. Arrector pili muscles contract, and sweat glands secrete sweat.
Blood Clotting Mechanisms. Activation of this process increases blood clotting process.
Increased Lung Ventilation. Respiratory muscles are stimulated and bronchioles (air passageways) dilate, increasing ventilation.
Inhibition of Non-essential Systems. Immune, digestive, urinary and reproductive systems are inhibited.

Physiological Response – Cont'd

- **Stage of Resistance:**
  - *Hormonal response* (table 2).
  - Slower start compared to the *sympathetic response (AR)*, but has a longer lasting effect.
  - If the stress continues, the body adapts to the stressors.
    i.e. Stressor is starvation:
    - a reduced desire for physical activity to conserve energy,
    - absorption of nutrients from food might be maximized.
- **Stage of Exhaustion:**
  - The body's resistance to the stress may gradually reduce/collapse.
  - Thus the immune system, and the body's ability to resist disease, may be almost totally eliminated.

Table 2 - Physiological changes elicited by Hypothalamic Hormones

Physiological Changes activated by Hypothalamic Hormones
Activate Anterior Pituitary

Human Growth Hormone (hGH)	Adrenocorticotropic Hormone (ACHT) Stimulates the adrenal cortex, secreting:	Thyroid-Stimulating Hormone (TSH) Stimulates the thyroid gland, secreting:
Fat Cells stimulates the breakdown of triglycerides; and release of fatty acids and glycerol into the blood.	**1) Cortisol** Liver cells convert glycogen to glucose; increasing blood glucose levels. It also increases blood pressure and surpresses the immune system.	**Thyroid Hormones** Heart - increases heart rate, and blood pressure, pumping essential component needed by the body.
Liver stimulates the conversion of glycogen to glucose; increasing blood glucose levels.	**2)Aldosterone** This increases water retention by the kidneys, causing the conservation of sodium, secretion of potassium, and increases blood pressure.	**Body cells** Increase metabolism, as ATP production is increased.

Stress and Health

- GAS highlights that extreme and progressive bouts of stress can impact health.
  - i.e. depletion of cortisol causes reduced blood glucose levels.
- Continuous high stress levels can make the person vulnerable to disease, or worsen existing conditions
  - (Selye, 1956; Baum, 1994; Glaser, 2007)

CHD and Stress – cont'd

- **Chandola et al (2008)**
  - 10,308 London-based civil servants (35–55 years).
  - Chronic work stress was associated with CHD (esp' under 50's)
  - Thus work stress is an important determinant of CHD among working-age populations
    - Indirect effects on health behaviours (Baer et al, 1987)
    - Direct effects on neuroendocrine stress pathways

Psychoneuroimmunology *(PNI)*

- Psychological distress was directly related to:
  - **HIV symptomatology**
    - (Hayes et al, 1992; Pakenham et al, 1995; van Servellen et al, 1998)
  - **Viral load in HIV sufferers**
    - (Antoni et al, 2006)
- **Weinman et al, (2008)**
  - Psychological stress impairs wound healing (i.e. suppresses the immune system)
  - A disclosure intervention led to significantly smaller wounds after 14 days compared to controls
  - This effect was still significant when health behaviours, personality were controlled for (Ebrecht et al, 2004)

Scope for Intervention

- Transactional model and GAS highlight two factors which could be targeted:
  1) **Address the appraisal process**
  2) **Equip people with coping skills**

Tools Available:

- **Pharmacological**
  - **Benzodiazepines and Beta Blockers:**
    - Reduce physiological arousal and feeling of anxiety (Priest, 1986)
    - Block the activity of the sympathetic neurons - Short term tool
- **Psychological**
  - **Progressive Muscle Relaxation (PMR)**
    - Tightening and relaxing specific muscle groups (Jacobson, 1938; Sarafino, 1996, 1998).
    - Carlson and Hoyle (1993): *PMR* is highly effective in reducing stress (Sarafino, 1998)
- **Systematic Desensitization (SD)**
  - Fear/anxiety/stress have been associated with the stressor/stimuli
  - Aims to reverse this association, by replacing the associated stress/anxiety with a pleasant or neutral stimuli (counterconditioning - Wolpe, 1958).
  - SD uses a stimulus hierarchy
  - Antoni et al, (2007) SD prevented disease development – modulated immunity

Tools Available:

Psychological

- **Biofeedback**
  - Quantitative measures of an individual's bodily functions are conveyed to the individual in real-time
    - blood pressure
    - heart rate
    - sweat gland activity
    - and muscle tension
  - Aims to raise awareness and conscious control of physiological activities
  - Biofeedback is as effective as PMR, in reducing tension headaches (Khanna, Paul, & Sandhu, 2007)

Tools Available:

Psychological

- **CBT**
  - Beck, (1975)
  - Targets the very first process in the GAS model;
  - Addressing maladaptive cognitions, which can influence the perception of stressor
  - Lazarus (1971), described this as cognitive restructuring, as stress-provoking thoughts are replaced with positive and realistic ones
  - Providing more effective coping strategies
    - (Antoni et al, 2006, 2002; Astin,1997; Chesney et al, 2003; Lutgendorf et al, 1998)

Tools Available:

Alternatives

- **Tai Chi training:**
  - Reducing anxiety, stress, and pain
    - *Adler et al, 2000; Bhatti et al, 1998*
  - Improved psychological states and age related cognitive processes
    - *Brown et al, 1995; Jin, 1991; Kutner et al, 1997; Li et al, 2001*
  - Enhance immune function in middle-aged/elderly individuals
    - *Irwin et al, 2007; Yeh et al, 2006*
  - Galantino, Shepard, and Krafft (2005):
    - Improved HIV - specific physiological parameters, QoL.
    - Qualitative data - positive physical changes and enhanced coping skills.

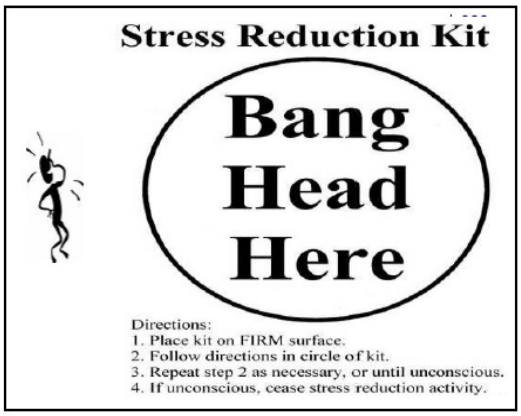
Tools Available:

Alternatives

- **Spiritual Growth Groups:**
  - Margolin, Avants, & Arnold, (2005)
    - HIV-infected participants
    - Acupuncture (group 1) vs. acupuncture + spiritual group therapy (group 2)
    - Group 2 had reduced depression and anxiety and greater drug abstinence

Interventions

- Psychosocial interventions influenced:
  1. The course of chronic diseases, and reduced mortality
     - Schneiderman et al, (2004) & Grossman et al, (2004)
  2. Decreased hospital admissions and mortality rates for CHD patients.
     - **McAlister et al, (2001) -** Systematic review
- Hence most disease management and prevention interventions should be directed towards stress management, as it reduces stress
  - (Katzer et al, 2008)



Conclusion

- What do we take away from this?

1. As health psychologists we should use theory and EVB approaches to inform our practice
2. We need to be attentive and creative in the tools we use in our interventions

Conclusion - cont'd

3. Social Marketing can be used to facilitate this process
   - The capacity to bring about voluntary behavioural change is far too valuable to be limited to the market place (Hastings, 2006)
   - Thus SM places a strong emphasis on researching what the target market (segmentation) wants
   - Qualitative approaches permit such exploration

Social Marketing 4P's

"Marketing is essentially about getting the right product, at the right time, in the right place, with the right price and presented in the right way (promotion) that succeeds in satisfying buyer needs"

Plan for My Research

- To hold 6 focus groups.
- Sample Demographics:
  - Male and females
  - Recruit participants from the two most deprived areas in SW Essex (Thurrock and Basildon)
  - Age (18-70 years)
- Address:
  - How health is defined, and current health status
  - Barriers for health
  - Stress – how is it defined, barriers for stress reduction, strategies to reduce it.
  - Advertising the service - Where, how and what

Questions

TASK A

- Get into groups of 4-5.
- Four sections of the FG:
  1. **Stress Perception** *(what it is?)*
  2. **Stress Prevention** *(barriers, solutions?)*
  3. **Stress Services** *(what they would like?)*
  4. **Stress Awareness** *(current – and ways to enhance it?)*
- Design 4-6 questions for the section you are assigned to.

TASK B

18-39 male –T+B	18-39 female –T+B
40 -59 male –T+B	**40 -59 female –T+B**
60 + male –T+B	60 + female –T+B

1. **Read the example FG data**
2. **Identify the differences and similarities between the two data sets**
3. **Think about the different features the two groups want for the stress management campaign**
4. **What recommendations would you make?**

Appendix 3 – Task B hand out

18-29 male –T+B	30-49 female –T+B
- Stress is caused by external factors, such as work and money issues. Think there is good awareness about stress – but not about prevention or management – depends on individuals' resources. - Not aware of stress services in SW Essex. - Thought that stress was influenced by coping skills, and that some cannot deal with the external pressures/stressors. - Stress affectS health - asserts pressure on heart. - Did not state PNI connection. - People are more likely to eat poorly, smoke and drink alcohol excessively when under stress. - Thought that there were minimal changes that one could make to reduce stress, they just have to deal with it – macho image. - Stigma was attached to stress services, and that men would not use the facility even if it was available. - Barriers for leading a healthy life and preventing stress, was inability to change social circumstances. Would not uptake stress management services - Vicious cycle - Overcome this barrier was to not advertise the service as a stress management programme. - No experience of HCPs speaking about stress. Value the pharmacists' advice – afraid that speaking to the GP may = anti-depressants. - Would prefer a drop in service – anonymous; use it when they need it. - Advertise by posters (stuck up in newsagents), leaflets, and Essex radio – truck drivers. - Use positive messages, emphasise that there is a way out – image of a door leading to the light. - Use dull colours alongside bright colours - Disliked arty adverts – wanted direct images - Emphasise the 'anonymity factor'	- Not good awareness about stress in the community i.e. unaware of prevention or management. - Not aware of stress services in SW Essex – would see GP. - Thought stress caused stokes and CVD symptoms, as that was the belief their parents held – myth about stress and CVD. - They thought genetics influenced who people dealt with stress. - This group described how they have had to deal with stress through out their lives, and how it has made them resilient. - Deal with it – not like the younger generations nowadays. - Described how the younger generations eat poorly as they are busier in their work lives. Despite this the group state that they feel guilty when they allow their families to have a poor diet – describe a more caring attitude. - Focus on CVD and stress, rather than PNI - Thought there were numerous changes that one could make to reduce stress, i.e. seek help, social support, become resilient – it takes a stronger person to seek help. - Would welcome a stress service – i.e. tai chi, yoga – relaxation service. - Experience of HCPs speaking about stress. Value the GPs' advice – seen as a credible source - Would prefer a weekly session- different activities every month, something for everyone. Evening session for those that work, as well as during the day for unemployed, mothers, etc. - Advertise by posters (stick up in GP surgeries), leaflets, and free newspaper. - Use positive messages, emphasise that there is a way out, and there are tools to assist – tailored to everyone's needs. - Use bright colours- white, blue, and pastel shades. - Disliked complicated adverts, want simplistic adverts. - Images of families – image of hand out to help. - Something for everyone – in easy reach - 'Minus the mental work – come along and relax'

Appendix 4 – Summary Evaluation Form

1. How would you rate the following:

	1 Poor	2 Satisfactory	3 Good	4 Excellent
The speaker's communication skills		10%	58%	32%
The speaker's enthusiasm			37%	63%
Content of slides		5%	42%	53%
Relevancy of the lecture		21%	16%	63%
Quality of the handouts		5%	26%	69%
The organisation of the lecture material			37%	63%
The speakers ability to explain the points coherently and clearly		16%	52%	32%
The relevancy of the tasks		21%	42%	37%

2. Please state what you found most useful from the lecture?

- That it covered a very difficult and complex issue like stress and all its underlying issues. It gave a very good insight of the topic. It gave out ideas, issues to think about and it introduced new themes such as social marketing.
- She managed to keep our attention to the presented topic.
- The lecture covered the topic really well not leaving many questions unanswered.
- Examples of studies. Interesting to see the types of interventions being developed here and now.
- How to structure a focus group and what to be aware of when planning certain interventions or services within a community.
- Real life example from community and a health psychologist.
- Very useful links! Great to see health psychology in practice, and current research taking place, which definitely helps us, with collecting and establishing data. Well done!
- Course content – it's relevance to day to day life and people you meet regularly so that you can educate.
- Coherence of the information – nice colour print outs. Useful and to the point information. Really nice summary of the GAS.
- It was clearly explained, and is very relevant topic in today's society. It has left me with questions regarding stress. Clear and concise. Straight to the point.
- Handouts and references.
- Gained more knowledge about stress.
- It was very much to the point, very efficient at covering most aspects of stress.
- Interesting topic and useful for the course.

- Thinking about applied health interventions in a real life context.
- How she has applied her work and health promotion, and learning about her own experiences with focus groups and social marketing.
- Handouts. References to studies. Overall learning about stress/health as well as relating this to a specific geographical area. Applying health psychology in a work capacity.
- Very interactive - Parm was an enthusiastic. And it was really interesting to hear about the current research on stress, and she was very good at applying it to past studies and theories.

3. Are there any other ways the lecture could have been improved?

- I really enjoyed it! (x 3)
- Would have liked more details of the studies.
- More interaction during slides.
- Use less …. Language ('kind off').
- More time given to tasks and discussion.
- More diagrams on PowerPoint.
- Would have liked to have heard about more recent direct examples of stress interventions.
- It was rushed towards the end because part 1 over running. But did not distract from teaching.

4. Additional comments

- I was impressed by the organisation – from the PowerPoint to the communication skills to the class engagement with the questions and the tasks.
- Thank you! (x2)
- Well done!
- Very good.
- I think you will make a very good lecturer/ health psychologist. Good luck.

Overall, how would you rate this event?

1- unacceptable	2- needs work	3- Fair	4- Good	5- Very Good	6- Excellent	7- Outstanding
			10 %	53%	27%	10%

Thank you for your time.

Appendix 5

REFLECTIVE COMMENTARY ON VIDEO RECORDINGS OF TWO LECTURES DELIVERED TO MSc STUDENTS

The first video recording shows a clip from a 'stress and health' lecture given to MSc Health Psychology students. This recording was taken in 2009, and was the first session I had delivered in an academic context. The second recording is of another session delivered to MSc Health Psychology students on 'evaluating health promotion', in 2011. These recording shall be reviewed and reflected upon.

In the beginning of the first recording, I introduce myself to the group, and explain my role as a trainee health psychologist. I felt that this was important, as it would illustrate how health psychology is applied within a public health setting. This is then followed by a brief overview of the lecture topic. I am conscious to assert the link between the previous lecture (e.g. health inequities and inequalities) and the present lecture, to help connect the two sessions together. Thus the diagram explaining the connection between inequalities and health was used in the introductory section of the lecture. However the inclusion of the epidemiological data (i.e. maps of deprivation and life expectancy) further emphasised this connection and add context.

As the previous session had overrun, I had less time than I was originally allocated to deliver the lecture. As a consequence I did feel conscious of the time limitation and was slightly restrictive in the time I allocated to the interactive parts of the lecture. For example I could have paused longer to encourage greater interaction with the students, whereby they could offer suggestions or answers to the questions I posed. I also felt that I focused on presenting all of the slides in the presentation, allocating more time to this component, as a pose to using the slides as a guide.

Despite this, I do believe that my confidence did increase as I progressed, and I did omit certain slides or allocate less time to certain sections if I felt that the students could refer to the hand-outs for greater context, or if they had already covered certain principles in other modules, etc. Furthermore the use of colour

and diagrams helped to describe theoretical models and principles, which was useful during the presentation.

As I progressed towards the end of my presentation I was keen to implement the tasks as it would allow the students to apply the material and translate their learning. I ensure that the students understand the nature of the task, explaining what each sub-group should focus on. As the size of the class was large, the division in to four large groups enabled me to work one-to-one with the groups. Upon reflection I was pleased that I divided the group myself as it helped to save time during this section of the lecture, especially as I could not have afforded any more loss of time.

Upon commencement of the task I moved from group to group, posing questions to stimulate thought, as well as answering any questions the students had. It also meant that I could ensure that they were fully aware of what the task entailed. By providing a specific timeframe, it ensured that the groups completed the task in a timely manner, further ensuring that I could bring the components of the task together once the groups had remerged into one, by asking the students to present their ideas. This allowed the students to share their learning, promoting peer learning. As the lecturer I also provided feedback, highlighting the positive aspects and areas for further consideration.

As this was my very first teaching and training session delivered in an academic setting I was pleased with the overall style of my delivery and deem it as good. I added extra detail and examples to facilitate learning and translate principles. My verbal and nonverbal language was positive and friendly. However I did feel that the speed of my delivery was somewhat rushed. I felt that the reduced length of delivery time meant that I was more conscious of the time, which impacted my delivery. Thus for future training sessions I felt that I was able to design the presentations, in a more concise manner, or request reasonable time allocations for teaching sessions to ensure that the interactive sessions of my teaching could be employed.

In the second recording, I believe my teaching style has become more distinct and developed, compared to the style depicted in the first recording taken in 2009. For example in the beginning of the recording I allocate a substantive amount of

time to engaging with the audience, through asking students to introduce themselves, and identify a specific learning objective to permit tailoring of the workshop. Thus employing a more bottom-up approach compared to the top-down approach which was more evident in the first recording. Throughout my teaching and training experiences I have found this to be a key inclusion in my workshops. I find it prompts and facilitates greater interaction with the audience, as well as developing a shared understanding in terms of what the objectives of the workshop are, and how learning objectives will be addressed; outlining clear, concise, and realistic learning aims.

As evidenced in the recording, I also attempt to summarise the module through my lecture session, despite learning in the beginning of the session that it was the last final lecture for the module. Thus I asked students what their assignment was for the module (e.g. designing a health campaign) and incorporated this in to the brainstorming session, which promoted students to think about what factors must be considered when evaluating health promotion and the implication of evaluations within applied practice; further evidencing a more flexible teaching style.

Overall I feel that my body language is more open and friendly in the second recording. I believe that my confidence in my ability to teach has developed significantly and is visible through the marked changes in my teaching style and format (i.e. providing a workshop overview and clear learning objectives to the audience).

I have been able to use the evaluation feedback from my teaching and training sessions to further reflect on my practice and identify new teaching strategies for future sessions. I believe that this is one form of my reflective practice that has been most conducive to my professional development in this particular domain, permitting further development as a teacher/training facilitator, and strengthening the quality of my work. This has helped to ensure that my teaching roles within the NHS and various academic institutions have been secured on a long term basis; examples of which are outlined in table 1. I feel that reflective practice is one aspect that I shall continue to employ in my future practice, as it has allowed me to develop as a teacher and ensure that my work is of high quality.

Table 1- List of Teaching and Training Sessions Delivered

Lecture/training Topic	Audience	Year
Health Promotion: **Stress and Health Lecture** *(version1: 1 hour 30 minutes)*	MSc Health Psychology students	2009
Research Methods Training *(version 1: full day)*	NHS South West Essex: Health Improvement Directorate	
Epidemiology and Health Psychology Lecture	MSc Health Psychology students	
Invited Speakers: **Stress and Health Lecture** *(version 2: 3 hour session)*	MSc Health Psychology students	
Health Promotion: **Evaluating Health Promotion Lecture**	MSc Health Psychology students	2010
Health Psychology: **Research Methods in Health Psychology Lecture**	BSc Psychology students	
Research Methods Training Workshops *(version 2: half day quantitative or qualitative workshops)*	NHS South West Essex staff	
Invited Speakers: **Stress and Health Lecture**	MSc Health Psychology students	
Health Promotion: **Evaluating Health Promotion Lecture**	MSc Health Psychology students	2011
Module Leader Post **Theoretical Foundations in Health Psychology** *August 2011- February 2012* *(Module redesign, teaching. Supervision, marking and moderating)*	MSc Health Psychology students	2011 - 2012
Research In Action - **An Example of Planning and Conducting Public Health Psychology Research**	MSc Health Psychology students	2012
Research In Action – **Conducting and Planning Qualitative Health Psychology Research**	MSc Health Psychology students	
Teaching and Training ***Doctorate Workshop*** *(Full day)*	DPsych Trainees	2013

AREA OF COMPETENCE: COMMUNICATE THE PROCESS AND OUTCOMES OF PSYCHOLOGICAL INTERVENTIONS AND CONSULTANCIES

SETTING: Public Health Commissioning - NHS South West Essex

CLIENTS:

- Deputy Director of Public Health
- Health Improvement Commissioning Manager

OVERVIEW

The aim of this case study to review an example of where the outcomes of a consultancy project were disseminated. The consultancy involved a service evaluation of two psychological interventions. Service evaluations are often conducted to review the efficacy of a given service to inform future service provision; with the fundamental premise to improve patients' health outcomes through improving the quality of the healthcare they receive (Kanouse, Kallich, & Kahan, 1995). Thus the communication of the processes and outcomes of psychological interventions and consultancies has wider implications to inform clinical practice, evaluation models, and public health commissioning actions. Hence the aim of this case study is to elucidate the steps involved in planning, implementing, and evaluating such communication efforts.

PREPARE INFORMATION FOR DISSEMINATION

In February 2009 I was requested as a consultant to evaluate two psycho-educational interventions called PACTWIN and WhyTry, which were aimed at children with learning and behavioural difficulties, as a result of my past experience of delivering interventions for such a target group and conducting service evaluations. The two interventions had similar objectives; to raise self-esteem, hope, compliance, and to reduce anger. However the mode of delivery differed, as PACTWIN was a holistic family intervention, and WhyTry was a school based intervention. A mixed methodology (e.g. qualitative and quantitative

analysis) was employed to evaluate the two interventions. The evaluation report was compiled and submitted to the two consultancy clients in August 2009. The aims of the consultancy project were as follows:

- To complete a service evaluation of the two interventions (PACTWIN and WhyTry) commissioned by NHS South West Essex since 2008.
- Devise evidence based recommendations for the two interventions to inform future commissioning.
- Disseminate findings to key stakeholders and define an action plan for future service provision.

The evaluation was positively received and the recommendations were approved by the two lead consultancy clients. As the lead researcher/consultant I was requested to arrange a meeting with the service manager, intervention co-ordinator, the research and service development lead from the Specialist Community Children's Services, and the health improvement commissioning manager, in order to communicate the evaluation findings, and design an action plan for the two interventions, based on the recommendations generated from the evaluation. This was an additional request post completion of the consultancy role.

As the lead researcher/consultant, I sought and obtained the relevant permissions to permit the dissemination of the evaluation report from the service manager and the two consultancy clients. The British Psychological Society Society - BPS (2009) Code of Ethics and Conduct was abided by to ensure that the highest level of data protection and confidentiality was maintained during the research process. For example a concerted effort was made to anonymise any identifiable data through the use of pseudonyms.

Thus the evaluation report was disseminated to the stakeholders with the meeting invitation, to ensure that all parties had a copy of the report for their reference purposes, as well as the list of the proposed meeting objectives (which were approved by the consultancy leads). King (2003) postulates that in order to disseminate effectively, and to evaluate the success of dissemination, one must have a clear set of intentions for what the dissemination is to achieve. As the aim

of the consultancy dissemination was to identify strategies for service development, as well as raise awareness on the interventions effectiveness, the meeting request, and evaluation report dissemination was an important process. The dissemination meeting provided an opportunity to communicate the findings, as well as a means to collaboratively define the action plan for future service provision, evaluation outcomes and strategies, and potentially the future commissioning strategies. Further reinforcing the importance of clear and concise objectives for such communication efforts; especially when the need to develop psychological services is identified, as was for the two psychological services which were evaluated.

My comprehensive knowledge of the intervention designs, evaluation tools, and the key service leads, aided the successful completion of the consultancy, as well as the preparatory stages of the communication efforts. Despite the weaknesses identified in the management of the two psychological interventions and the administration of the evaluation tools, the evaluation findings were used to formulate a balanced argument; highlighting the interventions value and the need for continued commissioning. The findings from the qualitative and quantitative evaluations were combined to provide an evidence base for the two interventions.

For example, the following points were highlighted to evidence the interventions efficacy. Overall both the parents and facilitators felt that the two interventions led to marked changes in the children's behaviour, as they were more compliant, less aggressive, and demonstrated increased social skills, confidence, and self-esteem. Some had noticed changes in academic attainment and diet. Furthermore, in reference to the family-based intervention (e.g. PACTWIN), there were significant improvements in parenting styles, in that parents felt empowered to use appropriate discipline strategies, set clear boundaries, and utilise more diverse forms of communication strategies (i.e. positive praise). The intervention provided an effective support group where parents could openly share their concerns, in non-judgemental environment, which was deemed as a highly cathartic experience which was deeply valued.

The inclusion of the qualitative evaluation demonstrated that not only were the quantitative evaluation measures inappropriate for the service users cognitive abilities, they failed to assess the health related outcomes (i.e. self-esteem, compliance and dietary changes). As the lead researcher I was also able to identify key areas that needed to be addressed from a methodological perspective, as well as from a health psychology perspective, whereby the inclusion of alternative behavioural outcomes could be assessed (i.e. observational behavioural charts and task-orientated self-rated measures). Hence my in-depth knowledge of the two interventions, and the supporting empirical evidence, enabled the successful identification of key dissemination points, which were evidence based.

An agenda for the meeting was devised, to ensure that the key points from the recommendations were translated into detailed action points (see appendix 1). The meeting agenda was sent to the service manager and the health improvement commissioning manager (one of the consultancy clients). Their approval of the agenda was obtained prior to the meeting. Therefore ensuring that meeting objectives met the clients' expectations; maintaining a transparent process in the communication of the process and outcomes of the psychological consultancy (King, 2003).

Reflection

As the lead consultant I was pleased that I was involved in the dissemination stages of the consultancy. Especially as I was given the opportunity to highlight areas for development, and support various members in the team in the strategy identification process; providing a greater sense of ownership.

I was able to reflect on my professional expertise, as a trainee health psychologist, as well as the findings generated from the evaluation, to inform the client and the stakeholders on what areas needed to be addressed. However the insight obtained from the qualitative evaluation, meant that I had a greater understanding on the barriers faced by the service users and the facilitators. This insight was invaluable, as it meant that I had a greater understanding on the micro and macro aspects of the interventions, which meant that I was also able to offer suggestions on how certain changes should be best implemented.

In light of my previous consultancy roles, such an opportunity to disseminate and action change in light of the evidence based recommendations was greatly valued, as it was a rare experience to be included in this phase. The continued contact with the consultancy clients and relevant stakeholders meant that there was a mutual understanding on what aims of the consultancy and the service were. I believe this was paramount in securing my extended role as a consultant and researcher, as it meant that I was able to tailor and specify the relevant points for this communication effort which were relevant to the service objects.

