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**CITY UNIVERSITY
LONDON**

**Internet and Social Media Age: What is the difference in Empathy across
Generations of Therapists in the UK?**

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Submitted in fulfilment of the requirements for the degree of:

Professional Doctorate of Counselling Psychology

City University London

Department of Psychology

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Internet and Social Media Age: What is the difference in Empathy across Generations of Therapists in the UK?

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City University Declaration

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Preface

This section details the three components of this doctoral portfolio. The first part of this portfolio begins with the research thesis, which investigates the difference in empathy across three generations of therapists: Baby Boomers, Generation X'ers and Millennials using a positivist approach and fulfilling a gap in age-related empathy research. The second part presents a client study about helping a complex PTSD client reconnect with herself. The third and final part of this doctoral portfolio focuses on a publishable paper based on the main research undertaken for this thesis.

Part One: Research Thesis

This section of the portfolio is an original piece of research aiming to explore the difference in empathy between three generations of therapists in addition to exploring relationships between empathy and Internet as well as social media use. Using a quantitative methodology, underpinned by a positivist epistemology, an anonymous online survey on empathy as well as Internet and social media use was disseminated to collect the data of 246 participants. The participants were all therapists in the United Kingdom born in one of three generations: Baby Boomer, Generation X and Millennial.

The aim of the research was to focus on age-related differences in therapist empathy. Empathy is particularly important in therapy for the development of therapeutic alliance, psychotherapeutic change and positive treatment outcome. Above all it is directly relevant to the practice of counselling psychology as counselling psychologists give primacy to the therapeutic relationship and empathy is a core condition (Rogers, 1951; 1957) for therapists to understand the client's inner world and facilitate this relationship. As a result, this study seeks to address a gap in the current age-related empathy literature, which until now has mainly focused on studying the general population. The findings are discussed and presented in light of existing literature together with a discussion on the implications for the counselling psychology field and recommendations for research.

Part Two: Client Study

This section of the portfolio contains an example of therapeutic work portrayed through a client study. This therapeutic example shows the importance of building a therapeutic relationship with a complex PTSD client for psychotherapeutic change to occur. In post-traumatic stress disorder (PTSD) clients experience a disconnection from the psychological, physiological and behavioural processes to respond effectively to environmental demands (Williamson, Porges, Lamb, & Porges, 2015). The case was formulated and interventions were made using a trauma-focused cognitive behavioural therapy model, also underpinning the positivist philosophy, as in CBT the foundations of science are seen as the most important kind of observations as they are objective and quantifiable. This client study illustrates my knowledge, experience and reflections of trauma-focused cognitive behavioural therapy as well as my own struggles and how these were overcome. Above all, it shows the importance of using empathy to build the therapeutic relationship through a foundation of trust in order to connect with clients for real therapy to begin, such as helping the client reconnect with herself as a result of psychological and emotional disconnection.

Part Three: Publishable Article

The third and final section of this doctoral portfolio presents a publishable paper based on the research undertaken for this thesis and outlined in Part One. The paper is intended for submission as a research journal article to the journal of Psychology and Aging. The peer-reviewed journal is a research journal published by the American Psychological Society. It is a very well-known psychology journal viewed as a resource for research dedicated to adult development and aging that may be applied, biobehavioral, clinical, educational, experimental or psychosocial.

Recent advances in social neuroscience research about mirror neurons and the neural underpinnings of empathy, has revived interest in empathy research. Prior work has focused on the difference in empathy across the lifespan of adults ranging from young, middle to older adults with contradicting results such as decreased empathy and no observed differences as a function of aging. In therapy, empathy plays undoubtedly a central role in facilitating clients, building therapeutic alliance and encouraging psychotherapeutic change yet no studies to the researcher's knowledge explored the difference in therapist empathy across generations, particularly when recent research suggests

younger generations display significantly reduced empathy compared to older peers. This study explores the results of self-reported empathy scores of three generations of therapists including psychologists, psychotherapists, counsellors and other specialist therapists. A quantitative methodology, underpinning a positivist approach was used to disseminate an anonymous online survey to collect the data of 246 participants. The data analysis results suggest no observed differences in the main facets of empathy (cognitive and affective empathy) across generations, though younger generations reported higher scores of distress and fantasy compared to older peers. Furthermore, investigations in the relationship between empathy and Internet as well as social media found negative relationships with empathy. Therefore, further research in this area is necessary.

Doctoral Portfolio Theme

This portfolio is composed of three related pieces of work linked by a common theme: connection and disconnection. In the client study, the complex PTSD client experienced a complete psychic and emotional disconnection from her mind, emotions and body, as well as a disconnect from the world surrounding her. Through trauma-focused work and third wave cognitive behavioural therapy, the focus of the work was to help her reconnect with her cognitions, emotions and physical sensations. The therapeutic relationship was gradually built using empathy, a primary tool in post-traumatic therapy to gain access to the inner scars of her psyche, the attributed meanings to her experience in order to develop a human connection. Thus, helping her reconnect with herself and the world. The research work instead focuses on empathy, an emotional connection between individuals (Krznaric, 2007). Empathy reflects connection, as only by empathizing and communicating this back to clients in practice is it possible to build trust and connect with clients to share and understand their experience. Furthermore, the rapid progression of Internet and social media technology bridges the distances to connect people across the world. Findings from the study are relevant for empathy research as well as the training and support of future generations of therapists. The publishable paper presents the research findings with the intention to submit to the Journal of Psychology and Aging.