PRESENT INFORMATION ON THE PROCESS AND OUTCOMES OF PSYCHOLOGICAL INTERVENTIONS AND CONSULTANCIES

Without dissemination, there is no knowledge building, theory confirmation, or benefit to service users or practitioners (Thyer, 2001). Dissemination refers to the diffusion of ideas that stem from research, to guide those in applied practice (Thyer, 2001).

However, the methods of dissemination play a central role in the potential uptake of findings. Hence a conscious decision to disseminate supporting material (i.e. summary handouts - intervention recommendations: appendix 2; and the meeting agenda: appendix 1) with the meeting invitation was one way of initiating the thought processes of those individuals invited regarding the evaluation findings and recommendations. But more importantly the meeting would enable the identified leads to plan and discuss the findings in an open and transparent forum. The inclusion of the action points also ensured that there were clearly defined targets; increasing the likelihood of tailored and specific decision making; providing structure to the planning process. Thus the action points were used as a means of translating the findings into actions and applied practice.

A collaborative partnership with the consultancy client and the service manager also ensured that the relevant parties were present in the dissemination meeting. It is crucial to identify the relevant individuals and groups when communicating the outcomes of consultancies or interventions, as the success and impact of the dissemination is partly determined by those groups or individuals that govern or

manage services and budgets. Thus the identification of the relevant leads was another crucial stage in the planning and presentation of the findings.

For instance, the intervention co-ordinator had a substantive amount of experience and tacit knowledge in the practicalities associated with the day-to-day running of the two interventions. Thus her attendance was vital as she would be in a position to advise regarding the logistical elements associated with any of the action plans identified, as an outcome of the dissemination meeting. Similarly the research and service development lead from the specialist community children's services was able to offer specialist guidance regarding the strategies identified for service development. The successful identification and the inclusion of relevant individuals and groups, during such dissemination stages of consultancies, are pivotal in the successful translation of the consultancy outcomes, informing future practice.

All of those present in the meeting were encouraged to introduce themselves, to ensure that everyone had a clear understanding of how everyone was involved in the service and the consultancy, especially as they had different roles and some were meeting each other for the first time. This was a vital step in promoting a collaborative and supportive team environment (Kerner, Rimer, & Emmons, 2005), which proved to be most facilitative during, and after the brainstorming section of the meeting; demonstrating the need for open communication channels (Crawford, Johnson, & Valdez, 2011). Thus the meeting had helped to encourage and promote the basis for collaborative working partnership for the latter implementation stages; reinforcing the efficacy of this form of dissemination.

It was also important that I structured the material for the dissemination meeting, allocating sufficient time and prioritising various topics. For example, as the vast majority of the stakeholders had direct involvement with the two interventions, a very brief overview was provided on the interventions. Hence a greater focus was placed on the evaluation findings and the recommendations identified. In order to minimise the use of technical jargon, greater time was allocated to the explanation of the research methodologies employed in the evaluation, to aid a greater understanding of how the results were generated, as well as the

importance of the utilising a range of measures for such interventions targeted at this population. This was particularly pertinent, as major flaws in the previous evaluation strategy employed had been identified. Thus a conscious decision was made to focus on the key points that had wider implications for future service provision as a result of this communication effort.

As the majority of those present in the meeting had minimal experience with qualitative research, they were keen to explore the various data sets. As the lead researcher I was able to identify evidence from the qualitative data sets to highlight areas of effectiveness, which I then further supported with existing quantitative findings (appendix 4 and 5). Thus I demonstrated that I was able to present accurate and comprehensive data, in a method that was tailored to the audience's knowledge base; within a flexible medium.

In light of the evidence presented, the stakeholders were encouraged to focus on the three following action points; (1) the identification of a new evaluation strategy; (2) explore the current marketing strategy and areas for development; and (3) review service specification targets and relevant action plans to meet targets for the forthcoming year. Thus the agenda for the meeting ensured that the stakeholders had a sound understanding of the process involved in the generation of the three distinct action points. The brainstorming task ensured that the stakeholders were involved in the planning process, even though the action points were identified for them; promoting a collaborative communication process. For example the stakeholders were able to identify and plan the steps needed for the various strategies, as well as identify who would be most suited to the designated tasks. This ensured that all parties were open to follow-up meetings and discussions in order to implement the action plans; elucidating the importance of such a transparent and collaborative form of communication.

Reflection

The reaction to the dissemination meeting was very positive. The overview of the service evaluation findings ensured that those present in the meeting had a sound comprehension of the data set, and the rationale behind the suggested action points. This insight aided the collaborative planning process, as well as promoting a shared sense of ownership of the strategies identified. There was an

appreciation for a more rigorous, reliable and tailored evaluation tool, as a result of the points highlighted in the dissemination meeting. Thus exemplifying that evaluations have to be tailored to suit the activity and circumstances of individual services/interventions (Nutbeam, 1998). This was extremely reassuring, as the communication had successfully highlighted the areas of improvements, as the managers present were in favour of implementing the action plans.

The experience obtained throughout my training (i.e. other consultancy projects, presenting at conferences, teaching and training) equipped me with the confidence and the relevant skill set to present to such a panel of multi-disciplinary health professionals. For example I was aware that making the information concise and specific was important. Similarly my role as the lead consultant/researcher meant that I was able to efficiently answer questions, due to my in-depth knowledge of the data set. However this experience was most rewarding, as I was involved in the all phases of the consultancy, which meant that I was able to also see the implications of my work, as well as appreciate the value in such communication efforts.

EVALUATE THE IMPACT OF DISSEMINATED INFORMATION

Two phases of evaluation were identified to assess the impact of the disseminated outcomes. Firstly it was agreed that the impact of the consultancy dissemination would be assessed by whether the recommended action plans would be approved and actioned, and secondly whether the action plans were implemented. A range of evaluation phases provided a more sensitive measure to assess the impact of the disseminated information, and the various evaluation phases were assigned specific outcome measures (Nutbeam, 1998). The following illustration depicts the various phases and sub-components of the evaluation.

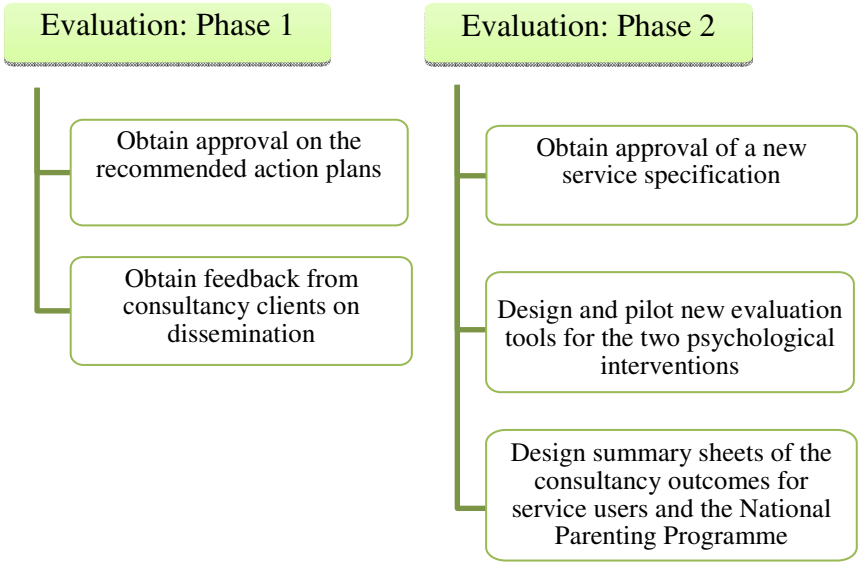


FIGURE 1: Dissemination Evaluation Model

It was particularly important to initially assess whether the action plans identified were to be approved. As it would be indicative of the effectiveness of the dissemination activity, and whether I was able to present a sound evidence base for the continued investment for the two interventions; in light of the methodological hurdles faced due to the poor selection and administration of the initial evaluation tools selected by the service team (prior to my involvement as a consultant). Thus the dissemination meeting was a prime opportunity to explain the findings, and highlight the inclusion of the qualitative evaluation, to ensure that the stakeholders could make an informed decision on whether these two psychological services were effective, and whether the allocated funding was to be continued.

In light of the unanimous decision to approve the recommended action plans, it could be inferred that the dissemination of the consultancy outcomes was highly successful, in highlighting the psychological interventions efficacy, and the continued investment in developing the services further. The stakeholders approved the recommended action plans by setting into motion the relevant steps for service development, service evaluation development, and marketing efforts.

However not only did the meeting highlight the psychological benefits of such school-based and holistic family interventions, the importance of effective

evaluation measures was recognised, as the commissioning manager and the service manager both approved, and heavily emphasised the need to design and pilot a new set of evaluation measures. Furthermore a series of follow-up meetings were held with the lead consultant/researcher and the commissioning manager in order to review the outcome measures assigned (e.g. the supporting evidence justified the inclusion of specific health outcomes, amongst others), and the proposed targets for the forthcoming financial year. Hence the need for reliable measurement tools, to inform future commissioning activities and service provision, was recognised. Once again, evidencing the effectiveness of the consultancy outcomes dissemination, as the information had clear implications in informing future actions (i.e. development of evaluation tools, a new service specification, and marketing strategies), as well as the acceptability of the communicated recommendations

Furthermore, as part of the phase one evaluation the service manager and the commissioning manager, were requested to provide feedback (e.g. verbal and written) on the following factors outlined in appendix three. The commissioning manager verbally expressed that she deemed my communication skills to be of a high standard (e.g. being able to tailor the information for various audiences), and that I successfully demonstrated my ability to address the areas of action, translating the findings into applied practice; as well as maintaining and applying an evidence-based approach. The consultancy clients gave me clearance to lead and manage the agreed action points generated from the dissemination meeting, highlighting my professional competency to carry out the assigned tasks, and manage the additional responsibility. Thus the skill set that I possessed as a trainee health psychologist was acknowledged, permitting an extension of my consultancy and research role.

With reference to the phase two evaluation, I successfully developed summary sheets of the consultancy outcomes, as part of the marketing strategy (appendix 4 and 5), a new service specification was composed from a set of recommendations (appendix 6), and a range of evaluation tools were designed for piloting (appendix 7). Thus it was successfully evidenced that the dissemination of the consultancy outcomes, had a significant impact, as the following action plans were successfully implemented, and the separate tasks were positively received. For example the

new evaluation was commended. In a one-to-one meeting the commissioning manager, described the evaluation as more 'colourful, fun, tailored, and interactive'. My ability to work with multi-disciplinary teams (e.g. tailoring communication and content of reports/summaries), and the successful incorporation of feedback within my practice was identified, as well as reinforcing the efficacy of collaborative working partnerships across various disciplines (Glen, 1999).

Upon the successful completion of the action plans, identified from the dissemination meeting, I was given further permission to pilot and offer training on the new evaluation tools, and evaluate the impact of the summary sheets. However, due to the budget cuts in the National Health Service, the progression of the action plans was halted, as the two interventions were to be decommissioned, in spite of the supporting evidence for these two valuable psychological interventions. Thus the forecasted piloting and evaluation was could not be continued.

Despite this hurdle, I was recognised as a lead consultant within the trust, as requests to evaluate similar interventions were forwarded to me. Thus I translated the key learning's and findings from the service evaluation, to assist colleagues in the Children's Health Improvement Directorate in their planning stages of their intervention and then with their planning stages for evaluation (i.e. I was able to recommend a similar evaluation model, whereby facilitators, parents and the service users were included in the evaluation).

Reflection

Despite the evaluation showing the efficacy of the two interventions; the action points were limited in their impact as they could not be fully implemented and evaluated as forecasted, due to macro-economic factors. This raises questions in clinical practice, as it provides a harsh reminder that the provision of services are governed by economic factors, and that primary care services are given precedence over many tertiary services.

As a researcher I felt deflated and annoyed, as the provision of these two psychological interventions, which had been shown to have positive behavioural outcomes, were to be withdrawn from a population of service users that are most vulnerable. Despite this outcome, my expertise was recognised, which enabled me to advise and apply the learning's from the case study consultancy to other projects. Thus dissemination of psychological outcomes and consultancies also provide an invaluable opportunity to raise the profile of health psychology, which is paramount to the development of this growing field, as it highlighted how health psychology can be applied within public health.

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Appendix 1 - Meeting Agenda

Meeting Agenda
PACTWIN and WhyTry Evaluation Outcomes

Meeting requested by: Parmpreet Kalsi
Consultant/lead researcher contact details: **********

Objectives:

- Disseminate findings from the PACTWIN and WHYTRY service evaluation commissioned by NHS South West Essex since 2008
- Review the recommendations for the two interventions.
- Identify key action points in order to address service development and future commissioning activities.

Introductions

Evaluation Summary:

- The service evaluations of PACTWIN and WhyTry have shown the strengths and weakness the interventions, as well as areas for action.
- Both interventions have shown that the service users developed enhanced behavioural and social skills.
- Hence interventions such as PACTWIN and WhyTry, provide a medium for preventative mental and physical health; which have the potential to elicit long-lasting beneficial effects on individuals and their families, such as better parent-child interactions (Huppert 2004).
- However the need for greater planning in the evaluation tools is an area of extreme importance. For example the quantitative measures selected for both interventions were not ideal for the service users, as the questions were not relevant and the language was too complicated.
- Therefore designing a suitable evaluation framework is of great importance for future PACTWIN and WhyTry evaluations.
- The deployment of new evaluation tools must be piloted with staff and service users. In order to ensure the tools are suitable in terms of administration and tailored to the intervention goals (i.e. behavioural

objectives such as compliance), as well as for the service users cognitive levels of functioning.

- The need for continued training should be addressed. Staff must be trained in the administration of evaluation tools. There should be an appreciation and focus on the importance of effective evaluation data. For example staff should be more proactive in ensuring that all measures are collected (i.e. both pre and post), and that team leaders are aware of how to calculate scores from the measures utilised.

Proposed Action Points

- Identify a new evaluation strategy
    - *e.g. alternative tools, piloting of tools, implementation of new evaluation measures*

- Explore the current marketing strategy and areas for development

- Review service specification targets and relevant action plans to meet targets for the forthcoming year.

Brainstorming Session

Points to Action – TBC

CLOSE

Appendix 2 - PACTWIN & WhyTry Service Recommendations

1.1 PACTWIN Service Recommendations

Structure

- The holistic approach of the service is crucial, as this evaluation has emphasised changes in the parenting skills tend to translate into behavioural changes in the children (i.e. reduction in over activity, and impulsivity, non-compliance, and aggression).
- It is important to develop partnerships with schools to raise awareness of PACTWIN and the range of behavioural needs the family and the focus child have, so that school staff can identify such problems, efficiently and provide effective help. Highlighting the need for collaborative work.
- As support was influential for all three PACTWIN strands, it would be ideal to provide monthly top-up sessions, to reinforce PACTWIN maintenance, whilst offering a medium of support for both parents and the children. Whereas alternative support mediums (i.e. an online forum, drop in centre or telephone support) would also be useful for parents with more complex needs.
- The programme is currently functioning well for the parent strand. However efforts are required to tailor the programme for the two children strands, as the results revealed vast age variances and behavioural needs, especially in the sibling strand. Hence completion of a risk assessment for each family, in the early stages of the intervention, and an ongoing observation sheet per session could facilitate tailoring (i.e. allocation of age appropriate tasks).
- It would be ideal to offer additional sessions in the PACTWIN programme. For example where experienced PACTWIN service users could attend in weeks 1 or 2, to act as mentors; and potentially assist in minimising any initial anxiety in new service users. As well as providing an educational session for friends and family members to attend, in order to raise their awareness on the needs of the family, and how they could assist in ensuring consistency of PACTWIN.
- In addition it would be important to incorporate the self-esteem lecture, delivered by the service manager into the PACTWIN syllabus; ideally in weeks 3 or 4 in the session outline, as it was found to be very useful for the parents.

Tools

- The interactive tools/tasks incorporated into PACTWIN were extremely useful in engaging with children. Thus efforts should be made to ensure that theoretical principles are taught and delivered in an interactive way, as currently completed for the toast task (promotes sharing), making the shields (defence mechanisms), cartooning, etc.
- PACTWIN should continue to build on the rules principle. As both the quantitative results (obtained from the children), and the qualitative results (obtained from the parents and facilitators), have verified it to be a highly effective tool, in developing better parent-child interactions, creating greater understanding in the families.

- The reflective journal was instrumental in PACTWIN being successful for the parent strand, as the qualitative feedback exemplified from the Parent Journal Feedback (appendix 6), and the parent focus group results. Hence the priority for further development of this tool must be acknowledged (i.e. template sheets, weekly reflection sheets, etc), as without this tool the parents disclosed that they would not have been able to reflect on their family dynamics, and their parental behaviour efficiently, which could have hindered the practical implementation of the PACTWIN principles.
- It would also be apt to use the facilitators as key developers in designing the new journal as they have valuable insight on what tools to include, or not.
- Massage was identified as an effective tool by the parents and the facilitators, as it assisted in enhancing the parent-child interactions, as well providing a kinaesthetic medium to facilitate engagement between parent and child.

Resource Management

- It would be imperative to secure a PACTWIN base, with three adjoining rooms, outdoor space and suitable storage to ensure that the three strands can run as intended, providing the necessary privacy to facilitate disclosure, and better resource management.
- Facilitators currently tend to have full-time jobs, and cannot provide greater time allocation to PACTWIN as it requires. Hence it would be ideal to invest in a team of full-time PACTWIN staff, so that they could cater for those families that require home-visits, etc. This would also allow facilitators to allocate time for pre-session planning which was desperately needed, to enable tailoring.
- It was evident that the parents and facilitators recognised the need for consistent PACTWIN maintenance and delivery. Hence it would be advisable to use partnerships with schools to permit greater PACTWIN collaboration, so that learning support assistants (LSAs) have greater awareness of PACTWIN children and some PACTWIN tools to permit consistency for the child (i.e. use of rules, descriptive praise, etc).

Training

- It would be ideal to provide *bite-size* training, as the material was too vast to learn efficiently. It is imperative that top-up sessions are offered to facilitators, as provided for WhyTry, as it would act as a reminder for PACTWIN tools, in a condensed format.
- Additional topics on behavioural management should be included in the training, as the facilitators felt that they needed more training on how to deal with challenging situations and basic restraint management.
- On-the-job training should be used to provide facilitators with the varied skill-set to work with all three PACTWIN strands. As facilitators felt that they could gain more insight on the family dynamics, by moving around the various PACTWIN strands, which they could not currently achieve when just working with one strand.

Evaluation

- As evidenced by this evaluation, it is important to utilize multiple informants in the assessment of the intervention, as it provides greater content and contextual validity, by allowing the identification of those measures which are of greatest importance to the families, such as adaptive measures:

    - ◊ The completion of tasks and daily living,
    - ◊ Participation in social and recreational activities,
    - ◊ Social relationships with siblings and parents.

- It would be worthwhile to use another set of measures to assess the interventions impact, as the questions for the children were not suitable, and the children struggled to engage with the evaluation process. For example children could be asked to evidence examples of change (i.e. are things calmer at home? If so how…, etc) to provide a more ecological insight.
- However, it is vital to ensure that any alternative evaluation measures are colourful and interactive; to maximise potential engagement from the children.
- Furthermore case notes should be used by facilitators to track each child's progress, which would facilitate better tailoring, the identification of complex needs, etc. As well as offering an ecological measure, with higher reliability compared to the just pre and post measures which can be confounded by uncontrollable factors. A weekly observational sheet for each strand may also be useful.
- Alternatively a Parenting Stress Index could be used to assess how PACTWIN affects coping skills in parents. As parents who felt they had more control over their child's behaviour, reported lower scores on the parenting stress index.
- It is imperative that future PACTWIN evaluations should include the following measures listed below; and that agreements are made between schools to provide such data for the children attending PACTWIN at the times stipulated.

    - ◊ Attendance rates 3 months pre and post intervention, and reasons for absence.
    - ◊ Fixed term exclusion rates 3 months pre and post intervention
    - ◊ Number of disciplinary actions for the student/s undergoing the interventions for 3 months pre and post intervention
    - ◊ Drop out rates for the programme – Students who dropped out and/or students excluded from the programme, and the justifications for this.
    - ◊ SEN status for the focus child.

Marketing and Referral Pathways

- Greater efforts should be made to raise PACTWIN awareness amongst key stakeholders (i.e. potential service users, school staff, health care

professionals, etc), so that people can access the service readily, as some service users did not know that the service existed.

- Leaflets were deemed as a suitable medium to raise awareness in potential service users. However attention to the wording and content is of great importance, as the parents suggested that the support element should be emphasised, more so than parenting training element.

1.2 WhyTry Service Recommendations

Structure

- Overall, the WhyTry structure seems to be most advantageous, as the tools and resources are applicable for the current population it has been used for; which was facilitated by the multi-sensory approach of WhyTry, and the *ready-made toolbox* of resources.
- In addition the WhyTry ideologies (i.e. reality ride) are transferable to the wider population of children in South West Essex, as two facilitators demonstrated in a recent summer school programme. Thus, the wider implementation of WhyTry (i.e. inclusion of the reality ride visual in students planners), would not only benefit the wider population in South West Essex, it would also add more consistency to the WhyTry implementation; which is integral for such interventions, in order to maintain the positive effects for such programmes.
- The current WhyTry training material has been very effective, and the valuable training top-up sessions must be maintained, as this has encouraged increased WhyTry uptake and maintenance among facilitators.

Raise Awareness

- Efforts should be made to develop partnerships with school, to raise WhyTry awareness, which could encourage more commitment to WhyTry amongst staff. As some facilitators have experienced resistance to WhyTry implementation. Consequently these partnerships could aid greater time allocation for facilitators to complete WhyTry implementation and planning.
- Facilitators suggested that inset days should be used to deliver and disseminate information on WhyTry to raise awareness amongst school staff, to encourage greater commitment to the programme.

Evaluation

- Future WhyTry evaluations should include multiple informants, in order to provide greater content and contextual validity, as evidenced by the inclusion of facilitator feedback in this service evaluation. For example, the quantitative measures did not detect increases in all of the behavioural outcomes assessed, but the facilitator reports evidenced changes in these measures (i.e. concentration and school commitment).
- It would be worthwhile to use another set of measures to assess the interventions impact, as the questions are not suitable for the children, and the children struggled to engage with the evaluation process. For example children could be asked to evidence examples of 'where they felt more confident', etc; to provide a more ecological insight.

- However, it is vital to ensure that any alternative evaluation measures are colourful and interactive; to maximise potential engagement from the children.
- Furthermore case notes should be used by facilitators to track each child's progress, which would offer an ecological measure with higher reliability, compared to just the pre and post measures, which can be confounded by uncontrollable factors. A weekly observational sheet for each child may also be useful.
- It is imperative that future WhyTry evaluations should include the following measures listed below; and that agreements are maintained between schools to provide such data for the children attending WhyTry.

    - ◊ Attendance rates 3 months pre and post intervention, and reasons for absence.
    - ◊ Fixed term exclusion rates 3 months pre and post intervention
    - ◊ Number of disciplinary actions for the student/s undergoing the interventions for 3 months pre and post intervention
    - ◊ Drop out rates for the programme – Students who dropped out and/or students excluded from the programme, and the reasons for this.
    - ◊ SEN status for the focus child.

Appendix 3 – Phase one evaluation

Please rate the following below:		Very Poor	Poor	Satisfactory	Good	Very Good
Objectives	Dissemination of the service evaluation findings					x
	The recommendations review					x
	The identification of key action points to inform service development and future commissioning activities					x
Communication & listening skills	Verbal communication				x	
	Ability to explain psychological or technical terms					x
	Listening skills					x
	Ability to incorporate alternative solutions and suggestions				x	
Organisation	Organisational skills (I.e. meeting agenda, meeting invitation)					x
	Time management					x
Applied Practice	Ability to translate solutions into actionable points					x
	Relevance of the action points identified					X
	Practicality of the action points identified					x
Supporting Material	The quality of the supporting material					x
	The content of the supporting material					x
	The relevancy of the supporting material					x
Overall	Overall management of the meeting					x
	Overall presentation skills					x

Other Comments:

Parm led on the service evaluation of the PACTWIN and WhyTry service. She also led the dissemination of the evaluation findings. Dissemination of the PACTWIN and WhyTry service evaluation findings informed the subsequent actions:

- New evaluation tool design (tailored to different people)
- Refined evaluation outcomes and revision of the service specification
- Summary Sheets for the National Parenting Programme

Parm played a large role in ensuring that the service users and the parents were informed of the evaluation findings. Parm was always aware of her audience and tailored her messages accordingly. She was very conscious about sensitivities and the way she communicated with relevant stakeholders. Parm has done an excellent job, almost all independently, with a lot of enthusiasm.

Henna Ali

Health Improvement Commissioning Manager, NHS South West Essex, Line manager to Parmpreet Kalsi

Appendix 4 – Summary Sheet

NHS South West Essex

SUMMARY OF PACTWIN SERVICE EVALUATION

Overview of Intervention

A holistic service providing a psycho-educational service for families who have children (aged 5-18 years) with learning difficulties, behavioural problems, family and social problems. Sessions are run in the evenings and family members are divided into the three strands:

1. Parents
2. Siblings
3. Focus children

Referral route: Paediatrician clinics in South West Essex.
Number of service users: 61 parents, 34 focus children and 22 siblings.

Aims for Service Evaluation

1) Assess the impact of PACTWIN on all three of the strands, by utilising both a quantitative and qualitative methodology.
2) Assess whether parent-child interactions improved.
3) Identify the strengths and weaknesses, in response to service users' feedback.
4) Provide evidence based recommendations for future PACTWIN interventions.

Evidence for family-centred interventions

Problems in parent-child interactions, marital relationships, and family functioning were found to be common factors, in some families of children with attention-deficit/hyperactivity disorder (ADHD), and other behavioural difficulties (Cunningham, 2007; Labato & Kao, 2002). Relational difficulties in the families of children with ADHD can also adversely affect the child's interactions in other contexts (i.e. with peers, teachers, etc); asserting the need for family-centred interventions to minimise this negative pattern. Labato and Kao (2002) successfully demonstrated that a family centred intervention led to better interactions within families, as the intervention raised awareness on the focus child's condition, whilst instilling adaptive coping mechanism in the siblings. Hence, family-centred interventions offer tools and apparatus to empower effective parent-child interactions, whilst providing support for the various family members.

Methodology

A mixed methodology was utilised to evaluate the efficacy of the PACTWIN intervention

Quantitative

Measures:
Parent Strand:
- SOUL Record – Parenting Questionnaire (21 items, assessing attitude, interpersonal skills, and practical factors).

Children Strands:
- Children's PAC

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Participants: Pare rs

Design and Analys
Parent Strand: Within-group design. The pre and post evaluation data was analysed by a paired samples *t*-test.
Children Strands: Post intervention measure – thus descriptive analysis was conducted for the pre-defined responses the and open ended responses.