I have always been interested in connection personally and professionally, the innate social need for human beings to connect with others, so powerful that it can make people feel part of the world or

completely alone. In my research, the theme of connection is reflected in the focus of the research: empathy. In my client study empathy is a fundamental skill in interpersonal relations, particularly in therapy to create connection between individuals. In my research, I sought to explore whether there was a difference in empathy between generations of therapists.

Overall, every required component of the portfolio completed during my doctoral training reflects different aspects of my research interest, therapeutic approach and above all my progress and growth as a trainee counselling psychologist.

References

Krznaric, R. (2007). *Empathy and the Art of Living*. Oxford, UK: The Blackbird Collective.

Rogers, C. R. (1951). *Client-centered Therapy*. Boston: Houghton Mifflin.

Rogers, C. R. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting Psychology*, 21 (2): 95-103

Williamson, J.B., Porges, E.C., Lamb, D.G., & Porges, S.W. (2015). Maladaptive autonomic regulation in PTSD accelerates physiological aging. *Frontiers in Psychology*, 5, 1571

Part One: Research Thesis

Internet and Social Media Age: What is the Difference in Empathy across Generations of Therapists in the UK?

A quantitative study.

By

Marina Ghiron

Supervised by Dr Pavlos Filippopoulos

Submitted in partial fulfilment of the requirements for the degree of:

Professional Doctorate in Counselling Psychology

City University London

Department of Psychology

City University Declaration

This research thesis is an original work by Marina Ghiron. This thesis received research ethics approval from the City University Research Ethics Committee. “Internet and Social Media Age: What is the difference in Empathy across Generations of Therapists in the UK?”. Approval reference PSYETH (P/L) 15/16 73, 25th November 2015 and amendments approval 15th December 2015.

Abstract

Empathy is an essential ingredient in therapy associated with client engagement and positive treatment outcomes. The purpose of this cross-sectional study was to evaluate the difference in self-reported empathy between Baby Boomers, Generation X and Millennial therapists and between genders. Participants (N=246) completed a self-report questionnaire online survey on empathy and Internet and social media use. Empathy was measured using Davis' (1983a) Interpersonal Reactivity Index (IRI) composed of four subscales Empathic Concern, Perspective Taking, Personal Distress and Fantasy. Socio-demographic information on Internet based communication and social media use was collected. Across all generations, there were no observable differences in Empathic Concern and Perspective Taking. Millennials scores were significantly higher in Personal Distress ($U = 2282, p = 0.01$) and Fantasy ($U = 2240, p < 0.01$) compared to Baby Boomers. No significant difference was found between genders across all IRI subscales ($p > 0.01$). A negative correlation was found between generations Internet based communication using a mobile phone and Empathic Concern ($r_s = -0.167, p < 0.01$), as well as social media use with Fantasy ($p < 0.01$) as well as from Empathic Concern ($r_s = -0.144, p = 0.02$) and Fantasy ($r_s = -0.187, p < 0.01$) from the mobile phone. The absence of observed differences in Empathic Concern and Perspective Taking across generations and heightened Personal Distress and Fantasy in Millennials is discussed in view of emotional regulation strategies, information and connection overload as well as increasing trends in narcissism. Implications and recommendations for future research are discussed.

INTRODUCTION

Chapter One

1.1. Overview

In therapy, the ability to empathize and understand a client's experience by viewing the world from their point of view can be a remarkable as well as a profoundly effective experience. Research has consistently shown that therapist empathy is one the strongest predictors of client's progress in therapy (Watson, 2002; Elliott, Bohart, Greenberg & Watson, 2011). As a result, empathy has become a fundamental component in every therapeutic approach for the development of a positive therapeutic relationship (Norcross, 2010). However, Konrath, Hsing and O'Brien (2011) found a significant decline in empathy in younger generations and suggest the rise in electronic media use is partially to blame for this. The rapid advancement of technology has helped connect individuals across the globe, but it has also changed the way people interact with each other, substituting face-to-face (F2F) interactions for computer-mediated communication (CMC). This research will therefore focus on comparing empathy of therapists brought up in the digital age and those brought up before the widespread use of Internet and social media. The topic of comparing therapist empathy across generations is novel so this chapter will engage in a systematic literature review of empathy literature, including defining empathy, its importance and role in therapy as well as the different disciplines that feed into this topic though always taking a critical approach.

1.2. Defining Empathy

Empathy is one of the most significant concepts in psychology, though a unified definition has been difficult to establish (Elliott et al., 2011). The term empathy derives from the Ancient Greek word *empathia*, which comes from "in" (en) "suffering" (pathos), hence "in-suffering" (Wispè, 1986). It first originated in aesthetics when Robert Vischer used the term *Einfühlung* in German, to mean "feeling into" as a way to coming to know a particular work of art (Duan & Hill, 1996). Though it was Theodore Lipps who introduced the term *Einfühlung* in psychology (Jahoda, 2005) and only later in 1909 did Titchener, a German-trained psychologist, translate the term into English to express "feeling into the people and things they perceive" (Duan & Hill, 1996). Empathy became the way to express putting oneself in someone else's shoes and perceiving and feeling the world

from another's point of view.