Qualitative

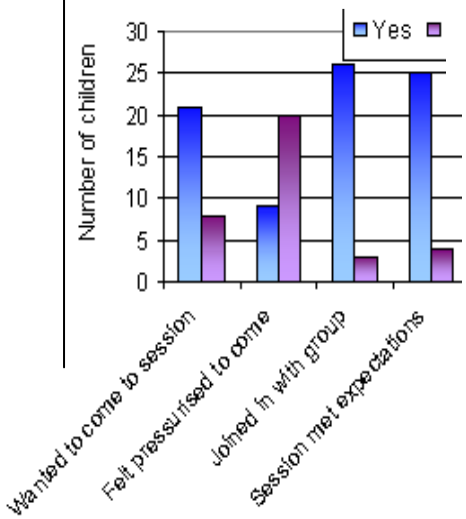
Measures: Facilitators: Focus Group
Parents: Focus Group, PACTWIN Course Evaluation, and Journal Evaluation Form

Participants: Facilitators: *n*=4 (all female) / Parents: *n*=6 (2 fathers, 4 mothers)

Design: Semi-structured question list

Analysis: Thematic and content analysis

Chart 1-Levels of children's engagement with PACTWI



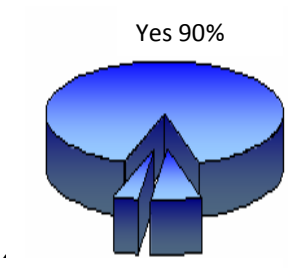
- Children rated the sessions as very friendly, relaxing and interesting.
- Chart 1 further reinforces the children's interest and engagement with PACTWIN.
- The textual responses revealed that the majority of the children wanted the programme to continue.

Children's thoughts on the parent-child interactions

- 90% of the children disclosed that things were better at home at the post phase of the intervention; as pictorially represented in chart 2.
- It appears that the rules have enabled changes to be translated into the family context, assisting parent-child interactions.
- The quote below shows that the parent and child seem to be more aware of each others responses, and can use the boundary tool, to potentially alter maladaptive behaviour in the child.

It's helped because I get a warning which helps

Chart 2 –Response to 'are things better at home'



Results for Parents Strand

Quantitative Results: It was therefore apparent from these results that the parents had significantly increased in their parenting skills, and overall behaviour ($p < .05$). For example the parents had shown an increase in their self reported: usage of appropriate discipline, ability to set clear boundaries for children, time spent listening to their children, and looking for opportunities to praise members of the family. There was also an increase in the parents' perceptions of improved parenting, and they significantly felt that they got on better with their children.

In addition the results had shown that the parents had shown significant increases in certain behavioural traits, as they had increased in their organisational skills, confidence as a person, their ability to exercise self-control, their positive regard for themselves, and their ability to cope with constructive criticism.

Qualitative Results:

Five major themes were identified from the qualitative data set generated from the parent focus group. These were support, pitch, consistency, empowerment and tools.

Parents stated that the support gained from PACTWIN was invaluable to them, as '…*you realise that you're not alone and you're not a bad parent as everyone keeps telling you…'*
The holistic approach was effective for parents, as it was aimed at the families needs as a whole unit, not just about the focus child. This quote also describes how the various strands in the family were empowered with enhanced coping skills. *'It makes everyone cope better with it… the children came out much more better, they were happier because they could talk about their feelings more and we learnt different ways to approach it.'* The parents identified the reflective journal as a specific tool that was useful to them (supported by the Journal Evaluation Form findings), as it gave '…*different tips and techniques… you could tick on whether you shouted today…which then reminded you to use descriptive praise. That's what I found was good … just the reflectiveness of it. That's why the journals were fantastic.'*
Noticeable changes were reported by the parents for the focus children as a result of PACTWIN. For example academically children had shown significant progress '*… he's gone up a grade in school, he's won some awards at school, so I think it's had a big effect on him.'* As well as in social skills development and self-esteem '*…her interaction was much better, she seems much happier at br… positive effect of PACTWIN.'*
However parents disclosed … s needed to be consistent in a range of con… *t school because they spend the majority of t…*

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Qualitative Results for Facilitators

Three themes emerged from the qualitative data set generated from the facilitator focus group (resource management, structure, and empowerment). Overall, facilitators deemed the current organisational structure as successful, as the two facilitators per strand ensured effective resource distribution. Despite this, facilitators suggested that planning time could assist in tailoring, as required in the sibling strand, due to vast age variances. Despite this, facilitators acknowledged that once they achieve *'…the right infrastructure, full-time staff…PACTWIN could be fantastic!'*

The current PACTWIN 'toolbox' was deemed as effective by the facilitators; *'…cartooning worked fantastic. One of the siblings did not engage… but after the cartooning and when we talked about changing our labels… he did fantastic.'* Massage was also deemed beneficial by the parents and the facilitators; providing a kinaesthetic medium to facilitate engagement between parent and child. Whereas the parent's reflective journal was useful in facilitating and prompting behavioural changes for parents. Facilitators' were passionate to improve PACTWIN, as they saw it's efficacy in providing support to the family as a whole, and enabling positive changes. *'There was a considerable change…50% of the children if not higher… We saw a change in the group, their confidence… self-esteem, manners…'*

Conclusion

PACTWIN has been evidenced as an effective and useful positive psychology intervention for the target service users, due to its holistic approach. Areas of improvement were identified, and efforts for service and evaluation framework improvement are or great importance.

Service Recommendations

- Offer monthly top-ups for children and the parents to ensure support is continued.
- The service framework should be reviewed to ensure the two children strands are given tailored services, which are age-appropriate. Hence completion of a risk assessment for each family, and progress tracking could facilitate tailoring.
- The reflective journal was instrumental in PACTWIN being successful for the parent strand, and this resource should be further developed (i.e. template sheets, weekly reflection sheets, etc).
- The evaluation framework needs be reviewed. Suitable measures per strand are required (i.e. age appropriate), the inclusion of multiple informants – facilitator observation sheets, and additional follow-up evaluations (i.e. 3, 6, 12 months).
- Marketing should be reviewed, to raise awareness of the service. Service users thought leaflets would be a suitable medium.

Appendix 5 – Summary Sheet

Summary of WhyTry Service Evaluation

NHS South West Essex

Overview of Intervention

Aimed at children aged 5-18 years with learning difficulties, behavioural problems, and social problems, to overcome their challenges and improve outcomes in the areas of truancy, behaviour, and academics. WhyTry is based on solution focused brief therapy and multi-sensory learning.

Sessions were run in the school setting.

Referral route: School staff in South West Essex.
Number of service users: 336 children (241 boys and 95 girls)
Method of delivery: 50 groups and 45 one-to-one sessions.

Aims for Service Evaluation

1. Assess the impact of WhyTry on the children by utilising both a quantitative and qualitative methodology.
2. Evaluate whether WhyTry was successful in adapting children's behavioural outcomes (i.e. anger, self-esteem, hope, and school bonding and commitment levels) and what tools may have assisted, if any.
3. Provide evidence based recommendations for future WhyTry interventions.

Evidence for WhyTry

WhyTry has reduced truancy, improved academics, and changed the climate of schools throughout the United States, in a variety of contexts. Empirical studies have found school based interventions to be most advantageous in increasing psychological and physical well-being. Felner et al (1993) reported that such interventions which focused on developing supportive social interactions with peers and teachers, proved to be more effective in adjustment to school change and academic performance, compared to those interventions that just focused on coping and problem solving.

Whereas a meta-analysis conducted on studies which had evaluated school based interventions for children with ADHD, found school-based interventions to be clearly effective in reducing ADHD-related behaviours; whilst emphasising the importance for such interventions to provide consistent, ongoing support to maintain the positive effects of a chosen intervention (DuPaul & Eckert, 1997). Thus school based interventions provide a supplementary tool to preventative healthcare intervention, with the potential to promote well-being.

Quantitative Methodology for Service Users

Measures:	*Prevention Planning Survey* - used as a measure to assess anger levels in the service users. It is a 12 question self-report q… *et angry I slam doors/ I mak…*
	Children's H… This is a 6 item self-report q… e assesses two components …ys (capacity to find a means to carry out goals), as well as assessing problem solving, decision-making abilities, and self-attributions.
	Rosenberg Self-Esteem Scale - a 10 item self reported questionnaire that assesses self-esteem *(i.e. I am able to do things as well as most other people; I do not have much to be proud of; I take a positive attitude toward myself, etc).* This tool has high validity, and has been found to be effective for assessing self-esteem in adolescents.
	Student Survey of Risk and Protective Factors - School Bonding/Commitment - used to assess school bonding/commitment, in terms of school attendance and engagement with school activities. The self-reported questionnaire has nine items *(i.e. how often do you feel that the school work you are assigned is meaningful and important; how interesting are most of your courses to you, etc).* This tool has high validity, and has been found to be effective for assessing this construct in adolescents.
Participants:	27 Children
Design & Analysis:	Paired samples *t*-tests were conducted on the pre and post means generated for each of the four measures used to assess anger, self-esteem, hope, and school bonding and commitment levels.

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Quantitative Results for Service Users

The analysis revealed that for self-esteem, hope, and school bonding and commitment levels there were increases in the means from the pre and post measures, and a reduction in anger levels. However not all of these were statistically significant, apart from self -esteem, which was statistically significant ($p<.05$). **Thus the quantitative results revealed that WhyTry has led to significant changes in self-esteem in the service users.**

Summary table for WhyTry quantitative results

Measure	Pre mean	Post mean	Significance ($p<.05$)
Anger	2.3	2.2	N
Hope	20.1	23.2	N
Self-esteem*	**2.5**	**2.8**	**Y**
School bonding and commitment	3.67	3.72	N

Qualitative Methodology for WhyTry Facilitators

A focus group was conducted with 4 facilitators (all female). A semi-structured question list was used to retrieve the qualitative data set that was analysed with thematic analysis.

Qualitative Results for Facilitators

Three themes were identified within the data set retrieved from the focus group conducted with the WhyTry facilitators. These were structure, collaboration, and mechanisms for change.

Structure

The structure of WhyTry was positively received as the quote indicates *'I thought it was absolutely brilliant.'* Facilitators felt that WhyTry was a successful instrument to use confidently, as it was not rigid in its applicability. *'It is not dogmatic, rigid and inflexible. Whatever you need at that time, you bring in what you need as you go along.*' They also believed that WhyTry was a tailored package that was appropriate for all ages and behavioural needs.

Hence facilitators felt that WhyTry was applicable to most school children, not just those children with behavioural problems; as its principles were deemed transferable to all children (i.e. *WhyTry reality-ride ideology*), and it would assist in promoting a consistent message. '*Every single child has those issues at some point…we could actually identify…I remember when I down the slippery slope!'*

The WhyTry materials were also found to be efficacious, as the multi-sensory materials are highly effective, in warranting the engagement with the tasks and WhyTry principles. *'They were interested and motivated by the activities… you were able to engage them…quicker and for longer.'* Facilitators felt WhyTry provided a *ready made toolbox. 'You had music…in terms of the teaching resource it was brilliant - it had everything…posters.'* However evaluation needs to be simplified, as it was hard to engage children with this process, *'bring self-esteem down into words they understand'*.

The training top-ups were extremely appreciated by the facilitators as they acted as reminders, whilst enhancing their knowledge base. Hence the WhyTry programme was well received by the facilitators. *'I've been on masses of courses over the years - and it was one of the very few courses that I've been on that you came away and thought, WOW!'*

Collaboration

Facilitators felt that WhyTry could potentially have a greater impact if there was increased WhyTry uptake and consistency within schools. Engagement with school staff, especially at a senior level could encourage increased involvement; promoting WhyTry language and maintenance for the children. '*If more WhyTry language could have been used I think we would have seen…sig*

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Mechanisms for Cha

All of the facilitators ents; validating the quantitative findings. *these children have got low self-esteem and are sensitive to criticism because it immediately stirs up those feelings, and they don't access learning because of it ...increase their self-esteem and their self-worth, they're much more likely to access learning and to deal with the everyday challenges.'*

In addition, facilitators noticed increased concentration levels, academic achievement and increased attendance rates in the children. For example, the children were keen to come into school, as they looked forward to the WhyTry sessions. In addition specific tools such as the *reality-ride,* was deemed as most effective for adapting negative behaviour, as they could self-identify the early stages of a negative behavioural response. *'He'd come over and say I'm on the red ride… He can identify that he's not where he should be…I'm on the grey ride now…no, I want to get back on the… and that's a huge thing!'* Whereas the defence mechanisms and hurdles, led to increased self-awareness and confidence.

Overall the facilitators valued that WhyTry focused on inclusion for these children rather than exclusion. *'This is something constructive and positive to help that child to be valued, as an individual…to actually make some choices about how they behave or how they're supported… I think it's a great thing.'*

Conclusion

WhyTry was seen as an effective programme for the service users. However greater collaborative work is needed to ensure it is implemented to its full potential within schools.

Service Recommendations

- Partnership work with schools could increase knowledge of WhyTry amongst school staff, which could assist in ensuring greater time allocation for facilitators to complete WhyTry implementation and planning, with less resistance.
- The possibility of broader WhyTry dissemination in schools should be reviewed, as the tools are potentially transferable to most children. Reinforcing the applicability of such positive psychology interventions, as they have great potential at a population level.
- The evaluation framework needs be reviewed and designed, to ensure suitable measures are used for the children (i.e. age appropriate), the inclusion of multiple informants – facilitator observation sheets, and the addition of follow-up evaluations phases (i.e. 3, 6, 12 months).

Appendix 6 - Service Specification Recommendations

Review of the PACTWIN and WhyTry Service Specification (October 2009)

Supporting evidence for PACTWIN and WhyTry

The service evaluations of PACTWIN and WhyTry have shown the strengths and weakness the interventions, and areas for action. Both interventions have shown that the service users developed enhanced behavioural and social skills; highlighting the interventions efficacy in satisfying the following outcomes outlined in the service specification.

- **To help parents and other family members to manage children's challenging behaviour.** The reflective journal was particularly effective in enabling change for parents, as they reviewed their behaviour.
- **Promote positive mental health and wellbeing to all family members.** The holistic approach aided efficient translation of PACTWIN tools, which led to consistent changes in all family members.
- **Promote resilience and self esteem of children and parents.** Evidenced by the quantitative and qualitative findings generated for both interventions.
- **To improve emotional intelligence and social skills of children.** This was evidenced by increased reports of peer interaction from parents, teachers, and other school staff.
- **Promote children's learning and achievement.** Specific examples were identified, where children had either won awards, or increased their academic grades compared to pre intervention stages.
- **Facilitate families to help each other and promote community participation.** Parents stated that a major advantage of attending the intervention was the social support they received from each other, and even after the intervention finished. Highlighting the importance of the monthly top-up sessions for the PACTWIN parent strand.
- **Promote positive peer interaction and reduce negative peer influence. As well as facilitating a decline in anti social behaviour and to ultimately stop this behaviour.** The reality-ride tool was specifically useful for children to identify negative behaviour patterns to prevent escalation. This ability to recognise and identify their behavioural patterns has been evidenced as a powerful tool.

Table 1 provides a summary of other useful tools, identified in the service evaluation.

Table 1 – Summary of effective intervention tools

Effective WhyTry tools	– WhyTry packs *(i.e. posters, metaphors, interactive tasks, multi-sensory approach)* – Reality-Ride concept – Changing labels – Facilitator training

Effective PACTWIN tools	– Rules: facilitated by the holistic approach – Practical tasks to translate theoretical principles for the children strands – Massage – Self-esteem lecture – Descriptive praise – Reflective journal *(however must be developed further with facilitators – to include template sheets, weekly reflection sheets, etc)*

Gaps in Service Specification

Despite the service satisfying the outcomes outlined above, gaps were identified in the service specification. These have been highlighted below:

- **Appoint PACTWIN Coordinator to deliver and coordinate the programme**. This should be actioned urgently.
- **Identify children and families through health, education and social care and also self referral from parents.** Efforts should be made to increase awareness amongst school staff to recognise the needs of the children and family, to ensure that those in need are efficiently referred to the service.
- **Carry out a needs assessment of children and families, especially those families that are unable to access the service. Support families unable to come to group sessions.** The needs assessment process needs to be developed and implemented, to ensure the service is tailored to the needs of the service user/s. It will assist in informed resource allocation (i.e. via home-visits for those families with complex needs).
- **Provide on-going /top-up support at 3 to 6 monthly intervals.** The PACTWIN evaluation highlighted that the frequency of the top-up sessions need to be modified to monthly intervals, and be made available for both the parent and children strands.
- **Trained staff will operate mainly between the hours of 08.00 – 20.00hrs Monday to Friday.** Facilitators often work part-time, alongside other jobs, and often exceed working hours. Thus working hours need to be reviewed and allocation of 'planning time needs' to be incorporated, to permit tailoring for service users needs. In addition, despite all facilitators completing the compulsory training, the training needs to be modified (i.e. condensed format, top-up sessions, including additional topics on behavioural management and evaluation).
- **Establish a 0800 telephone line for referral purposes.** This would be a useful resource to establish, not just for the referral process, but as a resource for service users to utilise when additional support is required (i.e. during and post intervention).
- **Of those who complete the course, the following outcome measures should include (pre and post):**
    - **Level of attendance at school**
    - **Self esteem**
    - **An assessment of anti-social behaviour**
    - **An assessment of attitude towards risk and risky behaviour**
    - **Ability to achieve (by evaluation processes to be agreed)**

There are several gaps in the service specification, stated above. Both interventions need to revise the methods of evaluation utilised, as past measures

were either too complicated for the children to comprehend and to engage with. The following revisions should be made:

- Future evaluations should include the following measures[8]:
    - School attendance rates 3 months pre and post intervention, and reasons for absence.
    - Fixed term exclusion rates 3 months pre and post intervention
    - Number of disciplinary actions for the student/s undergoing the interventions for 3 months pre and post intervention
    - Drop out rates for the programme – Students who dropped out and/or students excluded from the programme, and the reasons for this.
    - Psychological measures: Self-esteem, aspirations, anger, social skills, etc.
    - SEN status for the focus child.

- Case notes or observational sheets should be used by facilitators to track each child's, or each group's progress; providing an ecological measure of the behavioural change. This could be quantitatively analysed, as behavioural markers could be pre-defined.
- Alternative measures should be reviewed to ensure the Every Child Matters outcomes, outlined in the service specification are adequately assessed.
- The evaluation measures for the children should be age appropriate, and prompt children to evidence examples of change (i.e. do you feel more confident… if so how? – WhyTry / Are things calmer at home? If so how? - PACTWIN) to provide a more ecological insight. These measures should be colourful and interactive; to maximise potential engagement from the children.
- Furthermore staff should be more proactive in the evaluation process, to ensure that all measures are collected (i.e. both pre and post), and that they are aware of how to calculate scores from the measures utilised. **Therefore designing a suitable evaluation framework is of great importance for future PACTWIN and WhyTry evaluations** *(Dr P*** and AP to design).*

[8] Agreements must be maintained between schools to provide such data for the children attending the programmes.

Appendix 7 – Example of Evaluation Tool

Name: _____ Date: _____ Pre / Post (please circle)

PARENTS/CARERS PACTwin EVALUATION TOOL

Section A – Demographics

Q1. Please select your age band:

- Under 18 years ☐
- 19-25 years ☐
- 26-35 years ☐
- 36-45 years ☐
- 46-55 years ☐
- 56-65 years ☐
- 66+ years ☐

Q2. What is your gender?

- Male ☐
- Female ☐
- Prefer not to say ☐

Q3. What town do you live in?

- Basildon ☐
- Thurrock ☐
- Brentwood ☐
- Other ☐

Q4. What is you occupation type?

- Managerial or professional ☐
- Administrative or secretarial ☐
- Skilled or trade ☐
- Manual ☐
- Unemployed ☐
- Retired ☐
- Other ☐

Q5. What is your marital status?

- Single ☐
- Married ☐
- Co-habiting ☐
- Separated/divorced ☐

Q6. How would you rate your overall health?

Very health – *I feel good*

ed well

do

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Q7. Which ethnic group are you from?

- White British ☐
- White Irish ☐
- White Other ☐
- Mixed – White and Black Caribbean ☐
- Mixed – White and Black African ☐
- Mixed – White and Asian ☐
- Mixed – Other mixed background ☐
- Asian or Asian British - Indian ☐
- Asian or Asian British - Pakistani ☐
- Asian or Asian British - Other ☐
- Black or British Black - Caribbean ☐
- Black or British Black - African ☐
- Black or British Black - Other ☐
- Chinese or Chinese British ☐
- Other ☐

Q8. How many children do you have?

- 1 ☐
- 2 ☐
- 3 ☐
- 4 ☐
- More than 4 ☐

Q9. If you have more than one child, how many of you other children are attending the PACTwin programme?

- 1 ☐
- 2 ☐
- 3 ☐
- All of them ☐

Section B – Parenting Questions

Q10. In general, during the last month, how would you rate the following:

	Very Poor	Poor	Satisfactory	Good	Very Good
Your interaction with your child/ren with special needs					
Your interaction with your child/ren without special needs					
Your interaction with your partner/ spouse					
Your communication with your child/ren					
Your communication with your partner/ spouse					
The amount of time you spend with your child/ren with special needs					
The amount of time you spend with your child/ren without special needs					
The amount of time spend with your partner/ spouse					
The amount					
Your pa					
Your confidence levels					
Your motivation levels					
Your parenting skills overall					

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Q11. What do you hope to achieve from PACTwin?

	Yes	No
Enhance communication skills		
Enhance coping skills		
Enhance confidence		
Better understanding of my child/ren's needs		
Enhance parenting skills		
Meet with other parents with a similar background		
Support		

Q11i. If other, please state below:

a) _____

b) _____

c) _____

d) _____

Section C – Your Health

Diet and Exercise

Q12. How would you describe your diet?

Good	
Average	
Poor	

Q13. Who prepares your meals?

I do	
Someone cooks for me (partner/spouse/etc)	
Tend to eat ready meals	
Go out for most meals	

Q14. Overall, do/es your child/ren eat the following for lunch (tick 1):

Packed lunch	
School meals	
Come home for lunch	
Other *(please state)* _____	

Q15. How would you describe meal times in general?

	Yes *1*	**No** *2*
Calm		
Controlled		
Enjoyable		
Manageable		
Rushed /hectic		

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Q16. How ofte ...s, burgers, hot dogs, milksha...

Every day	**4-6 times per week**	**2-3 times per week**	**Once a week**	**2-3 times per month**	**Never**

Q17. How often do you and your family eat snack foods between meals (i.e. chips, soft drinks, crisps, chocolates, etc)?

3 or more times per day	**Once or twice per day**	**A few times a week**	**Once a week**	**Never**

Q18. How often do you and your family eat vegetables and fruits (i.e. peas, sweet corn, boiled/baked potatoes, broccoli, apples, oranges, orange juice, etc)?

Every day	**4-6 times per week**	**2-3 times per week**	**Once a week**	**2-3 times per month**	**Never**

Q19. In the past 2 weeks how often have you and your family taken part in moderate physical activities which lasted for more than 10 minutes (i.e. long walks, gardening, etc)?

Never	**1-2 days per week**	**3-4 days per week**	**5-6 days per week**	**7 days**

Q20. In the past 2 weeks how often have you and your family taken part in hard to very hard physical activities which lasted for more than 10 minutes (i.e. aerobics, swimming, digging, running, etc)?

Never	1-2 days per week	3-4 days per week	5-6 days per week	7 days

Smoking

Q21. Do you smoke?

Yes ☐
No ☐

If no please go to question 25…

Q22. Please complete the question below:

			Office use
22a	How many cigarettes per day you usually smoke? Write the number in the box, as well as circle the relevant response.		/
		10 or less	0
		11 to 20	1
		21 to 30	2
		31 or more	3
22b	How soon after you wake up do you smoke your cigarett…	Within 5 minutes	3
			2
			0
22c	Do you … areas? (Circle one response)		0
		Yes	1
22d	Which cigarette would you most hate to give up? (Circle one response)	First of the morning	1
		Other	0
22e	Do you smoke more frequently in the first hours after waking than the rest of the day? (Circle one response)	No	0
		Yes	1
22f	Do you smoke if you are so ill that you are in bed most of the day? (Circle one response)	No	0
		Yes	1

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Q23. Do the following things affect the number of cigarettes you smoke?

	Yes	No
The environment you are in – *i.e.* pub, with friends, others smoking around me		
Non-compliance from others		
Financial pressures		
Stress		

Q24. Do you smoke as form of relaxation/ escape/ time out?

Yes ☐
No ☐

Alcohol consumption

Q25. Do you drink alcohol?

Yes	
No	

If no please go to question 30…

Q26. How often do you drink alcohol?

Once or twice a month	3-4 times a month	2-3 days per week	3-4 days per week	5-6 days per week	Daily

Q27. Based on the last time you drank alcohol how many **glasses** did you drink of the following:

	Wine	**Beer/Cider**	**Spirits** (Gin/ vodka/ whisky)	**Other (please state):**
1				
2-3				
4-5				
6-7				
More than 7				

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Q28. Do the following things affect the amount of alcohol you consume?

	Yes	No
The environment you are in – *i.e.* pub, with friends		
Non-compliance from others		
Financial pressures		
Stress		

Q29. Do you drink alcohol as form of relaxation/escape/ time out?

Yes	
No	

Stress

Q30. In general, during the last month how often have you felt the following things?

	Almost Never	Sometimes	Often	Usually
You are afraid of the future	☐	☐	☐	☐
You have many worries	☐	☐	☐	☐
Your problems seem to be piling up	☐	☐	☐	☐
You fear you may not manage to attain your goals	☐	☐	☐	☐
You feel frustrated	☐	☐	☐	☐
You feel tense	☐	☐	☐	☐
You feel rested	☐	☐	☐	☐
You feel mentally exhausted	☐	☐	☐	☐
You h				
You				
You feel you're doing things you really like	☐	☐	☐	☐
You enjoy yourself	☐	☐	☐	☐
You are light hearted	☐	☐	☐	☐
You are full of energy	☐	☐	☐	☐
You feel safe and protected	☐	☐	☐	☐
You have too many things to do	☐	☐	☐	☐
You have enough time for yourself	☐	☐	☐	☐
You feel under pressure from deadlines	☐	☐	☐	☐
You feel you're in a hurry	☐	☐	☐	☐
You feel that too many demands are being made on you	☐	☐	☐	☐

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Appendix 7 – Example of Evaluation Tool

Daily Checklist

	Satur	Sunda	Mond	Tuesd	Wedn	Thurs	Friday	Satur	Sunda	Mond	Tuesd	Wedn	Thurs	Friday	Satur	Sunda	Mond	Tuesd	Wedn	Thurs	Friday	Satur	Sunda	Mond	Tuesd	Wedn	Thurs	Friday
Got up on time																												
Brushed my teeth																												
Washed and brushed my hair																												
Got dressed on time																												
Ate Fruit																												
Ate vegetables																												
Helped parents/ other people																												
Listened to parent/s																												
Listened to teacher/s																												
Read and completed homework																												
Sat silently for a few minutes																												
Spoke the truth																												
Had a HAPPY day !!!!!!																												
Went to bed on time																												

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Appendix 7 – Example of Evaluation Tool

Facilitator Observation Sheet

Please rate the following behaviours for each child based on the observations made per session:	**1** - Very Low **2** - Low **3** - Satisfactory **4** - High **5** – Very High

CHILD'S NAME																										
Sessions:		1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
BEHAVIOURS OBSERVERD	Obedience																											
	Concentration																											
	Self-esteem																											
	Social skills – taking to others/making friends																											
	Sharing																											
	Confidence																											
	Tolerance																											
	Optimism																											
	Communication skills																											
	Problem-solving skills																											
	Frustration*																											
	Anger*																											
	Use of abusive language*																											
	Hostilely*																											
	Disruptive bevahiour*																											
	Impulsivity*																											

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Appendix 7 – Example of Evaluation Tool

PACT win - Weekly Success Checklist

Parents /Carers

Please rate to what extent you have been successful in completing the tasks listed below.