Empathy though, is often confused by mental health counsellors with the concept of sympathy (Clark, 2010). Both concepts are similar and related to one another in that they both entail responding with sensitivity to what the client is experiencing. However, they are conceptually different, and it is important to distinguish them as being distinct from each other. Sympathy, from the Ancient Greek *sympatheia*, meaning “with” (syn) “suffering” (pathos) (Wispè, 1986), which means expressing concern, sharing another individual's distressful experience and trying to alleviate it (Wispè, 1986; Clark, 2010). According to Clark (2010) empathy and sympathy may be distinguished across four dimensions: aims, appraisals, apprehension and agreement. Firstly, the aim with empathy is to express understanding to the client about their experience whilst with sympathy it is about concentrating on expressing compassion for an individual's distressful situation. Secondly, the therapist's appraisal of the client's experience using empathy means tuning into the client's feelings and meanings whilst sympathy evolves into the therapist's judgement of the client's emotional needs. Thirdly, apprehension, with empathy the therapist strives to understand the client's inner experience whilst with sympathy; the therapist may gain only a general understanding of the distressful situation. Finally, a therapist may use empathy to express empathic understanding and acknowledgement to a client about their inner experience however this does not imply that the therapist agrees with them. By using sympathy on the other hand, the therapist may express understanding and possibly agreement with the client's point of view, such as “*How could she have said that to you? I think you were right to leave her!*”. Empathy, therefore means entering the client's world and striving to understand as well as share their feelings and meanings as if they were one's own, thus taking the client's perspective. It involves an intellectual and an emotive component. In contrast, sympathy involves sharing the feelings of another yet keeping one's own perspective. The difference being “feeling with” (emotional congruency) another person and “feeling for” (Vyskocilova, Prasko, & Slepecky, 2011; Wispè, 1986).

Empathy is a complex and multi-level concept (Watson, 2002). Individuals can express it in different ways including imagining how another person feels, sharing emotions or by trying to understand the overall sense of what it means to be that person (Singer, 2006; Elliott et al., 2011). Scholars have conceptualized empathy as a trait, disposition or ability originating in nature (Davis, Luce & Kraus, 1994; Zahn-Waxler, Robinson & Emde, 1992) or through development, malleable to

environmental and socio-cultural factors (Konrath et al., 2011; Konrath, Falk, Fuhrel-Forbis, Liu, Swain, Tolman, Cunningham & Walton, 2015). Empathy has also been conceptualised as a skill that can be role modeled, assessed, taught (Crandall, & Marion, 2009) and acquired through practice (Fernandez-Olano, Montoyra-Fernandez, & Salinas-Sanchez, 2008). The ability to empathize argue Anderson and Konrath (2011) is like a muscle which through practice, training (Teding van Berkhout & Malouff, 2016; Konrath et al., 2015; Kern Koegel, Ashbaugh, Navab, & Koegel, 2015) and motivation (Klein and Hodges, 2001) can be developed. In the process of studying and defining empathy, theorists have taken two main approaches. Some argue empathy derives from cognitive mechanisms (Piaget, 1932; Mead, 1934) whilst others think of it emerging from an affective process (Mehrabian & Epstein, 1972). As a result, most research has often and mainly focused on either one or the other aspect of the empathic process.

1.2.1. Affective and Cognitive Component

First, empathy is seen as emphasizing a cognitive component (Kohler, 1929; Piaget, 1932; Mead, 1934). This is the ability to imagine the internal state of another (Reniers, Corcoran, Drake, Shryane & Vollm, 2011) and understanding another person's perspective and feeling in a particular situation (Rogers, Dziobek, Hassenstab, Wold & Convit, 2007; Halpern, 2003). The term "perspective taking" or theory of mind is often used to describe this process (Mooradian, Davis & Matzler, 2011; Blair, 2005). The second approach instead emphasizes the affective component. This is the ability to infer and share the emotions of others (Gould & Gautreau, 2014; Decety & Jackson, 2004) as well the emotional response to another's affective state (Mehrabian & Epstein, 1972). For example, whilst talking to a depressed friend, one feels heavy and starts to experience depressed feelings. Halpern (2003) argues the cognitive component is the basis of empathy and the affective component is the emotional background of imagining what another person is experiencing. Some proponents of affective theories of empathy have focused on emotional congruence, the degree to which one individual shares the emotions of another (Eisenberg & Fabes, 1990; Singer, 2006). Others instead, have used a broader definition, including experiencing a feeling distinct from the other, such as sympathy (Davis, 1994; Hoffman, 1984). It is the affective component of empathy, according to Konrath et al. (2015) that is the more critical one as it entails the tendency of others to be moved by another as well as the desire to help others.

In the past 40 years, however there has been a shift towards an integration of these two components.

It is believed that rather than being two distinct mechanisms these two components comprise an interdependent system (Davis, 1980, 1983a) where one influences the other. It is thus difficult to understand one component without considering the other as well (Deutsch & Madle, 1975). Therefore, empathy is a way of understanding that involves both our cognitive system, imagining the internal state of another (Reniers et al., 2011) and affective system, inferring how another person feels (Decety & Jackson, 2004). As such it has been defined as a multidimensional construct comprising both states (Davis, 1983a; Bohart & Greenberg, 1997, Duan & Hill, 1996; Feshbach, 1997) with increasing theorists suggesting empathy can only be understood provided both cognitive and affective components are recognised to be part of empathic response (Deutsch & Madle, 1975). As both systems influence each other, Davis's (1983a) multidimensional definition of empathy as a reaction to the observed experiences of another including the care for others (Konrath, 2012) will be used in this thesis.

1.2.2. Dispositional versus Situational Empathy

Another distinction that has been made is in measuring empathy, as being dispositional or situational. 'Dispositional' (Bryant, 1982; Davis, 1983a) or 'trait' empathy (Hogan, 1969; Mehrabian & Epstein, 1972; Davis, 1980) refers to individuals who have a tendency to be more empathic than others given their nature or through development. Melchers, Montag, Reuter, Spinath and Han (2016) exploring the heritability of empathy in a large sample of twin and non-twin participants found that affective empathy could estimate heritability between 52 and 57% whilst cognitive empathy's genetic variance was smaller at 27%. Thus, empathy is seen as a relatively stable character trait, which can also respond to individual's environment thus with the differences being inter-individual. Konrath et al. (2015) argues empathy traits are relatively stable over time and are the result of genetic and environmental factors, therefore at least in part, empathy is under conscious cognitive control. Dispositional empathy has often been measured using observed reports from others and by using specific self-report empathy trait measures such as the Empathy Scale (Hogan, 1969), Questionnaire Measure of Emotional Empathy (Mehrabian & Epstein (1972), Empathy Quotient (Baron-Cohen & Wheelwright, 2004), The Toronto Empathy Questionnaire (Spreng, McKinnon, Mar, & Levine, 2009) and the Interpersonal Reactivity Index (IRI; Davis, 1980, 1983a).

Some of these instruments have been developed viewing empathy as primarily cognitive (Hogan,

1969), affective (Mehrabian & Epstein, 1972) as well as comprising both components (Davis, 1980). The most commonly and widely used multidimensional measure of empathy, however is Davis's (1983) Interpersonal Reactivity Index (Gilet, Mella, Studer, Gruhn & Labouvie-Vief, 2013; Huang, Li, Sun, Chen & Davis, 2012; Fernandez, Dufey, & Kramp, 2011; De Corte, Buysse, Roeyers, Ponnet, & Davis, 2007). It includes four subscales such as affective other focused (Empathic Concern), cognitive other focused (Perspective Taking), affective self-focused (Personal Distress) and Fantasy, the tendency to transpose oneself in fictional characters of books, plays or movies. The first two subscales are the more robust components of empathy (Spreng et al., 2009), particularly Empathic Concern which focuses on individuals concern for others. Davis (1980) criticized previous empathy measurements as he argued they combined all responses into a single empathy score (Hogan, 1969; Mehrabian & Epstein, 1972). Instead he argues, it is important to measure these components separately otherwise it would be difficult to estimate the independent as well as the interactive contributions. However, unlike previous self-report measures as criticized by Davis (1980) these subscales are not aggregated into a total score but allow the separate measurement of the different empathy components. These self-report measures are typically measured in correlational studies therefore inferences that can be made from the results are limited (Konrath & Grynberg, 2013).

'Situational' empathy instead (Batson, 1991) or induced empathy (Barrett-Lennard, 1962) is one's momentary emotional experience as a reaction to a situation (Beadle, Sheehan, Dahiben & Gutchess, 2015) for example viewing someone suffering from physical distress (Batson, Duncan, Ackerman, Buckley, & Birch, 1981). Therefore, this perspective allows to study the effects of situational factors and intraindividual differences in empathy regardless of one's developmental level of empathy (Duan & Hill, 1996), for example examining the effect of therapist empathy during sessions. This form of empathy is measured by exposing participants to a specific situation and then questioning them about their experience (Vescio, Sechrist, & Paolucci, 2003) or by measuring their physiological responses (eg. skin conductance, Marci, Ham, Moran, & Orr, 2007). For the purpose of this research however, only dispositional empathy will be explored as this study seeks to examine the interindividual differences between generations rather than the intraindividual and situation specific differences in empathy (Duan & Hill, 1996) in addition to being consistent with previous age-related empathy research (Konrath et al. 2011). Furthermore, Konrath et al. (2011) argues dispositional empathy is a better predictor of a self-reported desire to help others compared to

situational factors. Therefore, even though empathy construct has been interpreted in various ways such as a cognitive-affective mechanism or personality trait, Konrath and Grynberg (2013) argue it is possible to reach a general definition where empathy is “experiencing perspectives and feelings congruent with another’s situation than with one’s own” (p.1) that includes cognitive and affective mechanisms, and which can also be applied to dispositional and situational empathy.