	Name:									
	Week:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
	Used descriptive praise with my partner/spouse									
	Used descriptive praise with my child/ren (without special needs)									
	Used descriptive praise with my child/ren (with special needs)									
	Spoke to my children lovingly and calmly									
	Maintained the agreed rules and disciplines									
	Had a positive mental attitude									
	Felt optimistic									
	Felt confident									
	Felt empowered and motivated									
	Felt hopeful									
	Felt happy									
	Made time for self									
	Described emotions in a meaningful manner									
	I am maintaining a 'to do' task list and check it daily									
	I am helping my child/ren maintain a 'to do' task list and check it daily									
	Completed my journal and noted improvements									
	Did not swear/use negative language									
	Listened to my child empathetically									
	Was patient with others									
	Exercised self control									
	Felt disheartened									
	Felt aggressive									
	Felt frustrated									

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1 – None **2** – A little **3** – Most of the time **4** – All of the time

Area of Competence: Promote Psychological Principles, Practices, Services and Benefits

SETTING:

- International Critical Health Psychology Conference – ICHP, July 2009 (Switzerland)

ADDITIONAL SETTINGS:

- Consultancy for National Health Service - NHS South West Essex Health Trainer Programme, March 2009
- Lecture for MSc Health Psychology students at City University, March 2010
- United Kingdom Public Health conference - UKPH (acceptance of poster presentation), March 2010

PRESENTATION TOPIC:

- Evaluation of a Training Programme for a New Heath Trainer (HT) Service in East London

AIMS OF THE PRESENTATION:

- To introduce, describe and explore the Health Trainer (HT) health promotion model and the common evaluation models adopted for this service, and review their efficacy.
- To highlight common downfalls for health promotion evaluation within the NHS.
- To highlight issues with dissemination of past evaluation findings.

OVERVIEW

In 2008, a mixed methodological evaluation of a training programme, aimed at equipping Health Trainers (HT) with techniques to aid behavioural changes within deprived communities, was conducted. Quantitative measures were used to assess whether the training had led to changes in the HT's awareness on the various topic included in the training programme (i.e. goal setting, local health

services, and talking to patients about behaviour change), and if the training had led to changes in the HT's health behaviours. Whereas the qualitative evaluation explored the trainees experiences of the training programme.

As a consultant trainee health psychologist, I combined the findings from these two evaluations, and compiled an evaluation report which identified recommendations for future Health Trainer training programmes. However in light of this experience several key implications for health psychology and such health promotion activities were identified. Consequently a concerted effort was made to promote the psychological principles, practices, and benefits which were elucidated by the training evaluation. This shall be explored in further detail.

SEEK OPPORTUNITIES FOR THE PROMOTION OF HEALTH PSYCHOLOGY

Health promotion is described by the World Health Organisation (WHO) as a vital tool to facilitate increased control, and better health outcomes. The Department of Health (DOH) has made significant attempts to shift from traditional top-down health promotion approach to a more bottom-up, self-improving system built around the individual needs of service users, which is facilitated by effective public engagement. It was for this reason the DOH introduced the Health Trainer (HT) concept; a unique approach to achieve personalised and tailored support mechanisms, to facilitate behavioural changes. For example, rather than just sending out health messages through doctors and other healthcare professionals; the HT model focuses on empowering and equipping volunteers in the community, in order to facilitate increased engagement with deprived or marginalised groups, offering a more personalised and ecological form of support and guidance (Fine & Barreras, 2001).

However through my role as a consultant trainee health psychologist, it became apparent that (1) individual HT programmes offered different training packages for trainee HTs, and that (2) the training programmes were often not evaluated, despite a high number of HT service evaluations being readily available. Thus I felt that the HT training evaluation conducted in 2008 was an example of how and why this stage of the HT service model should be evaluated, as the training is

fundamental in influencing the success or failure of the HT health promotion model. Opportunities were sought to (a) raise the profile of the HT model as a form health promotion, (b) disseminate the findings from the HT training programme evaluation, and (c) elucidate the implications of employing a series of phase specific evaluations for such forms of health promotion activities.

Thus an active search for conferences, health improvement initiatives, and teaching training opportunities were sought. Numerous opportunities were identified, all of which were critically appraised to inform the consequent promotion activities. For example opportunities were evaluated based on the (a) target audience, (b) relevance of the conference/symposium, service/ intervention objectives, and modules objectives, (c) practical factors (i.e. submission deadlines, budget allocation, etc.).

What proved most conducive in the successful identification of relevant opportunities was networking with relevant healthcare professionals and leads from academic institutes, as well as regularly checking the British Psychological Society bulletin boards and announcements regarding upcoming conferences. For example, through regular supervision with university supervisors, the opportunity to discuss past, current, and future projects meant that there was a shared understanding of individual and departmental research activities, as well as dissemination activities (i.e. presenting at conferences, writing papers, teaching and training events). Thus, upon receipt of the abstract submission invitation for the ICHP conference, and further discussion with relevant parties (e.g. line manager, university supervisor, and fellow trainees) an appraisal was made to submit the HT training evaluation abstract.

Whereas compared to other applied settings (i.e. NHS – service managers), where the opportunities were sought to promote health psychology and the HT findings, greater effort was required, as they required more insight on how health psychology was relevant to their HT services. Fortunately the sound establishment of the Health Psychology team at NHS South West Essex, and the successful completion of several large scale projects, provided a platform; providing examples of how health psychology was relevant to public health and health improvement activities. For example through several promotional settings, the

inclusion of health psychology and behaviour change principles for the HT programme were highlighted (i.e. the relevance of action plans, social support, self-efficacy, psycho-educational resources, and relapse prevention strategies). Hence service leads became knowledgeable about health psychology, and its application within their health improvement services. There was a continuous effort in seeking promotional platforms across the various training placement (i.e. NHS and academic settings).

Reflection

Due to the insight I obtained as a lead consultant for the HT training evaluation, I had a clear understanding of the various elements, and consequently what would be applicable for the range of promotional platforms identified. This proved to be most useful during the identification of relevant promotional opportunities. Despite taking an active role in searching for conferences to present the findings, I initially constrained my search to those conferences which were frequently advertised in the psychology domains.

It was only later on in my placement that I was more aware about other health-related conferences (e.g. UKPH) which proved to be relevant for the HT study, but which were not necessarily grounded in psychology. It became apparent that I had to be aware of both psychological and non-psychological promotional platforms, especially for those projects that were more specialised or focused on a particular domain of health. This proved to be most efficacious for future projects, as it meant that these opportunities provided a platform to shed light on health psychology, raising the profile of this applied field and other domains. This wider scope in seeking promotional opportunities meant that the UKPH conference was successfully identified as a subsequent promotional opportunity for the HT training evaluation, as well as identifying and securing other opportunities where I could apply the evaluation findings in practice (i.e. consultant role for the HT programme at NHS South West Essex).

EVALUATE NEEDS, REQUIREMENTS, AND BENEFITS RELEVANT TO PROMOTING HEALTH PSYCHOLOGY PRINCIPLES, PRACTICES, AND SERVICES

The central premise of the HT model is to reduce health inequalities, improve access to health facilities, and promote healthier lifestyles. Health psychology plays a pivotal role in addressing these factors, whether it is through the use of psycho-educational campaigns, psychological interventions, public engagement, or challenging macro factors such as economic policies or government policies (Marks & Yardley, 2004). As the HT model set out to achieve better health outcomes in deprived communities, through public engagement, and tailored psycho-educational health campaigns, the model was relevant to public health psychology.

Hence the HT model has scope to encapsulate and implement principles from health psychology (i.e. raise awareness on health related issues – nutrition, physical activity; raise awareness on behaviour change - setting behavioural goals; provide social support; and use principles from motivational interviewing) (Hogan, Linden, & Najarian, 2002; Heaney & Israel, 2002; Miller & Rollnick, 1991, 2002) , which in turn would equip the HT's with a specialised tool kit for facilitating behavioural change and supporting their service users during their process of change.

The mixed methods evaluation of the HT training programme in fact evidenced the utility of the health psychology inclusion, for such a service training programme. The quantitative evaluation (i.e. analysis of pre and post questionnaires) and the qualitative evaluation (i.e. analysis of data generated from focus groups) I conducted, evidenced that the inclusion of the health psychology topics led to significant changes in the HTs' knowledge, confidence, and their awareness on behaviour change principles; reinforcing the role of health psychology in such services and training programmes (see appendix 1 – evaluation report). Thus it was paramount to present this unique HT training model, as well as raise awareness on issues surrounding HT training evaluations.

For example, the evaluation exemplified that training is pivotal in ensuring that staff are adequately trained, and equipped with the relevant tools; potentially

determining the quality of the health promotion delivered to service users. Due to the nature of the HT model, each HT service could be tailored to target the health needs in a given demographic area; making each HT training programme and service unique. Thus in order replicate and test these HT models, detailed training manuals, phase specific evaluations potentially allow the adequate testing of these models; informing future health promotion activities.

However, the methodologies used to evaluate such training programmes are also central in determining reliable and robust findings, which can inform future evidence based practice (Nutbeam, 1998). The mixed methodology (Cameron, 2011) employed in the HT training evaluation, illuminated areas of focus that neither one particular methodology would have highlighted alone. The pragmatist philosophical approach (Maxcy, 2003) proved to be most insightful, in highlighting significant changes in skill and competence amongst the cohort, as well highlighting the particular factors that facilitated this shift, through the combination of both quantitative and qualitative methodologies (e.g. role play was important in the motivational interviewing training and increasing overall confidence amongst the HT cohort).

Hence testing each HT model through the various stages (e.g. the pre and post training phase and the implementation stages – 3, 6, 9, 12 months), and utilising reliable and sensitive measures (whether in a mixed or singular methods framework) is paramount as it can facilitate evolution and replication of those HT models that prove to be efficacious. As evidence based commissioning is so heavily endorsed through the NHS, especially with the increasing pressure from budget cuts, the ability to evaluate the efficacy and cost effectiveness of such health promotion initiatives is key, if such endeavours are to continue receiving funding. Reliable and sensitive evaluation designs are therefore even more pertinent; to ensure that there is a continued investment in those effective health promotion initiatives.

The goals of the ICHP conference were to critically explore issues in health psychology, explore research developed and carried out in routine practice by health psychologists, the application of research findings and their ability to feed back into theory, and the need for innovative research methods. In light of the

issues identified from the HT training evaluation, the study was relevant to the ICHP conference, as it provided the appropriate platform to critically address issues within the HT model of health promotion, and provide an example of applied practise. Therefore reviewing the outcomes of the evaluation findings meant that an informed appraisal could be made to identify relevant platforms for promotional activities.

Reflection

It was clear that the HT training evaluation had wider implications for future HT models, applied health psychology, and evaluation design and implementation. During the initial evaluation process for the ICHP conference, I was aware that the training evaluation could compliment the conference objectives. However as it was one of the first conferences I had considered, I was initially unsure as to whether the study was relevant.

Maintaining open channels of communication meant that the promotional material was reviewed by the relevant leads, and their subsequent approval and encouragement meant that I was able to successfully submit the study abstract, and secure a place to present the findings at the ICHP conference. Subsequent meetings with other trainees, who were presenting at the same conference symposium, also ensured that that there was continuity between the different studies, relating it back to the symposium objectives. This process highlighted that transparent and open chains of communication can aid the evaluation process when identifying the promotional platforms.

In light of the ICHP experience, I was more confident in seeking new and alternative platforms to promote and disseminate the HT training evaluation findings (e.g. delivering training and consultancy for the new HT service at NHS SWE, delivering a lecture at City University on health promotion evaluation and wider contextual issues surrounding evaluation). Thus the ICHP experience certainly made me more confident in my ability to seek and evaluate the needs for health psychology promotion for the HT project, and future projects. It encouraged me to take my learning's from research projects forward as I could recognise the wider implications to inform future practice, by assessing current issues and developments in health psychology.

EVALUATE METHODS AND RESOURCES FOR USE IN THE PROMOTION OF PSYCHOLOGICAL PRINCIPLES, PRACTICES, AND SERVICES

The ICHP conference was an apt platform to present the HT training evaluation, as it addressed issues surrounding applied health psychology practice and how this informs theory development. The conference placed a strong emphasis on community engagement and empowerment models, hence presenting the HT model was most applicable. It not only highlighted how health psychology can assist such models of health promotion, but it also raised the profile of public health initiatives in the United Kingdom (UK), which was pertinent for this international promotional platform. Thus the ICHP conference was deemed as a relevant opportunity to promote health psychology and the HT model.

Exploring the presentation requirements and costs (i.e. travel and accommodation) was an important part of evaluating the methods and resources that would be necessary in this promotional activity. For example as the conference was held in Switzerland, and the majority of the international delegates spoke different languages, I needed to ascertain whether the presentation would need to be available in different languages. Furthermore relevant enquires had to be made into funding opportunities to cover the attendance (i.e. accommodation and travel).

Fortunately I was able to obtain funding from City University to cover the costs of attending the conference, and it was not a pre-requisite to translate the presentation into any specific language. In light of this evaluation, the costs were minimal, and the implication of presenting at such a prestigious and international setting meant that the profile of applied health psychology within public health in the UK would be raised, as well as addressing contextual issues surrounding health promotion evaluation.

Whereas for the UKPH conference, where the study had been accepted for a poster presentation, I was unable to present due to issues surrounding funding. Thus exemplifying that resource allocation and availability can constrain promotional activity, and that conducting such evaluations are central to applied practice and promotion activities.

Reflection

I had limited experience in seeking financial funding for such an endeavour. This meant that I had to work closely with the appropriate leads within the health psychology department to formulate a case for funding. Actively searching for cost effective packages was key. Highlighting value for money and the potential benefits for the university and the psychology department secured the funding. This experience proved insightful for those future experiences where I independently had to seek funding from my employers (i.e. UKPH conference). However with reference to this experience; in spite presenting a strong case for the UKPH conference presentation, due to the NHS budget deficits I did not secure funding to attend the conference. This raises issues within applied practice and the constraints health psychologists are faced with in such promotional endeavours.

Despite this experience, my role as a lead consultant for the NHS SWE HT programme, reinforced that there are a wide range of promotional activities that can be utilised, as a means of raising the profile of health psychology, within relevant domains. For example, whether it be in applied settings such as the NHS, or academic settings.

SELECT PROMOTIONAL RESOURCES AND SERVICES TO DEMONSTRATE THE VALUE OF HEALTH PSYCHOLOGY PRINCIPLES, PRACTICES, AND SERVICES

Overall conferences were identified as an ideal platform to present the HT training evaluation, as it meant that this novel HT training programme was promoted, as well as the implications associated with stage specific evaluation within health promotion. As a range of practitioners (i.e. HT service managers, commissioning managers, applied psychologists) attended the selected conferences, the impact of such a promotional activity and dissemination was high, as the evaluation findings could potentially inform theory development and practice, which was the central aim of the ICHP conference symposium.

More specifically the goal of the ICHP conference was to debate and explore critical ideas within health psychology and developing new ways of health psychology practice; for example reviewing and challenging the ways in which

health promotion can be conducted, and methodological issues within health promotion evaluation. Hence the selection of the conference was apt for the HT training evaluation, as it exemplified a range of issues surrounding evaluation design, and the role of health psychology within health improvement training programmes and service provision.

In light of the conference selection, I was able to tailor the content relevant to the identified target audience. For example, greater emphasis was placed on the HT model as a form of health promotion, and how health psychology lends itself to not only the design of the model, but also the training and evaluation processes involved in such programmes. This was important as the HT model was unique in the UK, and as it was an international conference, providing adequate context was crucial.

Furthermore, to ensure that the presentation complemented the symposium objectives I submitted the presentation slides (appendix 2) for review. In light of the feedback provided by the symposium organiser, a few amendments were made, to ensure that enough context was provided on the HT training programme content, and the text on the slides was reduced. In addition, as the symposium was to feature a range of the projects conducted by the Health Psychology Team at City University, I was also given a specific design for the presentation format. Thus the presentation underwent a series of reviews and changes to ensure that the promotional material was presented in the relevant format, and that both the written and verbal feedback was tailored to suit the target audience.

A concerted effort was made across the range of promotional activities, to ensure that the legal and ethical requirements were satisfied. For instance any identifiable data was anonymised to maintain confidentiality. Furthermore the relevant permissions were sought to ensure that as a consultant I was able to present the findings.

Despite placing emphasis on seeking and selecting conferences as a medium for promoting the role of health psychology within HT services; efforts were made to network with HT service managers and commissioning managers, in order to identify other HT services where health psychology could be applied in practice. I

was able to successfully evidence the role of health psychology in such services, and was consequently consulted by a commissioning manager to assist in training provision, the evaluation, and the composition of a new service specification for the HT service at NHS South West Essex. This demonstrated my ability to promote health psychology, across a range of promotional platforms.

However promotional activity is dependent on the available resources and financial budgets (i.e. UKPH conference). Evidently within applied practice a series of factors can determine whether one has the opportunity to promote psychological services and benefits, whether it is remit or budgets restrictions. In spite of this, this case study has highlighted that a constant effort was made to identify a range of platforms where the benefits of health psychology could be promoted, whether it be to academics, applied practitioners, public health specialists, or health psychology trainees (appendix 3).

Reflection

Presenting at the ICHP conference was very conducive in building my confidence in presenting research on such a platform. Attending and presenting at the conference reinforced that the conference was an apt platform to present the findings from the HT training evaluation, as it highlighted a range of factors that health psychologists and healthcare professionals should consider within public health and health promotion (i.e. evaluation design, the inclusion of health psychology topics – goal setting, motivational interviewing to facilitate behaviour change, etc.). This increased my confidence in selecting other opportunities to present the findings.

Upon reflection I believe that it is a vital to maintain a proactive and a broad ranging search in the quest to promote health psychology, as it facilitates and ensures the growing application of this applied psychology. I believe that my continuing effort to identify opportunities to present the evaluation findings demonstrates my ability to identify relevant platforms, and consequently my ability to tailor the findings and their implications for a wide range of audiences, whether it is in a conference setting, consultancy model, or a teaching and training setting.

This case study has also demonstrated the vital role the scientist-practitioner model plays in practice; whereby learning acquired from research and practice are used to inform future activities in applied practice; continually refining health psychology practice.

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Qualitative Evaluation of a Training Programme for a New Health Trainer Service in East London

P. K. Kalsi

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1.0 Abstract

Health Trainers (HT) are part of the government's strategy to reduce health inequalities in deprived communities. Barking and Dagenham (B & D) is one outer London borough that has adopted this philosophy, in the hope that local residents will access this service to help achieve healthier lifestyles. Twenty HT trainees attended the 20 session training programme that was delivered by a health promotion specialists and health psychologists. A qualitative methodology was used to evaluate whether the training was effective. Thus three focus groups were held with eleven trainees, and thematic analysis was employed to extract 11 key themes from the transcripts. These highlighted that the training increased the HTs' confidence, understanding of health-related issues and behavioural change; validating and extending the findings obtained in the quantitative evaluation. Additionally the trainees highlighted specific sessions which did not meet their needs, emphasising the importance of the quality of trainer, and the need of one-to-one support. Thus it will be vital for future cohorts to have mentors during the training, to provide tailored support to the trainees as their needs are varied, due to the individual differences present in the group.

Key words: *Health Trainer training, health promotion, thematic analysis, evaluation*

2.0 INTRODUCTION

2.1 Health promotion and the Health Trainer (HT) role.

Health is an important resource to facilitate a better quality of life, both physically and mentally. Health promotion is therefore a vital tool to facilitate better health, which in turn affects many factors; such as the economy, due to increased productivity from a healthier workforce. Subsequently the importance of health promotion was highlighted by the Ottawa Charter for Health Promotion (OCHP) in the first international conference held in November 1986. The OCHP postulated that **'***health promotion is a process of enabling individuals to increase control over, and to improve, their health*[9]*'*.

Some have postulated that the traditional patterns for health promotion in the NHS have not been as effective, as they have lacked choice and personalisation. It was upon this very premise the Department of Health (DOH), started shifting from the traditional *top-down* approach "*to a more bottom-up, self-improving system built around the individual needs of service users, and influenced by effective engagement with the public"* (DOH, 2006, page 5). Since the publication of the White Paper published in 2004 called *"Choosing Health: making healthy choices easier"* this shift has been evident in the public health services.

It recognised that if the current major health concerns were to be tackled the approach to health promotion had to be changed. It was for this reason the DOH introduced the Health Trainer (HT) concept; a unique approach to achieve personalised and tailored support mechanisms, to facilitate behavioural changes. It was a new fresh approach to health. Rather than just sending out health messages through doctors and other health care professionals; why not use ground level support? Such as volunteers in the community; people who understand local issues, and potential barriers to facilitating healthier lifestyle changes (Fine and Barreras, 2001).

[9] http://www.euro.who.int/aboutwho/policy/20010827_2

Consequently based on the government's cross cutting spending review on health inequalities (HM Treasury/DOH, 2002), the importance of co-delivery between local communities, businesses and the community voluntary sectors (CVS) was recognised. Subsequently HTs are recruited from the community, and use their positions as a platform to disseminate knowledge and implement the psychological tools to facilitate behavioural change (DOH, 2008). They are a dynamic resource to provide health promotion that is grounded in local communities, which is tailored to specific needs of residents.

2.2 Health Trainers Training

HT initiatives are running across the UK, and seem to be continually evolving. This is true for Barking and Dagenham (B & D), as this new HT workforce is being taught a tailored syllabus, which has encompassed a strong emphasis on psychological theories and tools, which will assist the HTs to target the main health concerns predominant in this borough. Which include high levels of smoking-related illnesses, cardio-vascular disease, cancer, childhood obesity and deprivation causing great health inequities.

The training consisted of twenty sessions, and the trainees were trained by health promotion specialists and health psychologists. This evaluation aims to explore the effectiveness of the unique training programme, by gaining feedback from the trainees.

Furthermore as this is the first HT programme in B & D to be established it is a crucial to explore the strengths and weaknesses of this new training programme. Especially as this HT programme is a complex model; consisting of three independent voluntary sector organisations (DABD/CIIIL, Health Concern and Faith Forum), employing their own HTs, compared to other HT programmes where the HTs are employees of the PCT[10].

Hence this feedback will allow comparisons to be made with other HT training programmes, as different training processes are employed by different PCTs (Morris et al, 2007). For example some PCTs have used a mentoring scheme for trainees, to provide support and information during the training (Morris et al, 2008). Thus completing an evaluation of the B & D HT training programme enables a review of and reflection on what elements of the training programme worked, as well as those which did not; leading to changes for future HT cohorts (Kvale, 1992; Yardley and Bishop, 2008).

However this evaluation also has implications for Health Psychology as, HTs are an unique resource for health promotion, therefore the training process they undergo, is pivotal in determining how effective they are in their role as HTs, and how future health promotion initiatives will be shaped.

2.3 Summary of the Quantitative Evaluation for B & D Health Trainers Training

An independent quantitative measure was utilised to review whether the training was effective (comparison of pre-training and post-training). This measure exemplified that the trainees' health-related knowledge, health services knowledge, confidence as a HT, and their physical and mental well-being had increased, compared to the baseline pre-training measure (Estacio, 2008). Thus this study aims to employ a qualitative methodology, to explore these findings in more depth by; adopting a *pragmatist philosophical approach.* This advocates the combination of various methodologies; as the aim of inquiry is not to seek a truth that is independent from human experience, but to achieve a richer and detailed

[10] Primary Care Trust/s

insight, whether through scientific analysis, or any *productive combination* of methodologies (Maxcy, 2003). Therefore the qualitative methodology will provide an alternative tool to explore the trainees views regarding the training received, compared to the closed questions used in the quantitative approach.

2.4 Aims of the Evaluation

To obtain in-depth feedback regarding the training provided. The central aims of this study are to (1) conduct focus groups with each of the three voluntary sector provider organisations (DABD/CIIIL, Health Concern and Faith Forum); (2) identify strengths of the training; (3) identify areas of improvement for training future HT cohorts; and (4) to compare and explore the quantitative findings with regard to the qualitative findings.

3.0 Methodology

3.1 Design

A qualitative methodology was utilised to assess the efficacy of the training. Permitting the strengths and weaknesses to be identified by the participants, compared to pre-determined responses commonly used in quantitative approaches (Chamberlain, 2004), which may provide a limited insight into participants' views. Qualitative methods can permit in-depth exploration of these views (Holloway and Todres, 2003), regarding the HT training programme, for example.

To complement the exploratory nature of the qualitative methodology, a semi-structured question list (Appendix 1) was used to elicit in-depth responses, so the trainees could elaborate on their views and opinions, whilst maintaining a structured framework to the topics addressed in all of the focus groups.

Three focus groups were held with each of the three organisations (DABD/CIIIL, Health Concern, and Faith Forum), because there were slight variances in the way that each organisation would be operating (i.e. based in GP practices, or going out to religious institutions in the community). Therefore this minimised any potential discrepancies that may have emerged between the three groups.

Focus groups were used as they can elicit greater information regarding a series of questions, due to their informal nature (Wilkinson, 2003). The group context can in some cases, facilitate greater personal disclosure compared to one-to-one interviews (Farquhar, 1999; Frith, 2000); and co-participants can trigger memories, stimulate debate, and encourage detailed accounts. Consequently focus groups were used, as they can produce rich and detailed accounts regarding the trainees' views about the training.

3.2 Ethics

To ensure that the study addressed all the ethical considerations participants were given information and consent sheets (Appendix 2). Hence participants were aware that they could withdraw at any time, etc. Additionally due to the qualitative methodology, participants were informed that the focus groups were being recorded, and that the data would be anonymised, as direct quotes were to be included in the evaluation. Ethical approval was granted by the City University Ethics Committee (Appendix 3).

3.3 Participants

Eleven trainees (out of the 21 trainees) took part in the focus groups. The 11 trainees were from a range of ethnic backgrounds (i.e. Pakistani, White British, African, and Mixed); and spoke a variety of languages (English, Urdu, Hindi, Punjabi, Arabic, Swahili). The mean age of the eleven trainees was 35.27 years. The trainees were affiliated to three different organisations; thus the number of participants in each focus group varied (i.e. 3 participants: DABD/CIIIL, 6 participants: Health Concern, and 2 participants: Faith Forum).

3.4 Apparatus and Materials

The focus group discussions were recorded digitally, to allow transcription. The semi-structured question list (Appendix 1) was used during the focus group, and the participants were given an information sheet and consent forms to ensure that informed consent was obtained (Appendix 2).

3.5 Procedure

Each of the three focus groups took place three weeks after the training had completed. Information sheets and consent forms were completed; ensuring that informed consent was obtained (Appendix 2). The focus groups were held in locations that the participants were familiar with, which helped to develop greater rapport. Before the focus groups were held, participants were given numbers; so that they could be identified during the transcription process. Each focus group lasted for approximately 50 minutes, and was recorded.

3.6 Method of Analysis

The data obtained from the three groups was orthographically transcribed (Wilkinson, 2003). These transcripts (Appendix 4, 6, and 8) were then scrutinised using thematic analysis (Wilkinson, 1998), which is commonly used to analyse focus group data (Wilkinson, 2003; Braun and Clarke, 2006).

Repeated reading (line by line) of each of the three transcripts enabled the identification of themes, within the data. Joffe and Yardley (2004) state that a theme can either be *'manifested'*; where it appears explicitly within the data, or be *'latent';* where it is implied. Thematic analysis often draws on both of these themes, as this method of analysis combines the analysis of frequency codes (patterns in the text) and the analysis of their meaning in context. Furthermore *deductive* and *inductive coding*[11] were used interchangeably in the analysis process, as both forms of coding have their advantages, and compliment the semi-structured question list format employed in this evaluation.

For example, *deductive coding* permits the researcher to replicate, extend or refute prior discoveries (Boyatzis, 1998; Braun and Clarke, 2006); such as the quantitative measure employed to evaluate the training process (Estacio, 2008). Whereas *inductive coding* allows new areas of focus to be identified within the data, which may have not been considered by the researcher.

When each of the transcripts had been coded, comparisons were made between transcripts to identify common themes. Thus a template was devised, and evidence from each transcript was inputted into the template, creating one summary table for each focus group (Appendix 5, 7, and 9). As some data showed

[11] '*Deductive coding'* applies existing theoretical ideas, or pre-determined focus areas identified by the researcher during the coding process, whereas '*inductive coding'* uses the raw information derived from the text (Boyatzis, 1998; Hayes, 1997; Frith and Gleeson, 2004; Joffe and Yardley, 2004; Patton, 1990).

overlapping themes; relevant quotes were underlined in the summary tables. Each summary table was colour coded[12], as they were all combined together to form the master table (Appendix 10). Thus the colour coding permitted distinctions to be made between the data extracted (Appendix 10) from the different focus groups, allowing comparisons to be made, when the master table was being summarised. During this process re-emerging patterns (i.e. frequencies of common themes across the individual focus group, as well as all three focus groups) were acknowledged. Some disparate themes or sub-themes were subtracted (Joffe and Yardley, 2004) creating the summarised master table (Appendix 11).

4.0 Results

4.1 Summary of Themes

The thematic analysis identified 11 major themes *(course structure, areas of improvement, project co-ordination, learning aids, group dynamics, psychological states, understanding HT role, HT self-efficacy, boundaries, needs* and *support)* across the three focus groups which were conducted with the HT trainees. However three of the major themes seem to be dominant across all three focus groups (*course structure, areas of improvement, project co-ordination*) as they were consistently re-occurring. Joffe and Haarhoff, (2002) propose themes which are widely shared within particular groups, are taken to illustrate the existence of social representations. The summarised master table (Appendix 11) has been separated for each theme and shall be discussed in detail in this section.

4.2 Course Structure

This theme was continually emerging across all three focus groups. It consists of four sub-themes, and each one shall be discussed in detail. Table 1.1 (FG data removed - confidentiality) evidences the *content* sub-theme. Trainees stated that they were happy with the course content, especially three areas (nutrition, physical activity and smoking cessation). This was reflected by various trainees making relevant lifestyle changes in all three focus groups. They also enjoyed those sessions which they deemed relevant, to facilitate behaviour change, such as health psychology topics. However some trainees felt that the training did not meet their expectations, as the topics they enjoyed could have been '*deeper*', and that some topics such as sexual health were too short. In fact trainees stated that they would be happy to have two separate sessions on the same topic to achieve the depth they desired, or alternatively have a list of relevant resources to research in their own time. Thus the content of the course did meet the trainees' expectations, but certain topics needed to be more detailed.

Another sub-theme was *speed of delivery*, which is summarised in Table 1.2 (FG data removed - confidentiality). Trainees postulated that there was not enough time to ask questions, or practice what had been taught (i.e. nutrition session). In fact some sessions seemed to be too fast, that trainees found it hard to digest the material coherently. A feature that seems to resonate with the *content* sub-theme discussed above, is that trainees desired more time on *particular topics that are very relevant to health, such as diet,* compared to some other topics. Again, if more time is to be dedicated to certain sessions, it should be spread over two sessions, as some trainees lost concentration in the late

afternoon sessions. Thus as P? suggests *time management would be a big factor to look at for the next one* (cohort).

Order and *repetition* are two additional sub-themes derived from the major theme, *course structure,* and are evidenced in Table 1.3. *Order* was dominant in (FG data removed - confidentiality), as the same ideology of having the nutrition, smoking cessation, and the physical activity sessions earlier on is communicated. However the justifications underpinning this suggestion vary between the two focus groups. P? and P? suggest that it would permit greater understanding of the theoretical topics covered (i.e. communication and persuasiveness) facilitating applied learning. Whilst P? and P? suggest it would create clarity about the training process for the HT role.

The r*epetition* sub-theme was only dominant only in (FG data removed - confidentiality), thus there was no-cross validation between the three the focus groups. It is apparent that the trainees had various opinions about the repetition of some sessions (i.e. equality and diversity: FG data removed - confidentiality), both positive and negative.

4.3 Areas of Improvement

This major theme consists of six sub-themes, and it is most insightful as the sub-themes were often cross-validated across the three focus groups. One of the sub-themes identified was *review understanding* (Table 2.1 - removed - confidentiality), where the trainees only in (FG data removed - confidentiality) consistently suggested that trainers should review the trainees understanding, by asking questions to ensure messages are conveyed accurately.

Table 2.2 (removed - confidentiality) summaries the evidence for the two sub-themes, *assignment* and *additional sessions*. It is evident that the *assignment* sub-theme reflects a lot of anxiety and concern, as the trainees express their struggle with the assignments. P? describes how she panicked when the assignments were set (FG data removed - confidentiality). Furthermore the need for support with the assignment is expressed in both (FG data removed - confidentiality). However P? alternatively suggests that if the assignment question was *'user friendly'* there would be less anxiety, as once the question was *put into easier terms and formats, it wasn't as awkward.* Thus modifying and providing support with the assignment is most crucial.

Another sub-theme of the *areas of improvement* is *additional sessions*. Trainees from (FG data removed - confidentiality), highlighted three areas for future training (mental health, drugs and alcohol), as they may be confronted with them in their job-role. In fact the quantitative measure revealed that trainees' knowledge regarding these topics was relatively low compared to nutrition, both pre- and post- training; emphasising the need to include these topics for the next cohort.

Another re-emerging pattern across all three focus groups related to an IT session that the trainees attended explaining the National Data Capture Tool. This session was received poorly by the trainees for a number of reasons outlined in Table 2.3 (quality of trainer, format of session, poor projection, and speed of delivery). Evidently some aspects seem to overlap with sub-themes from other major themes (i.e. course structure and learning aids), however as they are explicitly referring to this database session, they have been coded as such. Modifications were identified by the trainees (i.e. using handouts, and practising the task in real-time, as the trainer was explaining it).

The next sub-theme to be discussed under the umbrella of *areas of improvement* is *quality of trainer* (Table 2.4 - removed - confidentiality). This sub-theme was very instrumental, in whether trainees were satisfied with particular sessions, as *there were different trainers for different* sessions (FG data removed - confidentiality). Consequently sessions on group work, introduction to the CVS, and screening, were poorly received. P? expresses that when the *trainer faltered,* the group's behaviour changed, emphasising the importance of the *quality of trainer*. However as the *screening session* covered sensitive topics, and the trainer failed to address the topic comprehensively, as well being unable to answer the trainees' questions, a lot of emotions were stimulated within the trainees (i.e. anger, frustration, and being upset). P? in fact states that it would not *'have been as sensitive if someone else had been delivering it'* (FG data removed - confidentiality).

Interestingly when the quality of trainer was stronger the trainees desired more from that session, as they were inspired to learn more, and their needs were met. Thus the importance of the quality of trainer is further exemplified, especially as P? postulates *'if there was more on his level then it would be a very rounded course...then there wouldn't be really much suggestion of needing more time'* (FG data removed - confidentiality).

4.4 Project Co-ordination

This theme consists of three sub-themes. *Conflict* is one of the least occurring sub-themes for this theme, none the less it has been included. It became evident that one of the organisational managers was arranging and providing additional training for her HT trainees. Thus the project co-ordinators need to address such actions, as the trainees may receive conflicting messages regarding the messages conveyed in this training programme.

In contrast, the *lack of communication* sub-theme was more frequently occurring. Trainees expressed that they were not always informed immediately (FG data removed - confidentiality) about changes which were implemented (i.e. introduction of assignments and exams: FG data removed - confidentiality). P? claims that this made him feel that he was *part of a test dummy/ experiment* (FG data removed - confidentiality). Additionally P8 states that the job description lacked detail regarding the amount of work entailed with the training and the assignment. Thus messages need to be accurately communicated, with enough notice, by project co-ordinators.

The last sub-theme *receptiveness,* exemplifies that certain project co-ordinators were more receptive to the trainees' needs and opinions (FG data removed - confidentiality). For example trainees from (FG data removed - confidentiality), highlight that one project co-ordinator became defensive, when the trainees expressed their feelings, especially regarding the screening session, consequently deterring future expression of their opinions regarding weak trainers. Thus project co-ordinators need to be sensitive and careful about their feedback to the trainees.

4.5 Learning Aids

Table 4.1 (removed - confidentiality) summarises all 6 sub-themes. It is apparent that the trainees really enjoyed the various learning aids which were incorporated into the training. The two sub-themes (*visual* aids and *materials and tools*) exemplify that using a combination of simple learning aids (i.e. range of

NRT[13] products and handbooks) satisfied the trainees' expectations, despite the unique variances in the trainees' needs, as there was something for everyone. However P? did suggest that a *list of useful websites* (i.e. NHS Direct) would be really helpful (FG data removed - confidentiality) and should be incorporated into the learning pack.

Whereas the other four sub-themes (*role-play, group discussions, collaborative learning,* and *practice tasks*) in contrast suggest that using a combination of learning tasks should be promoted for the next cohort, as they (i.e. role play) helped to increase the trainees' confidence (FG data removed - confidentiality). Trainees actually specified that doing role plays in pairs, and/or having another person observe, (FG data removed - confidentiality) and showing them to the group was beneficial. As P? states: *…you saw what everyone else did … and you thought 'mine's not bad' or 'I could have done that next time…cos' you got lots to compare… that was really good* (FG data removed - confidentiality); facilitating collaborative learning.

Despite the evident efficacy of all the sub-themes in this theme, there were some limitations, as the group task did not always work (i.e. for motivational interviewing), nor does collaborative learning, as there were some instances when the majority of the trainees who had worked together on the assignment received the same feedback (FG data removed - confidentiality). Thus a balance must be achieved between the various learning tasks.

4.6 Group Dynamics

This theme consists of three sub-themes. Table 5.1 (removed - confidentiality) illustrates that there is a significant amount of cross-validation between the focus groups for the *individual differences* sub-theme; exemplifying the range of needs trainees had, due to the variation in previous knowledge, and learning styles. P? postulates that those who are *used to an academic environment* may not expect support clinics (FG data removed - confidentiality). Whereas another independent theme, derived from the analysis (*support* - section 4.12), highlighted that some trainees wanted more support (i.e. mentor); re-emphasising the *individual differences* sub-theme.

However, despite the individual differences, P? and P? propose that these differences are conducive to learning as HTs (FG data removed - confidentiality), validating another remerging sub-theme, *stability.* P7 asserts that stable group dynamics created a support network (FG data removed - confidentiality). Yet P? and P? (FG data removed - confidentiality) felt that the levels of *contribution* varied. Consequently trainees should be encouraged to partake more often, as they were in the behavioural change session.

4.7 Psychological States

Table 6.1 (removed - confidentiality) exemplifies that some trainees expressed that they were *anxious, angry* and *fearful* during the training. For example (FG data removed - confidentiality) describes how she was angry due to the screening session (section 4.3), whilst P? describes how she had to re-assure her trainees, in response to the fears elicited by the challenging behaviour session. Despite this the evidence for high *self-esteem*, was consistently re-emerging. For example P? describes that the training helped his confidence and communication skills. However it should be acknowledged, there was some evidence for low-self esteem for one participant (FG data removed -

[13] Nicotine replacement therapy

confidentiality), but due to the lack cross validation it was subtracted from Table 6.1 (Appendix 10 and 11).

4.8 Understanding the HT role

This theme was most insightful regarding the efficacy of the training. For example the *lack of awareness from PCT staff/ trainers* sub-theme only emerged in (FG data removed - confidentiality). This was explicable, as the HTs from Focus Group 1 are based in GP surgeries. Hence they were more likely to have experienced this, than the two other organisations. Whereas the *HTs' understanding* sub-theme (see Table 7.1 - removed - confidentiality) implies that the trainees themselves seem to have greater awareness about their role, as a result of the 20 session training programme. Despite this, trainees did say that in the initial sessions, they were not very clear about their role, which mapped on to the findings obtained in the mid-training evaluation. Consequently a suggestion derived from (FG data removed - confidentiality), is that *if someone who'd been doing health training for a couple of years* were to be brought in, their understanding of the HT role would have been clearer earlier on (FG data removed - confidentiality). The *understanding behavioural change* sub-theme suggests that the training was successful in instilling the trainees with the relevant knowledge. This was also evidenced in the quantitative measure (Estacio, 2008). P? (FG data removed - confidentiality), identifies that the health psychology topics aided this understanding; hence these topics should be included for the next cohort.

4.9 HT Self-Efficacy

Following on from the previous theme discussed, the idea that the trainees' understanding regarding their role, and how to facilitate behaviour change, has developed throughout the training seems to resonate in the HT self-efficacy theme. Table 8.1 contains various quotes (removed - confidentiality) derived from all three focus groups; suggesting that as the training progressed the trainees' self-efficacy increased. Again this finding was evidenced in the quantitative measure, as the trainees' post-training measures of self-efficacy had increased compared to the pre-training baseline measure (Estacio, 2008).

However, lines (FG data removed - confidentiality); imply that training may not be enough, as they will continue to develop and become more efficacious as they begin to work with clients (*practice makes perfect ideology*, Table 8.1). Furthermore as there were minimal and inconsistent patterns for low self-efficacy (Appendix 10), it was removed from the summarised master table (Appendix 11).

4.10 Boundaries

Despite the evidence that the trainees understand the HT role, Table 9.1 (removed - confidentiality) contains evidence which seems to contradict that to some extent. Some of the trainees' opinions seem to exceed the HT clinical boundaries. The justification behind their desire to be able to conduct blood pressure checks (for example), is that they feel they would be perceived differently by the clients. Implying that maybe the training was suitable, but clients may expect more, due to the HT title (Morris et al, 2008). Despite this, the training seems to still have accurately exemplified the HT role; as P3 and P5 state in Table 9.1 (FG data removed - confidentiality), with regard to the level 2 smoking cessation training received. In fact trainees stated that the level 2 smoking cessation training should be given to the next cohort despite the initial confusion

regarding prescribing NRT (Appendix 11), as they understand it's efficacy in relation to their role and facilitating behaviour change.

4.11 Needs

This theme appeared to be common in (FG data removed - confidentiality) predominantly. There was evidence for both satisfied and unsatisfied needs; implying variance in the trainees' needs (removed - confidentiality). For example P? almost desired a prescriptive set of tools, almost like a *magical wand* to use as a HT; whilst P? suggested that the training should provide more support towards job *security.* Thus the trainees' specific needs were satisfied to some extent, however project co-ordinators need to be receptive to the variable needs in future cohorts (section 4.4).

4.12 Support

Table 11.1 (removed - confidentiality) summarises the two sub-themes of the *support* theme (*during training, and after training*). It was explicitly expressed across all three focus groups, that the trainees would recommend having *mentors*, during the training, to help provide advice and one-to-one support. This was interesting as other HT programmes have employed mentoring schemes, and the feedback has been positive (Morris et al, 2008). P? suggests that the individual needs of the trainees are quite varied (FG data removed - confidentiality), thus the mentoring scheme may permit tailored support to the trainees.

Additionally the *after training* sub-theme highlights that the trainees would like to extend support and have extra ongoing training, once in the HT role. Ensuring they are up to date with DOH guidelines (FG data removed - confidentiality), as well being able to apply new information to their role (FG data removed - confidentiality). However P? and P? highlighted that such support was unavailable to them as they were unable to attend the support clinics. Therefore P? and P? suggest that there should be support available by e-mail, or by telephone (FG data removed - confidentiality).

5.0 Discussion

The 11 themes identified by thematic analysis, provide a detailed insight into the strengths and weaknesses of the B &D HT training programme. As each theme has been discussed, it is evident that the quantitative findings were verified through the qualitative findings. However the exploratory nature of the qualitative methodology was able to extract specific information to add depth to these findings. For example the qualitative methodology was able to identify tools that were effective in raising the trainees' self-efficacy and confidence (i.e. role play). New solutions to aid the trainees' understanding regarding the HT role were identified (i.e. get an experienced HT to do a session about their job role). The development of a mentoring scheme to provide one-to-one support was highlighted as important (Morris et al, 2008), acknowledging the variable needs in the group, as highlighted in *group dynamics*, *needs*, and *support.* Thus the qualitative methodology was able to extend and elaborate on the quantitative findings achieving a richer insight into the trainees' opinion regarding the training and their HT role.

Therefore in summary the HTs felt that the course did satisfy their needs, and the 10-week programme was optimal for their learning. However the trainees did suggest that they would like longer sessions for specific topics (i.e. nutrition,

physical activity and smoking cessation), on an on-going basis, as they deemed them to be the key areas that their clients would like to address. Furthermore the relevant topics (i.e. behaviour change) were positively received. However some sessions regarding screening, database and sexual health lacked detail and the quality of the trainer was instrumental in whether the session was effective for the trainees. Consequently time management will be an important factor for the next cohort, as certain sessions (nutrition, physical activity and smoking cessation) needed to be longer compared to the others (equality and diversity and communication) as identified by the trainees. These findings were cross-validated across the focus groups, re-asserting Joffe and Haarhoff, (2002) claims that widely shared themes, often illustrate the existence of social representations.

However it is worthwhile to acknowledge that this was the first cohort of HTs in B & D. Thus it was not possible to have the mentor scheme in place, as there was no access to HTs in this locality. Hence future training programmes will be able to address such contextual issues, as the B & D HT workforce begins to grow.

Therefore this study highlights that the evaluation of HT training programmes can provide an in-depth understanding of the processes of training, as the training strongly influences important factors in the HT role (health-related knowledge, HTs' confidence), which are key to ensure that this dynamic health promotion initiative is effective within the targeted communities (i.e. B & D). The knowledge obtained from this evaluation therefore has the potential to influence the ability to perform effective actions in future HT training development (Kvale, 1992; Yardley and Bishop, 2008). Thus onus now rests with the training providers to reflect upon these findings and to implement changes in that light.

<u>Recommendations:</u>

1. Develop a mentoring scheme, to provide one-to-one support; utilising the support from existing HTs.
2. The PCT should acknowledge that the training provider needs to provide more support with the assignments, as well as considering re-designing the assignment questions. As trainees struggled to understand them, causing anxiety.
3. More time should be spent on topics such as nutrition, sexual health, smoking cessation, and physical activity, as these were deemed to be key areas they will address with their clients. Furthermore additional sessions on drugs and alcohol, should be included in the training.
4. A combination of learning aids should be used to address various needs in the group. For example role play can facilitate increased HT self-efficacy.
5. The job description needs to be more detailed about the job role and the skills required (i.e. IT skills, amount of paperwork involved, assignments, etc.).

Appendix 2 - ICHP Conference Presentation

CITY UNIVERSITY LONDON

Qualitative Evaluation of a Training Programme for a New Health Trainer Service in East London

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CITY UNIVERSITY LONDON

Ottawa Charter for Health Promotion (OCHP) 1986

'Health promotion is a process of enabling individuals to increase control over, and to improve their health.' [1]

Health promotion is one tool to facilitate better health.

[1] http://www.euro.who.int/aboutwho/policy/20010827_2

CITY UNIVERSITY LONDON

Three Major Health Promotion Approaches

1. Behaviour Change Approach
Increase knowledge that will help change cognition and consequently behaviour.

2. Self-empowerment Approach
Empower individual to make change

3. Collective Action
Initiating community change

CITY UNIVERSITY LONDON

Health Promotion in the UK

- Traditional health promotion has not always been effective, as it has lacked choice and personalisation
- Upon this premise the Department of Health (DOH) started shifting from the traditional *top-down* approach *to a more bottom-up. '*

  "…self-improving system built around the individual needs of service users, and influenced by effective engagement with the public"
  (DOH, 2006, pg 5)
- Since the publication *"Choosing Health: making healthy choices easier"* (2004) this shift has been evident in the public health services

CITY UNIVERSITY LONDON

An Overview of Health Trainers (HT)

- HTs are part of the UK government's strategy to reduce health inequalities
- HTs challenge traditional methods of delivering health messages
- Rely on ground level support – i.e. volunteers in the community
- Advantageous solution:
  - They understand local issues
  - Potential barriers
  - Understanding these factors can facilitate healthier lifestyle changes (Fine & Barreras, 2001)
- HT provide health promotion that is:
  - grounded in local communities,
  - and tailored to specific needs of residents

CITY UNIVERSITY LONDON

The need for Health Trainers in the East London Borough

- It is an outer London borough
- Major health concerns:
  - High levels of smoking-related illnesses –lung cancer, COPD, etc.
  - Cardio-vascular disease
  - Childhood obesity
  - Deprivation was a leading factor for these health inequities
- This borough has adopted the HT philosophy, in the hope that local residents will access this service to achieve healthier lifestyles

CITY UNIVERSITY LONDON

The Training Programme

- 20 sessions
- Trainees were trained by health promotion specialists and health psychologists

- List of topics included:
  - Nutrition
  - Smoking cessation
  - Basic IT skills
  - Health psychology topics – behaviour change
  - Motivational interviewing
  - Communication skills
  - Challenging behaviour
  - Etc

CITY UNIVERSITY LONDON

Preparation for the Evaluation

- I attended the 20 session training
- I purposely wanted to immerse myself into the context
- Independent evaluations tools can lack insight

- Eseryel (2002)
  postulates that training designers, trainers, etc.; will need to become increasingly involved as program evaluators, in order for evaluations to have a substantive and impact on the development of training programs (page 95)

CITY UNIVERSITY LONDON

Aims of the evaluation

- Explore the effectiveness of the unique training programme, by gaining feedback from the trainees

- Enabling potential changes to be made for future HT cohorts, (Kvale, 1992; Yardley and Bishop, 2008)

Implications of the evaluation

1. HTs are an unique resource for health promotion

2. The training process they undergo is pivotal in determining how effective they are in their role, as well as shaping future health promotion initiatives

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Methodology

- A qualitative methodology was employed
  - Strengths and weaknesses to be identified by participants
  - Permits in-depth exploration of these views (Holloway & Todres, 2003)
- Three focus groups were held with 11 trainees (mean age= 35.3 years).
- A semi-structured question list

  Example Questions
  - Did the training meet your expectations?
  - Do you feel ready practice as a Health Trainer?
  - What did you enjoy most/least during the 20 session training?

- Transcripts were analysed by thematic analysis (Wilkinson, 1998)

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Quantitative Measure

This measure exemplified significant increases in the trainees':

- health-related knowledge
- knowledge of health services
- confidence as a HT
- and their physical and mental well-being

N.B. I did not see the findings until after the qualitative evaluation

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Whitehead , D (2002) Evaluating health promotion: a model for nursing practice. *Journal of Advanced Nursing, 41*(5), 490–498

- Positivist approaches to evaluation has predominated
- Health service agendas have been dominated and driven by biomedical frameworks (i.e. randomised controlled trial)
- This approach has been challenged by some
  - *Learmonth A. & Watson N. (1999) Constructing evidence based health promotion: perspectives from the field. Critical Public Health 19, 317–333.*
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Pragmatist Philosophical Approach

- The aim of inquiry is not to seek a truth that is independent from human experience, but to achieve a richer and detailed insight, whether through scientific analysis, or any *productive combination* of methodologies (Maxcy, 2003)
- Britton et al (1998) recommend the use of a qualitative methodology for *process evaluation* whereas quantitative methodology for *outcome evaluation*
- Thus the qualitative methodology was an alternative tool to explore the trainees views regarding the training received

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Emergent Realism

- The external reality can be described by combining systematic methods (Owen & Rogers, 1999)
- 'The most appropriate indicator of a relevant health promotion evaluation method is one that reflects the values of the activities that are measured' (Whitehead, 2002, p 494)
- Most health promotion activities aim to empower individuals and communities (i.e. participatory action research, psycho-educational)
- The scientific rigour of some research is often dis-empowering and non-participatory (Peersman, 2001)

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Results

- Seven major themes
  1. *Course structure*
  2. *Areas of improvement*
  3. *Project co-ordination*
  4. *Group dynamics*
  5. *Psychological states*
  6. *Understanding HT role*
  7. *Support*

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1. Course Structure

Course Content

- Nutrition, physical activity and smoking cessation sessions were most enjoyed.
- Both Quant' + Qual' measures showed significant changes in lifestyle patterns.

P7: *…smoking cessation was very effective… I actually gave up smoking.*

- Required greater depth for some topics (i.e. sexual health)

P7: *…time management would be a big factor to look at for the next one* (cohort).

- Reported minimal coverage mental health, drugs and alcohol topics.
- Quant' measures revealed that the trainees' knowledge on these topics was significantly low, both pre and post training.

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2. Areas of Improvement

Assignment

- Anxiety and concern as trainees struggled with the assignments
- Trainees wanted assignment questions to be *'user friendly'*, as once the question was *'put into easier terms and formats, it wasn't as awkward.'*

IT session (Induction for the National Data Capture Tool)

- Poorly received by the trainees due to poor projection, format of session, trainer, and speed of delivery
- Trainees would have valued handouts and practising real-time with trainer

Quality of trainer

- This was instrumental in whether trainees were satisfied with particular sessions
- When the *trainer faltered*, the group's behaviour changed
- Stronger quality of trainer inspired trainees to learn more, and satisfy their needs

'if there was more on his level then it would be a very rounded course…then there wouldn't be really much suggestion of needing more time'

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3. Project Co-ordination

Lack of communication

- HT job description lacked detail about the assignment and the need of IT skills

P8: *…the job role needs to be clear about…what skills the Health Trainer is going to need?*

- When modifications were made it they were not always communicated to the trainees in time - causing frustration

Receptiveness

- Project co-ordinators were receptive to trainees

P11: *…gave him the idea of us all of doing a talk, and it happened…he was really helpful*

- Defensive project co-ordinators deterred future expression of trainees opinions

P3: *… you're unlikely to offer constructive criticism…* because you think …'they're going to be defensive… so *it's best if I say nothing'*

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4. Group Dynamics

Individual differences
- There were a range of needs in the group of trainees

P7: …some people …are learning to be students …some have just done degrees… it's quite a varied group.