1.3. The Importance of Empathy

Empathy plays an important role in social interactions and many theorists agree it is a basic relationship skill (Bohart & Greenberg, 1997). In interpersonal relationships (Davis, 1996; Baron-Cohen & Wheelwright, 2004), high levels of reciprocity and emotional concern (Lin & Peek, 1999) can help individuals predict and adapt their behaviour to the feelings and thoughts of others (Meclhers, Montag, Markett, & Reuter, 2015). Furthermore, empathy also facilitates the development of a cooperative as well as trusting relationships (Mahsud, Yukl, & Prussia, 2010). In personal relationships, this social skill includes listening, consideration and supportive behaviour (Kellett, Humphrey & Sleeth, 2002). Therefore, empathy is a fundamental and necessary skill to build and foster relationships (Decety, 2015).

Empathy is also positively associated with prosocial and helping behaviours (Lockwood, Seara-Cardoso & Viding, 2014; Wilhelm & Bekkers, 2010), a voluntary and intentional behaviour for the benefit of another (Eisenberg, 1982), such as volunteering and donating to charities. Growing research suggests human beings have an innate capacity for prosocial behaviour (Mikulincer & Shaver, 2010) and that empathy plays an important role in it, particularly that it can explain why people help others. Paterson, Reniers, and Vollm (2009) found that volunteers in a university crisis helpline scored higher in Empathic Concern and Perspective Taking compared to non-volunteers. According to Eisenberg (2006), prosocial behaviour can be motivated by self-oriented reasons, other-oriented reasons or moral values. Individuals help others to regulate their emotions because they feel empathically distressed (Hoffman, 2008). Increasing neuroimaging studies demonstrate that perceiving the emotional state of another can automatically trigger a shared representation that matches the emotional state in the observer (Iacoboni & Lenzi, 2002). Therefore, evolutionary theory suggests that behaving prosocially helps the observer decrease their empathic distress and alleviate the aroused feelings as long as the cost is not too high (de Waal, 2008). However, Stocks, Lishner and Decker (2009) found that empathy can also evoke the need to reduce another’s

suffering instead of trying to reduce one's own aversive arousal reaction even when there is an easy psychological escape. Individuals may also use emotional empathy to evaluate the severity of another individual's situation in order to decide whether they want to help the other or not (Sze, Gyurak, Goodkind, & Levenson, 2012). Therefore, empathy can also evoke an altruistic motive to help another unfortunate individual. Verhaert and Van den Poel (2011) found empathic concern was positively associated with the tendency to donate, consistent with focusing on alleviating the suffering of unfortunate others. In particular, Davis (1983b) found that higher empathic concern was associated with a greater tendency to contribute time and money than any other facet of empathy. Therefore, individuals with higher dispositional empathy tend to engage in more altruistic endeavours such as volunteering, charitable giving (Davis, 1983b; 1983c) and donating to charity (Lee & Change, 2008).

Empathy is important for interpersonal relationships, prosocial behaviour and it is also increasingly being researched and used across fields in other disciplines such as leadership and medicine. In leadership, working with multiple people requires the ability to build relationships, understand other people's frame of reference (Gunther, Evans, Mefford, & Coe, 2007) and work effectively with others. Kellett, Humphrey and Sleeth (2002, 2006) found that empathy amongst other measures was the most important predictor of leadership. Leaders with greater empathy are rated higher in performance by their own supervisors (Sadri, Weber, & Gentry, 2011), more effective in gaining employees trust (Jin, 2010) and have followers who experience less stress (Scott, Colquitt, Paddock, & Judge, 2010). Therefore, maintaining positive relations with employees, is seen as an essential attribute for effective leadership (George, Sims, McLean, & Mayer, 2007). It is unsurprising that nowadays more companies are seeking empathic leaders to run organizations and produce positive outcomes (Holt & Marques, 2012). Therefore, emotional abilities as well as cognitive abilities are equally important for today's leaders (Carmeli, 2003).

In medicine, empathy is seen as an essential attribute of the patient-physician relationship associated with better clinical outcomes, patient satisfaction and compliance and reduced exposure to litigation (Smith, Kellar, Walters, Reibling, Phan, & Green, 2015). Hojat, Louis, Markham, Wender, Rabinowitz, and Gonnella (2011) found that diabetic patients of physicians with high empathy had better clinical outcomes compared to patients of physicians with low empathy scores. Furthermore, patient satisfaction (Kim, Kaplowitz, & Johnston, 2004) and compliance to treatment

plans (Attar & Chandramani, 2012) and patients experience of autonomy (Pollak, Alexander, Tulskey, Lyna, Coffman, Dolor, Gulbrandsen, & Østbye, 2011) is higher when physicians demonstrate empathy. Therefore, empathy in medicine not only serves to improve the quality of patient care but it has become an important aspect patient care. Following the Francis Report (Francis, 2013) into the failings of patient care in Mid Staffordshire hospitals, new recruits to National Health System (NHS) education courses will be required to pass a “valued-based” test in order to instill respect, dignity and compassion in the future workforce (Welikala, 2014). Moreover, the NHS (NHS England, 2013) has also launched the Compassion in Practice programme for nurses, midwives and care staff to bring compassionate care to patients.

As a result, significant research has been dedicated to studying empathy. Therefore, to have interpersonal communication some empathy is necessary, even at the simplest level (Feshbach, 1997), particularly in therapy.