Stability
- Despite the individual differences, some found it conducive to learning.
- Trainees expressed stable group dynamics created a support network

P7: …you pair off with every member … 2-3 times… that is quite useful… you're with lots of different kinds of people, different levels… is very helpful.P8: Yeah.

Learning Aids
- *Visual* aids *and tools* (i.e. jars of tar, handbooks, etc.) appealed to all trainees.
- Role-play, group discussions, and practice tasks helped to increase the trainees' confidence and facilitate collaborative learning

P11: …you saw what everyone else did … and you thought 'mine's not bad' or 'I could have done that next time…cos' you got lots to compare… that was really good'

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5. Psychological States

Fear/Anger/ Anxiety

P4: …it's a bit scary… you all think you're going to have these clients who are aggressive…
P3: …problems with staff thinking they've made the wrong decisions… took a lot of our time to explain to them that those were just extreme cases

Self-esteem

P9: …some things are better for me… confidence, politeness, approaching people.

Self-efficacy as a HT

P11: …I'm quite excited about it. I am looking forward to doing this and helping other people… I've got the knowledge.
P8: …I'm confident in helping someone else to change

- Quant' measure highlighted a significant increase in self-efficacy
- A *practice makes perfect ideology* was communicated.

P8: …practically we'll grow into the role; we'll learn things as we start…

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6. Understanding HT Role

HTs' understanding

- Trainees were clear about their role as a result of the training programme.
- Initially this was not the case (concurrent with the mid training evaluation).

P11: …tell me what your role is about?... and nobody could say…

- Trainees would have valued insight into other HTs experiences

P11: …really useful , if someone who'd been doing health training for a couple of years were brought in…

Understanding behavioural change

P8: …it highlighted…some of my own personal resistances … as I haven't made any changes it indicates to me that it's maybe not going to be the easiest thing for someone else to do it.

Int: Do you think the next group should have the health psychology topics?
P11: Yes I do, definitely… It helps you understand the way people think…knowing why is really important. I'm glad you put this in

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7. Support

During the training
- Trainees wanted a *mentor scheme, (*Morris et al, 2003)
- As P7 suggests, the individual needs of the trainees were quite varied. Consequently a mentoring scheme could permit tailored support for trainees

P8: would be great if there was some way of adding one to one support.
P2: ...need someone to be a mentor… help solve our queries…

After training
- Trainees wanted extended support and ongoing training

P8: …be able to voice and air their own concerns… some kind of general support, on an ongoing basis. Be it psychological or just a place to voice those things would be helpful…

- As well as ensure they were up to date with DOH guidelines.
- Support clinics were available, but wanted them in a web-based or telephone support format

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Discussion

This study highlights that the evaluation of HT training programmes can provide an in-depth understanding of the processes of training.

Training strongly influences important factors in the HT role *(health-related knowledge, HTs' confidence),* which are key to ensure that this dynamic health promotion initiative is effective within the targeted communities.

The knowledge obtained from this evaluation therefore has the potential to influence the ability to perform effective actions in future HT training development

Thus onus now rests with the training providers to reflect upon these findings and to implement changes in that light.

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Critical Perspective for HT Evaluations

Eseryel (2002) – page 93

- Despite the importance of evaluating training programmes, such evaluations are *often inconsistent or missing* (Carnevale & Shulz, 1990; Holcomb, 1993)
- Evaluations are often thought of at the last minute, and traditionally represented as the final stage in a systematic approach.
  - *i.e. most evaluations are of the HT intervention – not the training*
- HT evaluations are not often published, and are found as local NHS trust reports
- What is the purpose of such evaluations if the results are not acted upon or not disseminated for effect, especially when they may benefit people's health

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'Evaluation is an essential activity for any health promotion programme. Failure to include it in practice ensures that attempts to conduct health promotion are usually rendered ineffective and unsuccessful'

Whitehead , D (2002) Evaluating health promotion: a model for nursing practice. *Journal of Advanced Nursing, 41*(5), 490–498

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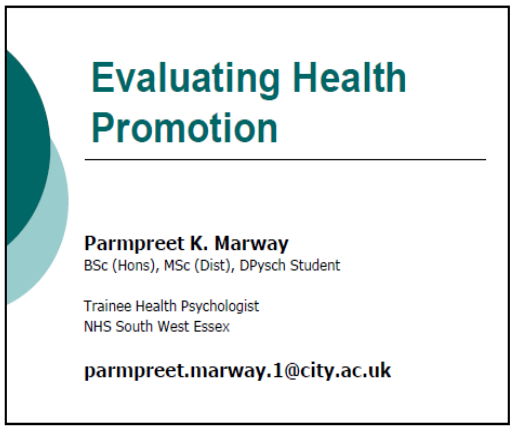
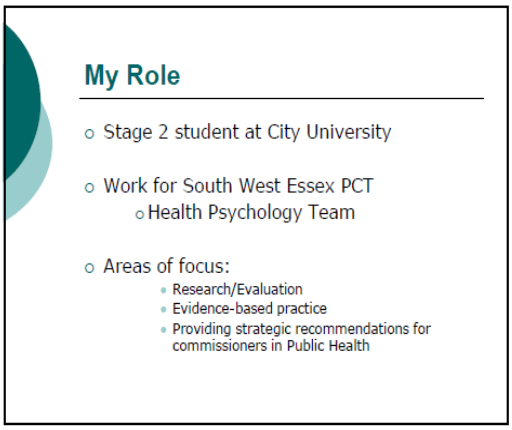
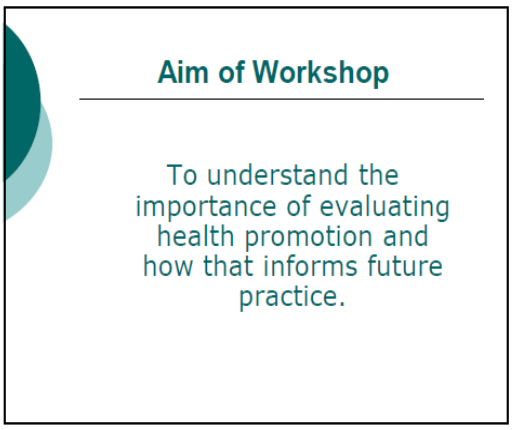
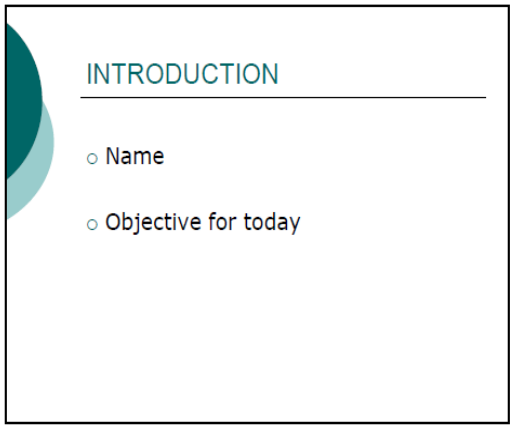
Questions

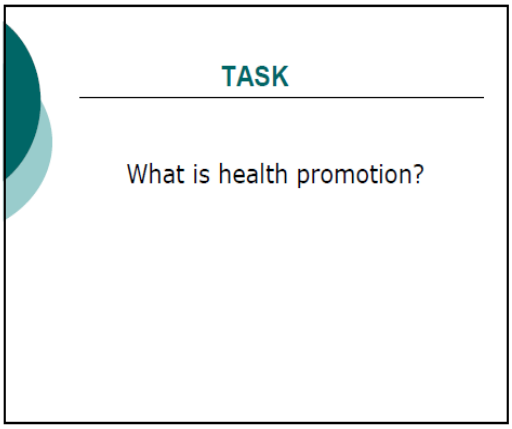
Appendix 3 – Lecture slides for Evaluating Health Promotion Lecture











Origins of Health Promotion

Improving the health of individuals, communities and populations is a long standing societal issue

World Health Organisation (WHO) Declaration of Alma Ata (1978)

- Improvements in health could not be determined by investments in the health care systems alone
- Stressed the importance to enrol other sectors in health improvement efforts

Definition 1

A strategy aimed "aimed at ***informing***, ***influencing*** and ***assisting*** both **individuals and organisations** so that they will accept more **responsibility** and be more active in matters affecting ***mental and physical health***"

Lalonde, 1974

Definition 2

"Health promotion is the process of enabling people to increase control over and to improve their health. Health is a positive concept emphasizing social and personal resources, as well as physical capacities.

Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy lifestyles to well-being."

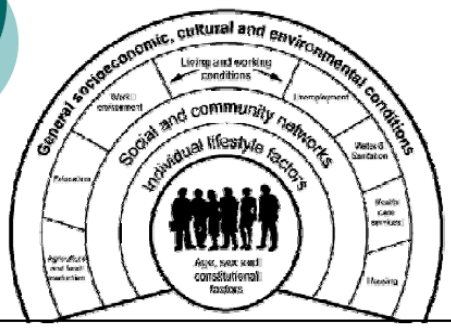
Ottawa Charter for Health Promotion (1986)

Definition 3

The *science* and *art* of helping people choose their lifestyles to move toward a state of optimal health

O'Donnell (1989)

Dahlgren & Whitehead's 'Layers of Influence' Model



New Public Health

Knowledge development for health promotion: a call for action (Ottawa, 1989)

1. Strengthening health
2. Redistributing power and control over individual and collective health issues
3. Reducing the negative impact of the wider determinants of health (i.e. economic, political)
4. Shifting allocation of resources upwards (preventing problems before they occur)
5. Giving attention to domains of health beyond physical (mental, spiritual and social dimensions)
6. Taking an ecological approach
7. Recognising community development and involvement as legitimate and effective strategies

Health Promotion is a key investment

- Health is a basic human right and is essential for social and economic development
- Increasingly, health promotion is being recognized as an **essential element of health development and community development**
- Health promotion, has an impact on the determinants of health
- Thus creating the greatest health gain for people, to contribute significantly to the reduction of inequities in health, to further human rights, and to build social capital
- The ultimate goal is to reduce health inequalities.

5 strategies of HP (1)

- The five strategies set out in the Ottawa Charter for Health Promotion are essential for success:
  - Build healthy public policy
  - Create supportive environments
  - Strengthen community action
  - Develop personal skills
  - Reorient health services

5 strategies of HP (2)

- Participation is essential to sustain efforts. People have to be at the centre of health promotion action and decision-making processes for them to be effective
- Access to education and information is essential to achieving effective participation and the empowerment of people and communities

5 strategies of HP (3)

Consolidate and expand partnerships for health

- Existing partnerships need to be strengthened
- The potential for new partnerships must be explored
- Capitalise by sharing of expertise, skills and resources

Increase community capacity + empower individuals

- Health promotion is carried out by and with people, not on or to people
- It improves both the ability of:
  - Individuals to take action,
  - The capacity of groups, organizations or communities to influence the determinants of health
  - Both short term and long term
- Requires practical education, leadership training, and access to resources

Health Promotion Principles

•Involves the population as a whole, rather than focusing on people who are at risk from specific diseases – preventative health promotion

•Combines diverse, but complementary, methods or approaches

•Aims for public participation

•Health promotion is basically an activity in health and social fields - and not a medical service, … but health professionals should work outwards, in education and health advocacy

(WHO, 1984)

5 approaches to HP

- Medical or preventive
- Behaviour change
- Educational
- Empowerment
- Social change

Naidoo and Wills (2000)

An example of health promotion

Health Trainers

Health Promotion in the UK

Traditional health promotion has not always been effective, as it has lacked choice and personalisation.

- Upon this premise the Department of Health (DOH) started shifting from the traditional *top-down* approach *to a more bottom-up.*

"...self-improving system built around the individual needs of service users, and influenced by effective engagement with the public"
(DOH, 2006, pg 5).

- Since the publication *"Choosing Health: making healthy choices easier"* (2004) this shift has been evident in the public health services.

Overview of Health Trainers (HT) - 1

- HTs are part of the UK government's strategy to reduce health inequalities.
- HTs challenge traditional methods of delivering health messages.
- Rely on ground level support – i.e. volunteers in the community.

Overview of Health Trainers (HT) - 2

- Advantageous solution:
  - They understand local issues
  - Potential barriers
  - Understanding these factors can facilitate healthier lifestyle changes
- HT provide health promotion that is:
  - **grounded** in local communities
  - and **tailored** to specific needs of residents

The need for HT in B+D

- It is an outer London borough
- Major health concerns:
  - High levels of smoking-related illnesses
    - (lung cancer, COPD, etc)
  - Cardio-vascular disease (CVD),
  - Childhood obesity
  - Deprivation – pattern between health inequities
- B & D adopted the HT philosophy, in the hope that local residents will access this service to achieve healthier lifestyles

The Training Programme

- 20 sessions
- Trainees were trained by health promotion specialists and health psychologists
  - List of topics included:
    - Nutrition
    - Smoking cessation
    - Basic IT skills
    - Health psychology topics – beh' change
    - Motivational interviewing
    - Communication skills
    - Challenging behaviour

Critical Perspective for HT Evaluations

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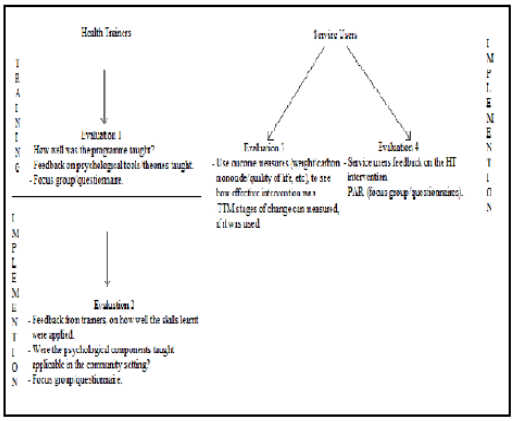

Preparation for the Evaluation

- I attended the 20 session training
- I purposely wanted to immerse myself into the context
- Independent evaluations tools can lack insight
- Eseryel (2002)

  postulates that training designers, trainers, etc; will need to become increasingly involved as program evaluators, in order for evaluations to have a substantive impact on the development of training programs (page 95).

Aims of the evaluation

- Explore the effectiveness of the unique training programme by gaining feedback from the trainees
- Enabling potential changes to be made for future HT cohorts, (Kvale, 1992; Yardley and Bishop, 2008)

Implications of the evaluation

1. HTs are an unique resource for health promotion
2. The training process they undergo is pivotal in determining how effective they are in their role, as well as shaping future health promotion initiatives

Methodology

- A qualitative methodology was employed
  - Strengths and weaknesses to be identified by participants
  - Permits in-depth exploration of these views (Holloway & Todres, 2003)
  - Only 20 HT trainees
- Three focus groups were held with 11 trainees (mean age= 35.3 years)
- A semi-structured question list

Methodology (2)

Example Questions

- Did the training meet your expectations?
- Do you feel ready practice as a Health Trainer?
- What did you enjoy most/least during the 20 session training?

- Transcripts were analysed by thematic analysis (Wilkinson, 1998)

Quantitative Measure (1)

- Experience of health-related work
- Perception of local health issues
- Knowledge on factors affecting health:
  - good/bad habits
  - Smoking
  - Weight management
  - Sleep
  - Drugs and alcohol
  - Mental health
- Knowledge of local services (i.e. cookery classes)
- Self-rated confidence levels on behaviour change (1-4 likert scale):
  - i.e. how confident do you currently feel about:
    - Providing information to individuals about the relationship between behaviour and health
    - Developing action plans for behaviour change
- HT's health assessment (i.e. vegetable consumption, smoking)

Quantitative Measure (2)

This measure exemplified significant increases in the trainees':

- health-related knowledge,
- knowledge of health services,
- confidence as a HT,
- and their physical and mental well-being.

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Results

- Seven major themes

1. *Course structure*
2. *Areas of improvement*
3. *Project co-ordination*
4. *Group dynamics*
5. *Psychological states*
6. *Understanding HT role*
7. *Support*

Course Structure

- *Course content*
- *Additional sessions*

Course Content

- Nutrition, physical activity and smoking cessation sessions were most enjoyed
- Both Quant' + Qual' measures showed significant changes in lifestyle patterns (i.e. smoking, diet, etc)

...smoking cessation was very effective... I actually gave up smoking

Additional Sessions

- Required greater depth for some topics (i.e. sexual health)

...time management would be a big factor to look at for the next one (cohort)

- Reported minimal coverage mental health, drugs and alcohol topics.
- Quant' measures revealed that the trainees' knowledge on these topics was significantly low, both pre and post training.

Areas of Improvement

- Assignment
- IT session
- Quality of Trainer

Assignment

- Anxiety and concern as trainees struggled with the assignments
- Trainees wanted assignment questions to be *'user friendly'*

'Once the question was put into easier terms and formats, it wasn't as awkward.'

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Project Co-ordination

- Lack of communication
- Receptiveness

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Group Dynamics

- Individual differences
- Stability
- Learning aids

Individual Differences

There were a range of needs in the group of trainees

...some people ...are learning to be students ...some have just done degrees... it's quite a varied group.

Younger trainees had completed university degrees, and found that training too simplistic

Older trainees required additional support from trainers outside training sessions

Stability

- Despite the individual differences, some found it conducive to learning
- Trainees expressed stable group dynamics created a support network

...you pair off with every member ... 2-3 times... that is quite useful... you're with lots of different kinds of people, different levels... is very helpful.

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Psychological States

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- Self-efficacy as a HT

Fear/Anxiety/ Anger

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Understanding HT Role

- HT's understanding
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Support

- During the training
- After training

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- As suggested, the individual needs of the trainees were quite varied. Consequently a mentoring scheme could permit tailored support for trainees

...would be great if there was some way of adding one to one support.

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Framework for the evaluation od health promotion initiatives

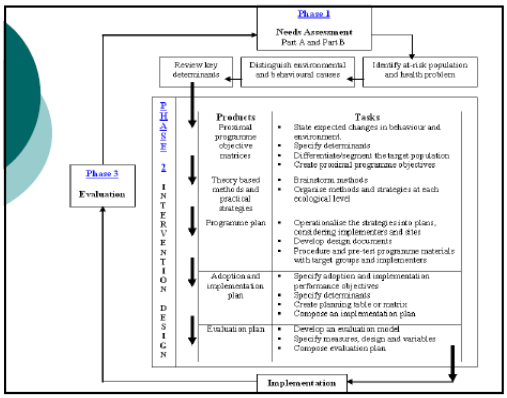
Rootman (2001)

1. Describing the programme
2. Identifying the issues and questions
3. Designing the data-collection process
4. Collecting the data
5. Analysing and interpreting the data
6. Making recommendations
7. Dissemination
8. Taking action

Nutbeam (1998)

Outcome model for health promotion

Health and Social Outcomes	QoL, functional independence, equity Mortality, morbidity, disability		
Intermediate Health Outcomes	Healthy lifestyles	Effective health services	Healthy environments
Health Promotion Outcomes	Health Literacy	Social influence and action	Healthy public policy & organisational practice
Health Promotion Actions	Education	Facilitation	Advocacy



Questions

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SECTION D: Systematic Review

A REVIEW EXPLORING THE EFFICACY OF MINDFULNESS-BASED INTERVENTIONS (MBIs) FOR DIABETIC HEALTH OUTCOMES

Abstract

Background: In the United Kingdom the number of people with diabetes is rapidly rising. Without careful and sustained self-management of the condition, life expectancy can be reduced between six to twenty years (Seshasai et al., 2011). 20-40 % of diabetic patients experience emotional problems (van Son et al., 2011). Co-morbid distress in diabetic patients has been associated with a reduced quality of life (Egede, 2005), poor diabetes control (Diabetes UK, 2008) and reduced glycaemic control (Lustman & Clouse 2005).

Mindfulness-based interventions (MBIs) have been used extensively for a range of psychological (Klainin-Yobas et al., 2012) and physiological disorders (Merkes, 2010; Niazi & Niazi, 2011) and have been found to be effective in improving disease related outcomes (Niazi & Niazi, 2011). However, a review exploring the efficacy of MBIs for specifically diabetic patients has not yet been conducted to date.

Aim: The aims of this review are: (1) to evaluate the efficacy of MBIs for patients with diabetes, and (2) to evaluate the methodological quality of the interventions.

Search Strategy: The following electronic databases were searched: Scopus, CINAHL, ScienceDirect, PsycINFO, PsycArticles, Medline, Web of Science, Psychological and Behavioural Sciences Collection, Cochrane, and Embase. Articles were also hand searched in peer-reviewed journals.

Selection Criteria: Only randomised controlled trials and quasi-experimental studies were included in this review. Peer-reviewed articles which had explored the effect of MBIs on type 1 or 2 diabetes were selected for inclusion.

Quality Assessment: To assess the methodological quality of the journals eight quality assessment criteria were used. Studies were scored 0 or 1 based on the pre-established criteria.

Results: A total of eight studies were selected for review. Four studies had utilised mindfulness-based stress reduction (MBSR), two studies had used acceptance commitment therapy (ACT) and the remainder had used mindfulness meditation (MM). Out of the eight papers assessed 50% scored a high quality assessment score which meant that these studies had a very strong methodology, and utilised relevant outcome measures, as well as a providing a detailed overview of the intervention. The remaining 50% achieved a medium quality assessment score as they had slightly less stringent methodologies, or failed to provide enough detail regarding the intervention. Despite the variation in the outcome measures, it was possible to group the outcomes to permit review, in terms of physiological outcomes, behavioural outcomes, and psychological outcomes.

Discussion: The review highlighted that the various MBIs are effective across a range of measures for diabetic patients (i.e. reducing HbA1C and stress levels, promoting adaptive coping, and increased diabetes-related acceptance). However, further research is needed in this field to explore the effectiveness of MBIs in diabetes employing more stringent methodologies, such as randomised controlled trials, with longer follow up periods in order to explore the long-term effects of MBIs for diabetes (i.e. behavioural changes, psychological, and physiological changes).

1.0 BACKGROUND

1.1 Diabetes

It has been estimated that worldwide, approximately 366 million people have diabetes, and that this number is expected to rise to 552 million by 2030 (International Diabetes Federation). This increase in prevalence is partly explained by the ageing population and the increase in obesity rates (van Son et al., 2011). In the United Kingdom the number of people with diabetes is rising rapidly. Since 2006 the number of people diagnosed with diabetes in England has increased from 1.9 million to 2.5 million (Quality and Outcomes Framework: diabetes prevalence, 2010).

Diabetes is the fourth or fifth leading cause of mortality in most developed countries (International Diabetes Federation, 2011), and it is undoubtedly one of the most challenging health problems in the 21st century (World Health Organisation - WHO, 2010). For example in some age groups, individuals with diabetes have a two-fold increase in the risk of stroke (WHO, 2006). It is also the leading cause of renal failure in both developed and developing countries. In addition, lower limb amputations are at least ten times more common in people with diabetes (WHO 2010), and it is one of the leading causes of visual impairment and blindness in developed countries (WHO 2010). Individuals with diabetes require at least two to three times the healthcare resources compared to people who do not have diabetes, and diabetes care may account for up to 15% of national health care budgets (Global Health Workforce Alliance, 2011). This evidence exemplifies the magnitude of diabetes as a global major health concern.

Diabetes is a chronic disease characterized by increased levels of blood glucose. In Type 1 diabetes this is caused from a deficit in the secretion of insulin. Whereas type 2 diabetes is caused as a result of insufficient insulin action, and/or a failure of the beta-cells to produce sufficient insulin, and it is the most frequent form (WHO, 2012).

Appropriate glycaemic control through adequate self-management is very important, in order to prevent or delay the onset of diabetes development, and potential complications associated with diabetes (i.e. coronary artery disease, neuropathy, nephropathy, and retinopathy). Consequently self-management consists of a healthy diet and physical activity, and medication adherence (i.e. insulin), alongside frequent assessment of blood glucose levels (WHO, 2003; U.K. Prospective Diabetes Study Group – UKPDS, 1998).

Without careful and sustained self-management of the condition, a person with diabetes faces a reduced life expectancy of between six to twenty years (Seshasai et al., 2011) as the burden of illness significantly increases. With a growing prevalence of chronic illnesses such diabetes, the need for effective prevention and disease management interventions is extremely great.

1.2 Diabetes and Emotional Distress

A considerable proportion of diabetic patients (20-40%) experience emotional problems (van Son, Nyklicek, Pop, & Pouwer, 2011), such as anxiety, depression and stress (Grigsby, Anderson, Freedland, Clouse, & Lustman, 2002; Ali, Stone, Peters, Davies, & Khunti, 2006; Nouwen, Winkley, Twisk, Lloyd, & Peyrot, 2010). Studies have exemplified that co-morbid distress in diabetic patients is associated with a reduction in quality of life (Egede, 2005), poor diabetes control (Diabetes UK, 2008), poor self-care behaviours, reduced glycaemic control (Lustman & Clouse, 2005), adverse cardiovascular outcomes, and in some cases mortality (Makine, Karsidag, Kadioglu, Ilkova, & Karsidag, 2009). Thus co-morbid distress in diabetic patients increases the risk of diabetes related complications and decreases diabetes related quality of life.

Psychological disorders and associated stress are often related to poor diabetes management. For example psychosocial stress, anxiety and depression have been associated with poor adherence to a prescribed regimen and poor glycaemic control in a mixed group of patients with type 1 and type 2 diabetes (Peyrot, McMurry, & Kruger, 1999; Fonagy, Moran, Lindsay, Kurtz, & Brown, 1987; Bryden, Peveler, Stein, Neil, & Mayou, 2001). This further supports the connection

between stress and maladaptive health behaviours (i.e. poor diet, increased smoking, and poor medication adherence) which can increase the risk of chronic disease development, such as diabetes and diabetes related complications (Weidner, Boughal, Connor, Pieper, & Mendell, 1997; Heslop, Smith, Carroll, Macleod, & Hyland, 2001; Metcalf, Smith, Wadsworth, Sterne, & Heslop, 2003; Ng & Jeffery, 2003; Crittenden, Manfredi, Cho, & Dolecek, 2007).

However the physiological stress response could also mediate the risk of diabetes onset and diabetes-related complications as it stimulates glucose production and insulin resistance (Lloyd, Smith, & Weinger, 2005). Consequently emotional stress poses a risk for diabetes onset and diabetes-related complications For example Pouwer and colleagues (2010), reviewed several longitudinal studies which suggest that not only depression but also general emotional stress and anxiety, sleeping problems, anger, and hostility are associated with an increased risk for the development of type 2 diabetes.

Despite the connection between emotional distress and diabetes, there has been limited focus on emotional problems in diabetic patients within practice and research (Van Son et al., 2011). In spite of this scarcity, studies have found a range of psychological interventions (i.e. cognitive behavioural therapy) to be efficacious in reducing stress, anxiety and depressive symptomology in diabetic patients (van der Feltz-Cornelis, Nuyen, Stoop, Chan, & Jacobson, 2010); providing scope for intervention for diabetic patients experiencing emotional distress. However a focus on mindfulness-based therapies and diabetes has not yet been explored, providing the rationale for this review.

1.3 Mindfulness: 'third wave therapies'

Traditional mainstream cognitive behavioural therapies (CBT) focuses on evaluating and challenging thoughts, especially those thoughts which are irrational and changing associated disruptive behaviours. Whereas mindfulness based therapies endeavour to achieve a mental state, where an individual has a non-judgmental awareness of the present moment. Deliberately paying attention to one's thoughts, bodily states, consciousness, and the environment, while

encouraging openness, curiosity, and embracing observation and a complete acceptance (Bishop, Lau, Shapiro, Carlson, & Anderson, 2004; Kabat-Zinn, 2003).

Mindfulness is an ancient practice found in a wide range of eastern philosophies, such as Buddhism and Yoga. Mindfulness-based interventions (MBIs) aim to help individuals relax their minds and as a result, achieve a state of calmness and happiness. Regular practise of mindfulness is believed to facilitate increased control over negative emotions, increase performance in daily activities, and promote a sense of well-being (Kabat-Zinn, 1994). Research has shown that higher levels of mindfulness is related to positive psychological and physiological outcomes (Walach, Buchheld, Buttenmüller, Kleinknecht, & Schmidt, 2006; Davidson, 2004).

It has been postulated that mindfulness can offer greater assistance and value for chronic illnesses (Zinken, 2009), such as diabetes, as higher levels of mindfulness can foster an increased willingness to tolerate uncomfortable emotions and sensations (Eifert & Heffner, 2003; Levitt, Brown, Orsillo, & Barlow, 2004), and increase emotional acceptance (Hayes, Strosahl, & Wilson, 1999). Mindfulness therefore offers assistance for self-regulated behaviours and adaptability to stressful events.

1.4 Mindfulness Based Interventions

Mindfulness-based interventions (MBIs) have been used extensively for a range of psychological and physiological conditions. MBIs encompass a large number of interventions, which include *mindfulness-based stress reduction - MBSR* (Kabat-Zinn, 1982), *mindfulness-based cognitive therapy - MBCT* (Segal, Williams, & Teasdale, 2002), *acceptance and commitment therapy – ACT* (Hays, Strosahl, & Wilson, 1999), and *mindfulness meditation - MM*.

Several systematic reviews have been conducted and they have provided encouraging evidence to support the efficacy of MBIs. For example Klainin-Yobas and colleagues (2012) conducted a meta-analysis, presenting evidence to support the efficacy of different MBIs addressing symptoms of clinical depression amongst

adults. In addition several reviews have explored the efficacy of singular MBIs such as MBSR, ACT or MBCT for a range of conditions. These reviews shall be discussed as follows, as well as providing a synopsis of what the specific mindfulness-based interventions entail, in the section below.

1.4a Mindfulness-Based Cognitive Therapy (MBCT)

Mindfulness-based cognitive therapy (Teasdale, Segal, Williams, Ridgeway, & Soulsby, 2000) is a relatively new psychological treatment designed to impart skills that empower and reduce relapse/recurrence in patients who are in remission from recurrent major depression

This eight week group intervention is based largely on Kabat-Zinn's (1990) MBSR program, it aims to teach individuals to disengage from habitual depression related rumination and behaviours, and view thoughts and feelings as transient rather than an objective representation. The theoretical rationale for MBCT is that through the practice of mindfulness earlier detection of dysphoric moods and negative thinking can be detected, enabling the patient to adequately address the precursors associated with a depressive episode, utilising alternative coping strategies. In addition to the eight group training, daily homework (both guided and unguided) is designed to facilitate the incorporation of awareness and mindfulness (Baer, 2003).

Chiesa and Serretti (2010) reviewed 25 studies examining the efficacy of MBCT on various outcomes, such as depression, anxiety, and quality of life – QoL, among patients with psychiatric disorders. The findings indicated that MBCT in conjunction with standard care could significantly reduce depressive symptoms, and lower relapse/recurrent rates in patients experiencing major depression. In addition, Teasdale and colleagues (2000) demonstrated that MBCT prevented relapse in patients with recurrent depression, compared to traditional cognitive behavioural therapy (CBT) in a randomised controlled trial. In fact at the one year follow up, for those patients with three or more previous episodes of depression (77% of the sample), MBCT significantly reduced risk of relapse/recurrence.

Moreover, a recent study conducted by Green and Bieling (2012) reported that MBCT led to a significant improvement in mood, mindfulness skills, and a reduction in the severity and the total number of perceived life stressors for a group of patients with a range of psychiatric diagnoses and comorbidities. This later study suggests MBCT could be extended to a range of patient groups with coexisting physical health problems. However due to the sample size of this study (n= 23) further research would need to be conducted. Despite this, the literature presented so far suggests that MBCT could be beneficial for diabetic patients with psychological comorbidity (i.e. depression, anxiety, stress) (Keen, Duncan, & Gold, 2012), however more research is needed in this area to shed more light on the effectiveness of MBCT for such populations.

1.4b Mindfulness-Based Stress Reduction (MBSR)

Mindfulness-based stress reduction is a multi-component group intervention (Mars & Abbey, 2010). It was developed by John Kabat-Zinn to address the cognitive and somatic dimensions stress, associated with chronic illnesses or pain. Typically MBSR interventions consist of meditation, hatha yoga, and self-directed body scans in order to raise awareness of sensation. Commonly diaries and log books are used to monitor exercise-related outcomes. For example audio-taped guided meditation is used to support homework (Baer, 2003).

The MBSR is typically delivered in a group format, consisting of six to eight weekly sessions. Each session is approximately 1.5 to 2.5 hours long, and one of the sessions is conducted as a full day session (six to eight hours long), this session is normally held in the latter stages of the MBSR programme (Kabat-Zinn, 1990).

The efficacy of this patient-centred, experiential, and educational intervention has been evidenced for a range of chronic physical and psychological illnesses (Reibel, Greeson, Brainard, & Rosenzweig, 2001). For example Kabat-Zinn and colleagues (1985) evidenced that a 10 week MBSR programme led to significant reductions in chronic-pain related symptomatology, inhibition of daily activity by pain, and pain related drug use. In addition a follow up study revealed that the majority of these reductions were sustained up to four years.

Furthermore, several reviews have been conducted exploring the efficacy of MBSR for people with chronic illness/diseases (Merkes, 2010; Niazi & Niazi, 2011). Both of the reviews highlighted that MBSR is efficacious in improving health outcomes across a range of chronic illness/diseases (i.e. fibromyalgia, chronic pain, rheumatoid arthritis, diabetes, cardiovascular diseases - hypertension) as MBSR significantly reduces stress levels and a range of health measures. In addition a meta-analysis conducted on 20 studies, by Grossman and colleagues (2004) advocated MBSR for a broad range of individuals to cope with clinical and non-clinical problems.

In fact Carlson et al., (2003, 2007) evidenced that participants with early stage cancer who were trained in MBSR showed decreases in monocyte numbers as well as decreased stimulated production of interferon-gamma and interleukin (IL)-10, and this effect persisted for one year.

Hence MBSR appears to offer scope for a range of psychological and physiological disorders, especially for those with chronic illnesses (Grossman, Niemann, Schmidt, & Walach, 2004; Chiesa & Serretti, 2010; Merkes, 2010; Niazi & Niazi, 2011), as it appears to reduce stress-related outcomes; enhancing adaptive coping skills and behaviours.

1.4c Acceptance and Commitment Therapy (ACT)

Acceptance and commitment therapy (ACT) (Hays, Strosahl, & Wilson, 1999) is a model for behaviour change. It is theoretically rooted in relational frame therapy (RFT); a behavioural approach to understanding cognition and language development (Montgomery, Kim, & Franklin, 2011). ACT ultimately aims to increase ones' psychological flexibility. Rather placing emphasis on altering or halting cognitions and feelings, ACT attempts to teach individuals to experience their thoughts and feelings (Gregg, Callaghan, Glenn- Lawson, & Hayes, 2007). Consequently ACT incorporates elements of mindfulness, in that it encourages one to attenuate to their thoughts and bodily states, while encouraging openness, curiosity, and embracing observation and acceptance.

ACT's six core processes attempt to encourage: acceptance over avoidance, cognitive diffusion over cognitive fusion, contact with the present moment over dominance of the conceptualised past or feared future, placing self as the context as a pose to the content, valued living, and committed action over inactivity and impulsive behaviour.

Studies have shown that increased acceptance is associated with improvement in quality of life, and reduced avoidance (Eifert & Heffner, 2003; Vowles & McCracken, 2008). In addition, Hays and colleagues (2006) conducted a meta-analysis of 32 studies (n=6638) and demonstrated the underlying principles of ACT in an adult population, and psychological flexibility was associated with improved quality of life and outcomes. Furthermore studies have found that ACT leads to positive long-term outcomes for depression, anxiety, chronic pain, and work stress (Hays et al., 2006), and the effect sizes indicate that ACT is a useful framework for chronic illness (Montgomery et al., 2011), as the effects are significantly noticeable post-treatment (i.e. 6 months) (Dahl, Wilson, & Nilsson, 2004).

Thus the evidence presented so far suggests that ACT could be useful promoting acceptance and increased self-management in diabetes, with potentially long lasting results.

1.4d Mindfulness Meditation (MM)

Meditation is classed as a self-regulatory practice that focuses on training attention and awareness in order to bring mental processes under greater voluntary control, promote relaxation, and improve overall health (Walsh & Shapiro, 2006). Meditation provides a mental and attitudinal framework in which mindfulness can be achieved (Mars & Abbey, 2010).

Mindfulness meditation is different to other forms of meditation, such as transcendental meditation, which requires one to concentrate on a mantra, repeating specific sounds, words or phrases. In contrast mindfulness meditation

does not require deep concentration, but in fact an increased awareness of one's environment.

Mindfulness meditation has been evidenced to reduce habitual and addictive behaviours (Wenk-Sormaz, 2005; Treloar, 2005; Kristeller & Hallet, 1999). Studies have also shown that meditation practices impact physiological pathways, including the immune and neuroendocrine systems, which are modulated by stress, and which are also relevant to disease development and progression (Carlson, Speca, Patel, & Faris, 2007; Hidderley & Holt, 2004; Tang, Ma, Wang, Fan, & Feng, 2007). For example, mindfulness meditation was found to enhance antibody production following an influenza vaccination, and significantly increase left-sided anterior activation, which is associated with positive affect and reduced anxiety (Davidson, Kabat-Zinn, Schumacher, Rosenkranz, & Muller, 2003).

1.5 MBIs & Diabetes

In light of this indirect and direct pathways associated with psychological distress, MBIs offer scope for intervention, in either preventing diabetes through increased coping skills (i.e. relaxation through mindfulness meditation), as well as increased disease management (i.e. increased mindfulness of bodily and psychological states).

Psychological interventions such as CBT, have been effective to some extent for addressing diabetic self-management. However as the central tenet of such interventions is to eliminate psychological distress, it can be posited that such interventions are not suited for chronic illnesses such as diabetes, as eliminating psychological distress may not be feasible for this population, as they are often exposed to the risk of diabetes-related complications (Gregg et al., 2007), and they tend to present higher levels of stress, anxiety and depression (van Son et al, 2011; Grigsby et al., 2002; Ali et al., 2006; Nouwen et al., 2010). Thus MBIs offer scope for intervention in that they can increase patients coping repertoire and potentially aid better self-management of their diabetic conditions.

2.0 PURPOSE AND AIMS

However a review of MBIs for diabetes has to date, not yet been conducted, due to the limited studies in this area. In spite of this observation, several studies have been conducted with diabetic patients employing a range of MBIs, in recent years (2009-2012). Thus it is proposed that a review should be conducted exploring the efficacy of MBIs for diabetes.

The aims of this review are: (1) to evaluate the efficacy of MBIs for patients with diabetes, and (2) to evaluate the methodological quality of the interventions.

3.0 METHODOLOGY

3.1 Study Selection Criteria

Type of studies

Randomised controlled trials and quasi-experimental studies

Type of participants

Only studies which had focused on patients with type 1 or 2 diabetes were included in the review.

Type of intervention

The studies in the review investigated the effectiveness of mindfulness-based interventions for diabetic patients.

Type of outcome measure

A series of measures were explored such as physiological measures (e.g. HbA1c - blood glucose levels; cortisol), psychological measures (e.g. stress levels, emotional well-being, mood states, quality of life measures, adjustment and coping measures), and behavioural measures (e.g. disease management outcomes (i.e. medication adherence, blood glucose testing, etc.).

3.2 Search Strategy & Search Terms

The following electronic databases were searched: Scopus, CINAHL, ScienceDirect, PsycINFO, PsycArticles, Medline, Web of Science, Psychological and Behavioural Sciences Collection, Cochrane, and Embase. Articles also hand searched in peer reviewed journals.

The following search terms were used:

1. 'mindfulness' and 'diabetes'
2. 'mindfulness-based interventions' and 'diabetes'
3. 'mindfulness-based stress reduction' and 'diabetes'
4. 'MBSR' and 'diabetes'
5. 'mindfulness-based cognitive therapy' and 'diabetes'
6. 'MBCT' and 'diabetes'
7. 'mindfulness meditation' and 'diabetes'
8. 'acceptance commitment therapy' and 'diabetes'
9. 'ACT' and 'diabetes'

Inclusion and Exclusion Criteria

Initially studies which matched the search terms were selected. The keywords were applied to the full text in the electronic literature search. During the second stage of the search, journals which included non-diabetic patients were excluded. Peer reviewed journals and peer-reviewed theses were selected for inclusion in the review. Studies which used any other psychological intervention, other than MBIs such as MBSR, MBCT, ACT and mindfulness meditation, were excluded.

3.3 Methods of Review

Criteria based analysis

To assess the methodological quality of the journals the following quality assessment criteria was used. The descriptions and scoring for each criteria is stated as follows.

1. Description of intervention

   Was a complete description of the intervention given (i.e. format: group /one-to-one; length: number of sessions; components of intervention)?

   1= yes

   0=inadequate/minimal description

2. Randomisation

   Were the participants randomly allocated to the groups (i.e. participants randomly allocated to receive one or other of the alternative treatments and the process is described)?

   1= yes

   0= no

3. Baseline comparisons (i.e. for both pre and post intervention)

   Were baseline comparisons made for both pre and post intervention and both groups (i.e. stress levels, HbA1C levels)?

   1= yes

   0= no

4. Sample size

   Was the sample size adequate (i.e. a–priori calculations and/or power analyses conducted)?

   1= yes and power analysis was carried out

   0= power analysis not carried out and sample

5. Withdrawals and dropouts explained

   Withdrawals and dropouts accounted for and explained

   1= yes

   0= no

6. Outcome measure (i.e. physiological, behavioural, and psychological)

   Was/were the outcome measure/s stated (i.e. physiological biomarkers: HbAIC; behavioural: disease management; and standardised psychological outcomes)

   1= yes

   0= no

7. Validity and reliability of measurement tool

   Was/were the measurement tool/s valid and reliable (i.e. test retest/ internal consistency)?

   1= yes

   0= no

8. Appropriate statistical analyses conducted

   1= yes

   0= no

The quality assessment was conducted by two researchers via a double blind method. The maximum score for the studies was 8. Studies receiving between 8-6 points were classified as high quality, 5-4 points as medium quality and studies with a score of 3 or less were defined as low quality.

Data Abstraction and Analysis

In order to compare the publications the following data outputs were extracted from the journals:

1. Study author
2. Year of publication
3. Country of research
4. Study population (gender, age, ethnicity if provided)
5. Sample size
6. Type of intervention
7. Intervention description
8. Outcome measure/s
9. Follow-up
10. Conclusion

4.0 RESULTS

55 abstracts were read for inclusion in the review, from which eight were shortlisted for inclusion. A total of 47 studies were excluded from the review. The studies were excluded for a number of reasons. For example, those papers which were systematic reviews, studies using other forms of interventions other than MBIs, studies using non-diabetic participant sample, and conference proceedings were excluded.

The selected papers were then assessed for quality by the author and another researcher, via a double blinded methodology. The inter-rater reliability was very high, with 100% replication of the assigned scores. Table 1 provides an overview of the scores assigned. Out of the eight papers assessed 50% scored a high quality assessment score, and the remaining 50% achieved a medium quality assessment score. Appendix 1 provides an example of the scoring table.

Table 1 – Quality Assessment Outcomes

Study Title & Author	**MBI Type**	**Quality Assessment Score**	**Quality Rating**
Improving Diabetes Self-Management Through Acceptance, Mindfulness, And Values: A Randomized Controlled Trial Gregg et al., (2007)	ACT	8/8	High
The Development And Feasibility Of A Web-Based Intervention With Diaries And Situational Feedback Via Smartphone To Support Self Management In Patients With Diabetes Type 2 Nes et al., (2012)	ACT	4/5	Medium
Effect Of Mindfulness Meditation On A1c Levels In African American Females With Type 2 Diabetes Schuster (2009)	MM	5/5	Medium
The Effect Of Mindfulness Meditation On Painful Diabetic Peripheral Neuropathy In Adults Older Than 50 Years Teixeira (2010)	MM	8/8	High

Study Title & Author	MBI Type	Quality Assessment Score	Quality Rating
Effects Of The Mindfulness Based Stress Reduction (MBSR) Approach On Psychic Health (Stress, Anxiety, Depression) And Coping Mode Of Diabetic Patients: A Controlled And Randomized Pilot Study Berghmans et al., (2012)	MBSR	7/8	High
Mindfulness-Based Stress Reduction Is Associated With Improved Glycaemic Control In Type 2 Diabetes Mellitus: A Pilot Study Rosenzweig et al., (2007)	MBSR	5/8	Medium
Mindfulness Based Stress Reduction: Effect On Emotional Distress In Diabetes Young et al., (2009)	MBSR	5/8	Medium
Sustained Effects Of A Mindfulness-Based Stress-Reduction Intervention In Type 2 Diabetic Patients Hartmann et al., (2012)	MBSR	7/8	High

Four of the eight studies reviewed were randomised controlled trials (RCTs), three were prospective cohort studies, and one was a retrospective cohort study. To permit review and comparison of the studies the defined data outputs (outlined in section 3.3) were used to extract information for the eight selected papers. Table 2 provides a summary of the studies reviewed.

Upon review of table 2, it is evident that a range of outcome measures have been used to test the efficacy of MBIs for diabetic patients. Out of the eight papers selected, two papers were had tested the ACT model, two papers had tested the efficacy of MM, and four papers had tested the efficacy of MBSR.

Table 2 : Data Extraction Table

Significant results/ Conclusion	Significant changes in: Intervention group HbA1c (F(1,78)=7.14, p=.009). Diabetic control increased in intervention group (p=.006), comparing group scores from pre and f/u, ACT produced significant improvement in diabetic control vs education group (u=621, z=-2.61, p=.009). Intervention group self-management scores (F(1, 60) =4.29, p= .043, partial n^2 = .07). Intervention group's AADQ scores (increased diabetes-related acceptance) F(1, 52) =23.87, p= .011,partial n2 = .12).	Average response rate was 68% Descriptive analysis only conducted Decrease in mean average HbA1C. *Decrease in mean BMI (pre mean: 7.39 vs. post mean:6.99),PAID scores (pre mean: 25 vs. post mean: 22.73), ADDQoL (pre mean:-1.25 vs. post mean:-1.12).* Participants rated feedback as useful for their diabetes management/coping, prompted behaviour change – dietary goal attainment. **Score in italics calculated by author*
Drop outs	15 participants	4 participants
Follow-up	3 months	3 months
Outcome measure/s	HbA1c / Self-management scores (Toobert et al, 2002) / Diabetes Care Profile (Fitzgerald et al, 1996) / Acceptance and Action Diabetes Questionnaire - AADQ (Hayes et al, 2004)	HbA1c / BMI / Self-reported measures: Audit of Diabetes Dependence Quality of Life – ADDQoL 19 (Bradley et al, 1999) / Problem Areas in Diabetes - PAID (Snoek et al, 2000)
Format	Group	1-2-1 - Smartphone and Diaries
Intervention description (i.e. content/ duration)	Education: - Diabetes disease process, Nutrition, Importance of physical activity, Blood glucose monitoring and use of results, Prevention, Diabetic complications ACT + education ACT : 4 hour session and mindfulness and acceptance training Focused on: - Difficult thoughts and feelings about diabetes, - Personal values related to diabetes, - Acting in valued directions.	3 month intervention consisted of: Smartphone Online diary application which participants complete 3x a day (16-19 item [1-6 likert scale] questionnaire on diabetes self-management/ monitoring, diet, blood glucose readings, and feelings). Reminders sent to prompt entry Received individualised written situational feedback (in the 1st month feedback was daily, in the later months weekly feedback was provided) based on ACT principles (value-focused, acceptance, and mindfulness) Audio files with mindfulness relaxation techniques Healthcare tool – Few Touch Application Blood glucose meter readings transferred to phone. Diet and physical activity goals could be recorded prompting feedback depending on performance outcomes in relation to goals assigned.
Intervention	ACT + education Vs. education	ACT
Study design	RCT	Cohort Study
Sample size	81 participantsIntervention group (n=43), Control group (n=38)	15 participants
Study population	Type 2 diabetics Low socio-economic status Mean: age-50.9yrs/ Diabetes duration-6 years	Type 2 diabetics 5 women/ 10 men Mean age 59.6 years
Country	USA	Norway
Year	2007	2012
Study title and Author/s	1) Improving Diabetes Self-Management Through Acceptance, Mindfulness, And Values: A Randomized Controlled Trial. **Gregg et al.**	2) The Development And Feasibility Of A Web-Based Intervention With Diaries And Situational Feedback Via Smartphone To Support Self-Management In Patients With Diabetes Type 2. **Nes et al.**

Significant results/ Conclusion	Participants with a high mean pre stress score were significantly overweight (t=2.28, p=0.04). No significant difference between pre and post intervention scores for A1C (ES: d=-.10), weight (d=.03), stress (d=.42). But effect size suggests MM most useful for highly stressed individuals. Correlation between pre weight and pre stress(r=.61, p=.01), post stress and post weight (r=.55, p=.02), and negatively correlated with post A1C (r=-.50, p=.05).	No significant difference between the groups for NPS and NeuroQoL scores. Intervention group had: - lower degrees of discomfort on the subscale of pain in the NeuroQoL (adjusted mean, ES -0.07). Higher score for pain intensity score (adjusted mean, ES -0.16) Significant correlation between symptom severity and sleep quality (r^s=53, p=.043).
Drop outs	11 participants	2 participants
Follow-up	n/a	n/a
Outcome measure/s	Derogatis stress scale - DSP (Derogatis, 1984) Weight AIC Mediation log sheets	Neuropathic Pain Scale –NPS (Galer & Jensen, 1997) NeuroQoL (Vileikyte et al, 2003) Pittsburgh Sleep Quality Index – PSQI (Buysse et al, 1989)
Format	Combination group and 1-2-1	Combination group and 1-2-1
Intervention description (i.e. content/ duration)	8 weekly sessions (1 hour long) Covered how to meditate mindfully and diabetes education. Group sharing was a key component in the intervention. In addition participants had to mediate 30-45 minutes daily as part of home practice and complete log sheets.	Intervention group: Instructed on MM. Instructed to listen to a guided disk 5 days a week for 4 weeks. Participants received a one 1-2-1 60 minute session on MM. Control Group: Received nutritional information. Instructed to maintain a food diary for 4 weeks. Both groups were followed up every week by telephone.
Intervention	MM	MM
Study design	Cohort study	RCT
Sample size	29 participants	22 participants Intervention group (n=11), Control group (n=11)
Study population	Type 2 Diabetics African Females Mean age: 58 years	Type 2 Diabetics with diabetic peripheral neuropathy. Mean age: 74.6 years, Diabetes mean duration: 12.6 years / Mean No' of years with painful symptoms: 7.76 years
Country	USA	USA
Year	2009	2010
Study title and Author/s	3) Effect Of MM On A1c Levels In African American Females With Type 2 Diabetes. **Schuster.**	4) The Effect Of MM On Painful Diabetic Peripheral Neuropathy In Adults Older Than 50 Years. **Teixeira.**

Significant results/ Conclusion	Intervention led to significant reductions in stress (i.e. group a pre:28.5 to 16 post-test: z=2.49, p<.05), and anxiety (group b pre:12.71 to 8.29 post-test: z=2.3, p<.05). Both groups post intervention had significant changes in coping styles (i.e. significantly different pre and post scores group A/ *group B*: active coping: z=2.325, p<.05/ *z=2.414, p<.05 //*coping planning: z=2.156, p<.05/ *z=2.388, p<.05//* positive reinterpretation z=2.226, p<.05/ *z=2.232, p<.05//*reduction use of blame: z=2.131, p<.05/ *z=2.456, p<.05 //denial z=2.070, p<.05// increase in acceptance z=2.217, p<.05*). Less impact on depression scores.	Reduction in post HbA1C at 8 weeks (p=.14, d=0.46), but follow up HbA1C had significantly reduced (p=.03, d=0.88) & decrease in mean arterial pressure seen at 8 weeks (p=.07, d=0.27), reaching significance at 1 month F/U (p=.009, d=0.48). No change in mean weight. Reductions in symptoms of depression (43%), anxiety (37%), and general psychological distress (35%,) upon intervention completion (depression: p=.03, d=0.86; anxiety: p=.33, d=0.43; general severity index: p=.O7, d=0.60). No change in somatization.
Drop outs	5 participants	3 participants
Follow-up	16 weeks	1 month
Outcome measure/s	Perceived stress scales - PSS (Cohen, 1988) Hospital & Depression Scale – HAD (Zigmond & Snaith, 1983) Brief Coping Scale (Carver, 1997)	HbA1C / Blood pressure / Weight / Symptom Checklist-90 : depression, anxiety, somatization / General severity index (Derogatis, 1994) / Log Sheets for home practice.
Format	Group and 1-2-1 practice	Group and 1-2-1 practice
Intervention description (i.e. content/ duration)	8 weekly group sessions of MBSR (per session: 2 hours long). Program was based on the MBSR programme designed by Dr Jon Kabat-Zinn. Comprised of mindfulness meditation, body scan, yoga and discussions of experiences. 4 home sessions a week.	8 weekly group sessions of MBSR (per session: 150 minutes long). One 7 hour weekend session. Program was based on the MBSR programme designed by Dr Jon Kabat-Zinn. Comprised of mindfulness meditation, body scan, awareness of breathing, and mindful communication. 2 practice disks were given to each participant to support home meditation (20-30 minutes, 6 days per week).
Intervention	MBSR	MBSR
Study design	RCT	Cohort study
Sample size	22 participants Group A (n=11), Group B/ waiting list (n=11)	14 participants
Study population	Type 1 diabetics, Had diabetes for >10 years 3 males / 14 females / Age range :20-50 years	Type 2 diabetics, Mean time since diagnosis: 7.36 years 5 males / 9 females, Mean age: 59.2 years
Country	France	USA
Year	2012	2007
Study title and Author/s	5) Effects Of The MBSR Approach On Psychic Health (Stress, Anxiety, Depression) And Coping Mode Of Diabetic Patients: A Controlled And Randomized Pilot Study. **Berghmans et al.**	6) MBSR Is Associated With Improved Glycaemic Control In Type 2 Diabetes Mellitus: A Pilot Study. **Rosenzweig et al**.