1.4. Impaired Empathy

Can people experience poor empathy though and if so what does this mean? The impaired capacity for empathy in individuals is associated with sociopathic tendencies, narcissistic personality disorder and developmental disorders such as autism. Keen (2007) identifies these individuals as “emotionally tone-deaf”, in that they have a reduced ability to recognize certain emotions of others, such as sadness, fear or distress.

Autism spectrum disorder is a neurodevelopmental disorder characterized by persistent interpersonal deficits and restricted, repetitive patterns of behaviour (American Psychological Association; APA, 2013). Individuals with autism have major learning difficulties and find it difficult to perceive people’s emotional expressions as well as respond empathically to others (Yirmiya, Sigman, Kasari, & Mundy, 1992). Theirs is quite literally a behavioural world and individuals with high-functioning autism tend to have an empathy deficit (Baron-Cohen & Wheelwright, 2004). As a result, this has consequences for their emotional development as they lack interest and experience difficulty in interpreting other’s emotions or their own. These differences however can be traced back to biological factors. According to Baron-Cohen (2008) people with autism have different brain structures compared to typical brains (i.e. more grey matter and white matter) and parts of the brain such as the amygdala (a neural structure involved in

responding to social and emotional information) are smaller and function abnormally (Cohen & Cicchetti, 2006). Furthermore, autistic people differ in brain functions. The social brain (Baron-Cohen, 2008), a network of regions in the brain engaged to reading other people's minds, is underactive. As a result, the inability to appreciate other's mental states and subtleties of the social world makes social interaction difficult. Therefore, autistics are unable to infer the minds of others and suffer deficits in cognitive empathy.

Narcissism is another form of empathy disorder that has been associated with a deficit or lack of empathy (Hepper, Hart, Meek, Cisek, & Sedikides, 2014). In particular, Narcissistic Personality Disorder (NPD) is characterized by inflated self-views, a need for constant attention and admiration and wide variety of behaviours to protect the self, such as seeking attention, reacting aggressively to criticism and a preoccupation with success, power, intelligence as well as attractiveness (APA, 2013) while devaluing others. In particular, individuals with this disorder have difficulty in recognising the feelings and needs of other (Baskin-Sommers, Krusemark, & Ronningstam, 2014). Narcissists can be charming and popular at first (Back, Schnukle, & Egloff, 2010) but later in the relationship may become antagonistic and hostile (Wink, 1991). Studies on narcissism and narcissistic personality disorder have shown significant impairments in affective empathy and empathic processing yet unaffected cognitive aspects of empathy (Ritter, Dziobek, Preissler, Ruter, Vater, Fydrich, Lammers, Heekeren, & Roepke, 2011). In particular, individuals with NPD do not have a general impairment in empathy, but a deficit in their ability to respond emotionally to another's observed emotional state. However, Hepper et al. (2014) found that although narcissists are low in empathy they are capable of empathic responding when forced to look from another's point of view. This could be because individuals with NPD exhibit structural abnormalities in fronto-paralimbic brain regions, particularly they have smaller gray matter volume in the left anterior insula compared to healthy individuals (Schulze, Dziobek, Vater, Heekeren, Bajbouj, Renneberg, Heuser, & Roepke, 2013). Therefore, according to Baskin-Sommers et al. (2014) individuals with pathological narcissism are capable in processing emotional information though choose not to engage so to avoid losing control and appear vulnerable. It can be argued that their low empathy is automatic rather than consciously suppressed but perspective taking can induce genuine change. Nonetheless, this form of personality style can cause dysfunction and lead to distress in interpersonal relations both for the narcissistic individuals as well as for the individuals they interact with (Miller, Campbell, & Pilikonis, 2007).

Another pathology characterized by impaired empathy is psychopathy. According to Hare's (1993) classification, psychopathy encompasses the essence of lack of empathy. Psychopathy is characterized by profound deficits in affective interpersonal empathy such as absence of empathy, guilt and remorse, pathological lying, as well as socially deviant lifestyle, poor behavioural control and criminal activity but intact cognitive empathy (Blair, 2005; Hare, 1993). Psychopaths are able to describe what other people feel but do not share nor care about these feelings therefore experience a diminished capacity for remorse and lack of guilt for the acts they commit against others (Blair, 2003; Hare, 1991; Roche, Shoss, Pincus & Menard, 2011; Cleckley, 1982), the latter being self-conscious emotions specifically important for other oriented empathy (Tangney, Stuewig, Mashek, & Hastings, 2011). Prior research has shown that although psychopaths understand the emotional states of others (Hare, 1993) they are not aroused by others emotional states and do not share these feelings (Cheng, Hung, & Decety, 2012). Therefore, their lack of empathy may be related to a disrupted affective processing rather than them being unable to adopt another's point of view (Decety & Moriguchi, 2007). It is therefore believed that the lack of empathy is what allows psychopaths to become harmful to others by behaving ruthlessly against others without remorse and encourages aggressive as well as antisocial behaviour (Jolliffe & Farrington, 2004). As Polaschek (2015) argues, psychopaths are on the wrong side of morality and ethics. Psychopaths have a tendency to be thrill seeking, manipulative and engage in antisocial behaviours. Evidence from studies show that deficient affective empathy may be the result of deficits in amygdala activation, particularly due to an overactivation of (pre) frontal regions, inhibiting amygdala reactivity (Baskin-Sommers et al., 2014) as well as reduced reactivity to the distress of others (Kiehl, Smith, Hare, Mendrek, Forester, Brink, & Liddle, 2001; Birbaumer, Veit, Lotze, Erb, Hermann, Grodd, & Flor, 2005). Therefore, psychopaths use cognitive mechanisms to perceive emotions though experience deficiencies in affective empathy. However, Meffert, Gazzola, den Boer, Bartels, and Keysers (2013) argue psychopaths are capable of empathizing but they have a reduced automatic propensity to do so, which they argue could be harnessed and improved in therapy.

In summary, autism, psychopathy and NPD are examples of disorders with impaired or lack of empathy. Individuals with autism experience deficits with cognitive empathy whilst individuals with NPD or psychopathy experience compromised empathic functioning as a result of deficits in affective empathy. If individuals are unmoved by the emotional states of others and fail to behave prosocially this has negative consequences for their social interrelations and bonds.

1.5. The Role of Empathy in Counselling Psychology

In therapy empathy is perceived by taking the perspective of another individual and responding with another person's emotion in the same way (Lei & Duan, 2013). Its function being to understand the client's inner psychological state and enabling the client to feel both heard and asserted (Vyskocilova et al., 2011). According to Watson (2002), empathy serves cognitive, affective and interpersonal functions in therapy. Cognitively, empathy helps the client deconstruct maladaptive worldviews and assumptions about the self, others and the world. By reflecting emphatically, the therapist brings into the forefront the clients felt meanings and internal worldview to help clients clarify their thoughts and beliefs. Affectively, it helps clients become aware, understand, label and regulate as well as process their emotions whilst feeling supported. When clients feel understood they also feel relieved that what they were struggling with has been understood and this can foster greater trust and strengthening of self. Roger's (1951; 1965), used empathy in the therapeutic setting to help clients explore and self-reflect, and this facilitated their psychotherapeutic self-directed change. On an interpersonal level, Watson (2002), argues empathy helps create a safe environment where clients feel understood promoting the development and maintenance of a positive therapeutic relationship.

Although the term empathy was coined at the turn of the 20th Century (Duan & Hill, 1996), the concept only really became popular with the work of Heinz Kohut and Carl Rogers (Bohart & Greenberg, 1997) who used empathy to describe a way of being towards others that promoted healing and psychotherapeutic change. From a psychoanalytic perspective, Kohut argued empathy, which he called "vicarious introspection" (Kohut, 1959), consisted in attending to the inner life of the client whilst maintaining the position of an objective observer. It was important thus to create an environment for transference to occur and help clients gain insight. He found empathy more useful to clients than the therapist's interpretation of the client's behaviour. Therefore, empathy served as a means to understand the client from their inner world (Gibbons, 2011).

From a person-centred approach (Rogers, 1975), Roger's proposed that empathy was one of the most important factors to bring about psychotherapeutic change in therapy and promote the healing process (Rogers, 1957; 1975). He used empathy to describe a way of being towards others, as a process and not a state (1975). It is the ability to sense, share and understand the client's world and

experience as if it were one's own yet without getting caught up in the emotions. The client is perceived as an expert of their inner experience and empathy is a process where the therapists enters the inner world of the client to understand people's experience, pain and source of their feelings (1965) as well as perception of the world (Thorne & Sanders, 2013). It also helps therapists acquire the ability to sense the client's felt meanings and communicate these back to the client. This aims to help clients begin to understand themselves by helping them learn to trust their feelings (1959) and subsequently make positive and constructive behavioural changes. Roger's believed clients knew where it hurt and that under the right circumstances they would find their own way and grow. By creating a safe environment, the client could focus on the therapeutic work rather than the therapeutic relationship (Elliott, Watson, Goldman, & Greenberg, 2004). Therefore, in person-centred therapy empathy is an experiential process of understanding that serves to help the client trust and accept themselves as well as promote self-exploration and discovery where the therapists act as co-explorer (Greenberg & Elliott, 1997).

The cognitive behavioural approach (CBT) to therapy instead emphasizes and acknowledges the role of therapist empathy in the development of a therapeutic relationship. Empathy serves to encourage and formulate solutions through constructive feedback to support desired behaviour change (Wright, Basco, & Thase, 2006). Empathy in cognitive behavioural therapy also serves to help the client, from a cognitive point of view of philosophical empathy to demonstrate to clients they are also able to understand their underlying beliefs and rules as well as the reasons for unhelpful behaviours upon which their emotions are based (Beck, Rush, Shaw, & Emery, 1979; Dryden & Ellis, 1988). Thus, in CBT empathy is seen as a facilitator of therapeutic alliance (Gibbons, 2011) and how therapists can show clients their maladaptive thoughts.