Significant results/ Conclusion	Compared to population values, diabetic individuals had higher distress at baseline values. Total mood score - significantly improved post intervention (pre score: 23.7, post score:8, p,0.001). Significant improvement in pre and post POMS-SF sub scales (p<0.001): Tension/anxiety (pre score:7, post score:4), Depression/dejection (pre score:6, post score:3), Anger/hostility (pre score:6, post score:2), Fatigue/inertia(pre score:12, post score:5), Vigour/activity (pre score:7, post score:12). The pre score (6) and post score (4) for the confusion/bewilderment sub-component - significant at p<0.05. MBSR had increased vigour/activity levels.	No significant effect of MBSR for albuminuria progression. At the 1 year follow up the intervention group had significantly lower levels of depression (PHQ-9, d= 0.71, p=.033), improved mental health status (d= 0.54, p=.007), and reduced diastolic blood pressure (d= 0.78, p=.004). The PHQ stress score was also significantly different (d= 0.64, p=.023) in the MBSR group. No significant difference in the physical component of the SF-12, nor for the HbA1c and systolic blood pressure readings.
Drop outs	n/a.	7 participants
Follow-up	n/a	I year
Outcome measure/s	Profile of Mood States Short Form - POMS-SF (McNair et al, 1992)	HbA1C / Blood pressure / Alnuminuria / Patient health questionnaire –PHQ (Spitzer et al 2000) / Short Form Health Survey – SF-12 (Ware 1998)
Format	Group and 1-2-1 practice	Group
Intervention description (i.e. content/ duration)	8 weekly group sessions of MBSR (per session: 2.5 hours long) One full day session in week 7/8 of programme. Participants had to practise mindfulness exercises daily (30-45 minutes long). Program was based on the MBSR programme designed by Dr. Jon Kabat-Zinn.	8 weekly group sessions of MBSR adapted for diabetes (6-10 participants per group) Booster session after 6 months.
Intervention	MBSR	MBSR
Study design	Cohort study - retrospective	RCT
Sample size	25 participants	110 participants Intervention group (n=53), Control group (n=57)
Study population	Type 1 (12%) and Type 2 (44%) diabetics (44% did not state type), Mean age: 56 years 60% of cohort were female	Type 2 diabetics with microalbuminuria Mean age: 59 years, Participants had diabetes for >3 years, 86 males / 24 females
Country	USA	Germany
Year	2009	2012
Study title and Author/s	7) Mindfulness Based Stress .Reduction: Effect On Emotional Distress in diabetes. **Young et al.**	8) Sustained Effects Of A MBSR Intervention In Type 2 Diabetic Patients. **Hartmann et al.**

In light of the evidence presented in table 2 it is clear that the studies reviewed utilised a range of methodological designs, and even though the same constructs may have been explored (i.e. stress levels), the scales/ measures used were different. Thus it was not possible to conduct a meta-analysis for the reasons stated above (Deeks, Higgins, & Altman 2008).

Despite this, it was possible to group the outcomes to permit review. Consequently to review the efficacy of MBIs for diabetic patients the findings will be presented in terms of physiological outcomes, behavioural outcomes, and psychological outcomes.

4.1 Physiological Measures

Several physiological measures were used to assess the efficacy and impact of the various MBIs for diabetics. These ranged from blood pressure readings, HbA1C (glycosylated haemoglobin), body weight/ body mass index (BMI). The results shall be reviewed as follows:

HbA1C

Glycosylated haemoglobin (A1c or HbA1c) is a form of haemoglobin that is measured primarily to identify the average plasma glucose concentration. Five of the papers reviewed had included this quantitative biological measure, as summated in table 3.

Table 3 – Summary of studies which used HbA1c outcome measure

Study	MBI Type	Outcome
Improving Diabetes Self-Management Through Acceptance, Mindfulness, and Values: A Randomized Controlled Trial. Gregg et al (2007)	ACT	**ACT led to significant change in HbA1c ($F(1,78)=7.14$, $p=.009$)**
The Development And Feasibility Of A Web-Based Intervention With Diaries And Situational Feedback Via Smartphone To Support Self-Management In Patients With Diabetes Type 2. Nes et al (2012)	ACT	Reduction in mean scores for pre intervention HbA1c scores (7.39) compared to post HbA1c scores (6.990)[14]

[14] Mean scores calculated by author as these were not provided in the original paper.

Study	MBI Type	Outcome
Effect Of Mindfulness Meditation On A1c Levels In African American Females With Type 2 Diabetes. Schuster (2009)	MM	No significant difference between pre and post intervention scores for A1C (*d*=-.10)
Mindfulness-Based Stress Reduction Is Associated With Improved Glycaemic Control In Type 2 Diabetes Mellitus: A Pilot Study. Rosenzweig et al (2007)	MBSR	Reduction in post HbA1C at 8 weeks (*p*=.14, *d*=0.46), but f/u **HbA1C had significantly reduced (*p*=.03, *d*=0.88)**
Sustained Effects Of A Mindfulness-Based Stress-Reduction Intervention In Type 2 Diabetic Patients. Hartmann et al (2012)	MBSR	No significant difference for HbA1c at 1 year f/u (*p*=.151, *d*=0.37)

Only two papers reported a significant effect on HbA1C for the two MBI (i.e. ACT and MBSR). Gregg et al., (2007) found that ACT led to significant change in HbA1c (*F(*1,78)=7.14, *p*=.009). Whereas Rosenzweig et al., (2007) detected a significant reduction in HbA1c at the 1 month follow up after the eight week MBSR intervention (p=.03, d=0.88). It is important to note that Rosenzweig and colleagues did not report a significant difference at the eight week post intervention stage (*p*=.14, *d*=0.46).

Weight & BMI

A few papers had include weight or body mass index (BMI) as an outcome measure. Some studies reported no significant change in mean weight (Rosenzweig et al., 2007: ACT). In addition, Shuster (2009) found the MM did not lead to any significant change in weight for African American women with diabetes (*d*=.03). However, a pattern between weight and stress was reported. For example participants with a high mean pre stress score were significantly overweight (*t*=2.28, *p*=.04), and a correlation between pre weight and pre stress(*r*=.61, *p*=.01), and post stress and post weight (*r*=.55, *p*=.02). Furthermore, ACT appears to have a minimal effect on BMI readings (pre: 29.36, and post: 28.45 scores) in the study conducted by Nes et al., (2012); however no statistical analysis was conducted to test the effect size or the statistical significance between these two scores.

Additional Measures

Only two studies had included measures of blood pressure. The RCTs found MBSR to have a significant reduction on mean arterial pressure at the 1 month follow up (*p*=.009, *d*=0.48) (Rosenzweig et al., 2007), and on diastolic blood pressure at 1 year follow up (*d*= 0.78, *p*=.004) (Hartmann et al., 2012). However, there was no significant difference in the physical component of the SF-12, and systolic blood pressure readings (Hartmann et al., 2012).

Diabetes Related Complications

Two studies explored the effect of MBIs on diabetes-related complications. Teixeira (2010) conducted a RCT to test the efficacy of MM on type 2 diabetes patients with diabetic peripheral neuropathy (diabetes mean duration: 12.6 years, mean number of years with painful symptoms: 7.76 years). Three scales were used to assess whether MM reduced neuropathic pain (Neuropathic Pain Scale – NPS, Galer & Jensen, 1997), sleep patterns (Pittsburgh Sleep Quality Index – PSQI, Buysse et al., 1989), and quality of life (NeuroQoL, Vileikyte et al., 2003). No significant difference between the intervention and control groups for NPS and NeuroQoL scores were observed. However the intervention group had lower degrees of discomfort on the subscale of pain in the NeuroQoL (adjusted mean, ES -0.07) and higher score for pain intensity score (adjusted mean, ES -0.16). A significant correlation between symptom severity and sleep quality (rs=53, p=.043) emerged. Whereas Hartmann et al., found no significant effect of MBSR for albuminuria progression (*p*=.134, *d*=.40), in their RCT.

4.2 Behavioural Measures

A few studies had assessed the utility of MBIs for health-related behavioural changes. For example, Gregg and colleagues had tested whether ACT led to any changes for diabetic control. This RCT study found that the intervention group had increased diabetic control (*p*=.006), compared to the control group who had diabetes education (*p*=ns) based on the pre and post scores. Thus ACT produced a significant improvement in diabetic control compared to the diabetes education group (*u*=621, *z*=-2.61, *p*=.009). Furthermore the Intervention group had increased self-management scores ($F(1, 60) = 4.29$, $p = .043$, *partial* $n^2 = .07$). Whereas the Young et al., (2009) study found that the MBSR intervention group had increased vigour/activity levels in the diabetic sample compared to the general population.

4.3 Psychological

A range of psychological measures were used across the studies in order to assess the effect of MBI for diabetic patients, as studies have found co-morbidity of diabetes and psychological disorders significantly impacts on quality of life and diabetes-related outcomes (i.e. self management). However several measures were utilised (i.e. Perceived Stress Scale – PSS: Cohen, 1988; Hospital & Depression Scale – HAD: Zigmond & Snaith, 1983; Brief Coping Scale: Carver, 1997; Patient Health Questionnaire – PHQ: Spitzer et al., 2000). Table 4 provides a summary of the psychological outcomes and the measures employed.

Table 4 – Summary of psychological outcome measure

Study	MBI Type	Outcome	Scales
Effect Of Mindfulness Meditation On A1c Levels In African American Females With Type 2 Diabetes Schuster (2009)	MM	No significant difference between pre and post intervention scores for stress (*d*=.42).	Derogatis stress scale - DSP (Derogatis, 1984)
Effects Of The MBSR Approach On Psychic Health (Stress, Anxiety, Depression) And Coping Mode Of Diabetic Patients: A Controlled And Randomized Pilot Study. Berghmans et al., (2012)	MBSR	Intervention led to significant reductions in: - Stress (i.e. group a pre: 28.5 - 16 post-test: *z*=2.49, *p*=<.05) - Anxiety (group b pre: 12.71 - 8.29 post-test: *z*=2.3, *p*=<.05) - Both groups (intervention groups a + b) had significant changes in coping styles - Less impact on depression scores	Perceived stress scales - PSS (Cohen, 1988) Hospital & Depression Scale – HAD (Zigmond & Snaith, 1983) Brief Coping Scale (Carver, 1997)
Mindfulness-Based Stress Reduction Is Associated With Improved Glycaemic Control In Type 2 Diabetes Mellitus: A Pilot Study Rosenzweig et al., (2007)	MBSR	Reductions in symptoms of: - Depression (43%) - Anxiety (37%) - General psychological distress (35%) Upon intervention completion: - Depression: *p*=.03, *d*=0.86; - *Anxiety: p=.33, d=0.43;* - General severity index: *p*=.07, *d*=0.60). - No change in somatisation	Symptom Checklist-90: depression, anxiety, somatisation. General severity index (Derogatis, 1994)
Sustained Effects Of A Mindfulness-Based Stress-Reduction Intervention In Type 2 Diabetic Patients Hartmann et al., (2012)	MBSR	1 year follow MBSR led to significantly lower levels of: - Depression (PHQ-9, *d*= 0.71, *p*=.033), - Improved mental health status (*d*= 0.54, *p*=.007). - The PHQ stress score was also significantly different (*d*= 0.64, *p*=.023) in the MBSR group.	Patient Health Questionnaire – PHQ (Spitzer et al., 2000)

Stress & Anxiety

Upon review of table 4, it is evident that all of the four studies have explored the effect of MBIs on stress and anxiety. The four studies (1: MM, 3: MBSR interventions) have used a range of measures to assess stress/anxiety levels, with varying results. Shuster (2009) conducted a prospective cohort study employing MM, with a sample of eighteen African American women with diabetes, and found that there was no significant difference between pre and post intervention scores for stress. However an effect size of *d*=.42 was detected.

Whereas, two of the MBSR studies found significant reductions in stress levels for the intervention groups. For example, Berghmans and colleagues (2012) utilised the Perceived Stress Scales - PSS (Cohen, 1988) and found a significant reduction between pre (PSS= 28.5) and post (PSS= 16) scores (z=2.49, *p*=<.05). In addition, Hartmann et al., (2012) found that the PHQ stress scores (Patient Health Questionnaire, Spitzer et al., 2000) between the control group and intervention were significantly different after the MBSR (d= 0.64, p=.023). Rosenzweig et al., (2007) also reported a 37% reduction in stress levels post MBSR (*p*=.33, *d*=0.43) (anxiety sub-component of the Symptom Checklist-90, Derogatis, 1994). Hartmann and colleagues (2012) however achieved a statistically significant reduction in anxiety (pre: 12.71 - 8.29 post-test scores: z=2.3, *p*=<.05).

Depression

Only three of the four MBSR studies had utilised measures for depressive symptomatology amongst the diabetic samples, in their RCTs. Two of the studies found MBSR statistically significant in reducing depressive symptomatology. Rosenzweig and colleagues reported a 43% reduction in depressive symptoms (*p*=.03, *d*=0.86). Similarly Hartmann et al., found that MBSR led to significantly lower levels of depression (*d*= 0.71, *p*=.033) at the 1 year follow up. However in the study conducted by Berghmans et al., MBSR was found to have less impact on depression scores.

Young and colleagues (2009) found that Total Mood Score (TMS) had significantly improved post intervention (pre score: 23.7, post score: 8, p<0.001). Significant improvement in pre and post POMS-SF sub scales were also detected (p<0.001): tension/anxiety (pre score: 7, post score: 4), depression/dejection

(pre score: 6, post score: 3), anger/hostility (pre score: 6, post score: 2), fatigue/inertia (pre score: 12, post score: 5), vigour/activity (pre score: 7, post score: 12). The pre score (6) and post score (4) for the confusion/bewilderment sub-component was also significant at $p<0.05$.

Coping Styles

One of the ACT studies included in the review, found a statistically significant increase for diabetes-related acceptance ($F(1, 52) = 23.87$, $p = .011$, *partial* $n^2 = .12$), and for self-management scores ($F(1, 60) = 4.29$, $p = .043$, *partial* $n^2 = .07$) (Gregg et al., 2007).

Even though the other ACT study (Nes et al., 2012) had explored diabetes related coping through two self-reported measures; Audit of Diabetes Dependence Quality of Life – ADDQoL 19 (Bradley et al., 1999), and Problem Areas in Diabetes - PAID (Snoek et al., 2000), and there were reductions in the mean PAID scores (pre mean: 25 vs. post mean: 22.73), and for the mean ADDQoL (pre mean:-1.25 vs. post mean:-1.12), as no statistical analysis was conducted the effect size or significance levels cannot be inferred. However qualitative reports did reveal that the feedback helped them to manage their diabetes by reinforcing favourable coping strategies, and they were also encouraged to follow their diet plan, check their blood glucose level and take their medication at the correct time and dosage.

The RCT conducted by Berghmans et al., (2012) found that MBSR led to significant changes in coping styles. For example for both intervention groups (group A / group B) there was a significant increase in 'active coping' ($z=2.325$, $p<.05$ / $z=2.414$, $p<.05$), 'coping planning' ($z=2.156$, $p<.05$ / $z=2.388$, $p<.05$), 'positive reinterpretation' ($z=2.226$, $p<.05$ / $z=2.232$, $p<.05$),and reduction in the 'use of blame' ($z=2.131$, $p<.05$ / $z=2.456$, $p<.05$). Whereas there was only a significant reduction in group b's use of 'denial' ($z=2.070$, $p<.05$) and increase in' acceptance' ($z=2.217$, $p<.05$).

General Psychological Distress

Overall MBSR was also found to reduce general psychological distress by 35%, General severity index scores ($p=.O7$, $d=0.60$) (Rosenzweig et al., 2007), and

significantly improve mental health status (*d*= 0.54, *p*=.007) (Hartmann et al., 2012).

5.0 DISCUSSION

The results have highlighted the varied application of the various MBIs for diabetes. The studies reviewed mainly consisted of MBSR interventions (50%), and the minority consisted of ACT intervention (25%), and MM (25%). Various methodological designs and outcomes measures had been employed in the studies reviewed, generating a range of findings. In sections 4.1, 4.2, and 4.3 the outcomes were grouped to permit comparison and provide an overview of the results, in order to assess the efficacy of MBI's for diabetes.

In summary, the biological outcomes reviewed demonstrated the efficacy of MBIs to some extent. Out of the five studies which had included HbA1C, only two studies found MBIs (ACT and MBSR) to have a significant effect on HbA1C (Gregg et al., 2007; Rosenzweig et al., 2007). Only a few papers had included weight or BMI as outcome measures. However, the results revealed that MBIs did not lead to any significant weight loss or BMI reduction (Rosenzweig et al., 2007; Schuster, 2009). In addition, only two studies had included measures of blood pressure (Rosenzweig et al., 2007; Hartmann et al., 2012), and found that there were some significant reductions in the MBSR groups at the 1 month and 1 year follow up.

As the studies had varying follow-up periods and a range of measures it is difficult to infer whether MBI's are effective for such outcomes in diabetic patients. It can be postulated that further research would need to be conducted with longer follow up stages (i.e. 3, 6, 12 months) in order to assess the effect of MBI in diabetic patients as it often takes three to six months for changes to be detected in such measures as HbA1C (Diabetes UK 2012; Mars & Abbey, 2010). For example, Rosenzweig and college detected a significant change in HbA1C readings at the one month follow-up (e.g. 3 months), as a pose to the post intervention scores (e.g. 2 months) which failed to yield any statistical significance. Thus longitudinal studies such as Hartmann and colleagues (2012) five year RCT are invaluable, as they can exemplify the long-term effects of MBIs, such as MBSR in diabetes-related outcomes.

However future studies should also use additional measures in order to assess adherence and diabetes management, other than utilising the HbA1C measure alone (Kilpatrick, 2010). HbA1C as a measure needs to be interpreted with caution, as hormonal changes, ethnicity, ageing, smoking and existing physiological disorders (i.e. renal failure, anaemia) can affect glycaemic control and HbA1C readings (Kilpatrick, 2010), consequently in order to attain a more stringent measure of glycaemic control a range of bio-medical, behavioural, and psychological measures should be used.

Despite this review highlighting a limited effect of MBI on weight/BMI in diabetic patients, MBI's could still prove effective in potentially influencing weight and BMI. For example, Shuster (2009) found weight and stress to be significantly correlated in both pre and post mean scores in her cohort study, and as MBI's have been evidenced to effective in reducing stress/anxiety and depressive symptomology (Klainin-Yobas et al., 2012; Rosenzweig et al., 2007; Hartmann et al., 2012; Berghmans et al., 2012; Young et al., 2009), MBI's could potentially be effective in facilitating reductions in weight or BMI. Furthermore as MBIs such as ACT have been found effective in increasing diabetic control, self-management, and vigour/activity scores (Young et al., 2009), MBI's could be influential in facilitating changes in other health-related domains and outcomes, such as HbA1C, weight/BMI, and diabetes-related symptomatology, as highlighted in the RCT conducted by Gregg et al., (2007). Thus once again highlighting the importance of including such psychological and behavioural measures in future studies, as these measures might be more useful in understanding how both psychological and physiological processes are related and can influence each other, rather than focusing on purely metabolic outcomes. Thus this review has so far reinforced the need to adopt a more holistic and biopsychosocial perspective when exploring the efficacy of MBIs for chronic illnesses such as diabetes (Norris, Engelgau, Venkat, & Narayan, 2001). However it is paramount that longer follow-up periods are employed in these future studies, in order to explore the long-term effects of MBIs for diabetic patients (Mars & Abbey, 2010).

Overall MBSR was also found to reduce general psychological distress by 35% (Rosenzweig et al., 2007), and significantly improve mental health status (Hartmann et al., 2012). In particular, the studies reviewed highlighted that MBI's are effective in reducing stress and anxiety in diabetics (Berghmans et al., 2012;

Hartmann et al., 2012; Rosenzweig et al., 2007; Shuster, 2009; Young et al., 2009). Whereas only a few studies demonstrated a significant reduction depressive symptomology in diabetics (Rosenzweig et al., 2007; Berghmans et al., 2012; Young et al., 2009). The review also highlighted that MBIs are effective in altering coping styles. ACT was found to a statistically increase diabetes-related acceptance. Similar results were evidenced in the recent review conducted by Hartmann and colleagues, as the RCT testing the efficacy of a MBSR intervention in diabetes led to significant increases in adaptive coping strategies (i.e. active coping, coping planning, positive reinterpretation, and acceptance), and decrease in maladaptive coping strategies (i.e. denial and use of blame). In light of this evidence it appears that MBI's are effective in altering stress and anxiety, as such interventions are effective in equipping patients with alternative coping skills, promoting greater acceptance of their diabetes, altering self-management behaviours. Therefore MBIs appear to be effective reducing stress and anxiety and promoting alternative adaptive coping strategies in diabetic patients.

Methodological Considerations

Despite the findings of this review it is important to acknowledge the methodological constraints associated with this review, and the studies included in it. The on-going empirical evaluation of MBI's needs to be enhanced through methodological developments in future studies (Mars & Abbey, 2010). The inclusion of specific mindfulness instruments, and a set of generic measures (i.e. physiological – HbA1C, weight/BMI; psychological – stress, coping skills; behavioural – diabetes related actions – medication adherence, blood glucose monitoring), longer follow-up stages, and the inclusion of qualitative data could be useful in elucidating the connection between mindfulness and diabetes.

For example many of the studies reviewed included self-reported measures, particularly for psychological outcomes (i.e. PSS, SF-12). Traditional psychological measures may be inadequate to capture the impact of mindfulness (Mars & Abbey, 2010). Hence the need to utilise more specific mindfulness measures is vital, in order to determine the impact of MBI's on mindfulness, as well as on other psychological and physiological outcomes for a range of chronic illnesses, such as diabetes.

More importantly the inclusion of specific mindfulness instruments in future MBI's studies would also enable statistical comparisons to be made across studies. For example the papers included in this review had utilised a range of outcome measure, sometime assessing the same outcomes, through different psychological scales (i.e. stress). Consequently the inclusion of similar outcome measures (e.g. HbA1c, blood pressure, body weight/BMI, stress, diabetes related self-management behaviours), in clinical trials with long-term follow up (Brown & Ryan, 2003; Speca, Carlson, Goodey, & Angen, 2000; Astin, 1997) is recommended, to permit on-going empirical evaluation of mindfulness in diabetes, and future reviews.

Despite this observation, self-reported measures are open to bias, whereby the intervention itself or the experimenter can impose bias, altering the responses for such questionnaires. It has been postulated that qualitative methodologies are suited for such studies, especially where subjective outcomes are being assessed (i.e. stress) (Kaplan, 1996; Kessler, 1987; Ganster & Schaubroeck, 1991), prompting further consideration of the inclusion of such outcome measures. Only one study in this review had used a mixed methodological design, whereby a qualitative methodology was employed to explore patients' views and thoughts, outside such positivistic frameworks (Nes et al., 2012). The findings revealed that MBI's (i.e. ACT) are useful in increasing awareness and promoting alternative coping styles. Consequently the need for more sensitive outcome measures, more stringent methodological designs (i.e. RCT), and the inclusion of alternative methodologies is vital in exploring the effectiveness of MBIs on diabetes.

In addition, detailed intervention manuals should be available to practitioners in order to replicate and test these clinical models for MBIs for diabetes. This review has highlighted that the various MBIs are effective across a range of measures for diabetic patients (i.e. reducing HbA1C, stress levels, and promoting adaptive coping, and increased diabetes-related acceptance). However further research is needed in this field to explore the effectiveness of MBIs in diabetes.

Concluding Remarks

The review highlights that the various MBIs are effective across a range of measures for diabetic patients (i.e. reducing HbA1C and stress levels, promoting adaptive coping, and increased diabetes-related acceptance). However, to what

extent is not yet known. Further research is needed in this field to explore the effectiveness of MBIs in diabetes employing more stringent methodologies, such as randomised controlled trials with longer follow up periods, to explore the long-term effects of MBIs for diabetes (i.e. behavioural changes, psychological, and physiological changes).

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Appendix 1 – Quality Assessment Table

		QUALITY ASSESMENT CRITERIA								
	Study Details Title & author	Description of intervention 1 = yes 0 = inadequate/ minimal description	Randomisation 1= yes 0= no	Baseline comparisons 1= yes 0= no	Sample size 1= power analysis carried out 0= no power analysis	Withdrawals and dropouts stated 1= yes 0= no	Clear and relevant outcome measure 1= yes 0= no	Validity and reliability of measurement tools 1= yes 0= no	Appropriate statistical analysis 1= yes 0= no	NOTES & Total score
1	Improving Diabetes Self-Management Through Acceptance, Mindfulness, and Values: A Randomized Controlled Trial **Gregg et al (2007)**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	High quality paper. Well constructed research Strong methodology
		1	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**8/8**
2	The development and feasibility of a web-based intervention with diaries and situational feedback via smartphone to support self-management in patients with diabetes type 2 **Nes et al (2012)**	**1**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	No statistical analysis conducted. Means only provided
		1	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**4/8**
3	Effect of mindfulness meditation on alc levels in African American females with type 2 diabetes **Schuster (2009)**	**1**	**0**	**0**	**0**	**1**	**1**	**1**	**1**	Details about the intervention are excellent….
		1	**0**	**0**	**0**	**1**	**1**	**1**	**1**	**5/8**
4	The Effect of Mindfulness Meditation on Painful Diabetic Peripheral Neuropathy in Adults Older Than 50 Years **Teixeira (2010)**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	Description of intervention is brief
		1	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**8/8**

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5	Effects of the Mindfulness Based Stress Reduction (MBSR) approach on psychic health (stress, anxiety, depression) and coping mode of diabetic patients: A controlled and randomized pilot study **Berghmans (2012)**	**1**	**1**	**1**	**0**	**1**	**1**	**1**	**1**	
		1	**1**	**1**	**0**	**1**	**1**	**1**	**1**	**7/8**
6	Mindfulness-based stress reduction is Associated with improved glyceamic control in type 2 diabetes mellitus: a pilot study **Rosenzweig,et al (2007)**	**1**	**0**	**0**	**0**	**1**	**1**	**1**	**1**	
		1	**0**	**0**	**0**	**1**	**1**	**1**	**1**	**5/8**
7	Mindfulness Based Stress Reduction: effect on emotional distress in diabetes **Young et al (2009)**	**1**	**0**	**1**	**0**	**n/a**	**1**	**1**	**1**	Compared means in archival data. Test used not described, but significance testing done
		1	**0**	**1**	**0**	**0**	**1**	**1**	**1**	**5/8**
8	Sustained Effects of a Mindfulness-Based Stress-Reduction Intervention in Type 2 Diabetic Patients **Hartmann et al (2012)**	**1**	**1**	**1**	**0**	**1**	**1**	**1**	**1**	
		1	**1**	**1**	**0**	**1**	**1**	**1**	**1**	**7/8**