Following Roger's, empathy was regarded as a foundation of helping skills training and was popularized during the 1960s and 1970s (Bohart, Elliot, Greenberg, & Watson, 2002) receiving most attention from psychotherapy theorists and researchers (Feller & Cottone, 2003). One of the studies during that time, such as Truax and Mitchell (1971) found a strong relationship between empathy and positive therapeutic outcome. However, empathy's effectiveness was put under scrutiny and empathy research quieted down until 1995 (Bohart et al., 2002; Duan & Hill, 1996). It then resurfaced as a fundamental component in the therapeutic alliance and with Goleman's (1995) research about emotional intelligence. In recent years, there has been a renewed interest in empathy

research, or “empathy craze” (Brooks, 2011), particularly with the growing field of neuroscience research looking into mirror neurons in our brains that allow us to feel what others are feeling (Alford, 2014). In particular, Preston and de Waal (2002) perception-action model for empathy suggests that perceiving another’s affective state automatically triggers a representation of the same affective state in the person observing it and this has been supported by neuroimaging studies (Bastaansen, Thioux, & Keysers, 2009), particularly with regards to the experience of pain (Singer, Seymour, O’Doherty, Stephan, Dolan, & Frith, 2004).

1.6. Empathy in the Therapeutic Relationship

To be empathic, individuals and in particular therapists, need the ability to both to listen, understand and share other’s emotional experiences (Singer & Lamm, 2009). Therapists use their theoretical knowledge about psychological dysfunction to use as a filter of the client’s presenting issues in such a way that it supports theory and can lead to empathic understanding (Vyskocilova et al., 2011). By expressing to the client that the therapist can share some of their distress and help them feel understood, empathy can facilitate further exploration of both thoughts and feelings (Watson, 2002; Greenberg & Elliott, 1997).

The question on whether some theoretical orientations and treatments are superior to others is a long-debated issue (Wampold, 2015). Nowadays there are NICE guidelines, as well as claims, with recommendations suggesting that some treatments are more effective than others for the treatment of certain mental health issues. Therapeutic orientations can reflect an understanding of clinical decisions but also offer a different point of view on the importance of the therapeutic relationship as well as how therapists define empathy (Carlozzi, Bull, Stein, Ray & Barnes, 2002). Fischer, Paveza, Kickert, Hubbard, and Gravston (1975), the only researchers who explored the relationship between therapeutic orientation and therapist empathy, conducted a study on a sample of 72 therapists using questionnaires and taped interviews, dividing the therapists into three major theoretical orientations, humanistic, psychodynamic and behavioural. Although humanistic therapists tended to score higher in the dimension of empathy, the results did not reach statistical significance. Overall, the results indicated that therapist’s empathy was not related to theoretical orientation, therefore suggesting no observable major differences between theoretical approaches on measures such as empathy nor a significant gap between theory and practice in the area of

relationship. Indeed, Luborsky, Rosenthal, Diguer, Andrusyna, Berman, Levitt, Seligman and Krause (2002) found a non-significant effect between the outcomes of different therapies. Therefore, common factors and therapist variability may outweigh specific ingredients in accounting for the benefits of therapy (Messer & Wampold, 2002).

Furthermore, although the training to become a psychologist, psychotherapist, counsellor or specialist therapist varies, the main goal across professional roles is to help client's work out their difficulties and make positive changes. However, across professional roles clients may place more value on therapeutic common factors such as a strong working relationship facilitated by an empathic, relatable and experienced clinician compared to evidence-based and documented effectiveness. In Swan and Heesacker (2013) for example, clients indicated a strong preference for therapy with value placed on non-specific common factors. Clients reported they were willing to sacrifice nearly 49% of the intervention that was supported by empirical evidence in exchange of ensuring that the therapist delivering the therapy was empathic, relatable as well as experienced (Swift & Callahan, 2010). To this date however no studies have explored the relationship between therapist professional role and empathy directly.

As mentioned above, across all therapeutic orientations empathy is an important nonspecific clinical factor for successful therapy outcome (Bohart et al., 2002; Miller & Rose, 2009; Orlinsky, Grawe, & Parks, 1994; Angus & Kagan, 2009) and the quality of therapeutic alliance is predictive of positive treatment outcomes (Horvath & Symonds, 1991; Black, Hardy, Turpin, & Parry, 2005; Elliott et al., 2011). Alone, it can account for as much as 30 percent in the variance of outcome (Lambert & Barley, 2001; Asay & Lambert, 1999). Research suggests the relationship between therapeutic alliance and client outcome is driven by the therapist not the client (Baldwin, Wampold, & Imel, 2007). In particular, therapist empathy is important for the development of the rapport and has been found to be the strongest predictor of client progress in therapy (Lambert & Barley, 2001; Wampold & Budge, 2012). The therapist's ability to create a warm and supportive relationship with the client is very important (Black et al., 2005), regardless of experience (Hersoug, Hoglend, Monsen, & Havik, 2001). Lei & Duan (2014) examined the relationship between therapist empathy and client perceived working alliance in China and observed that when therapists felt the client's emotions, their clients perceived higher working alliance. Therefore, accurate empathy is an important quality that can establish and strengthen the therapeutic relationship and give a high

power in directing client's individual behaviour.

Within the therapeutic relationship, an important aspect in client outcomes in therapy is undoubtedly the therapist who provides treatment. In his essay "Empathic: An Unappreciated Way of Being" (1975) Rogers noted that "the ideal therapist is first of all, empathic" (p.146). Therapy is most helpful and effective when clients feel their therapists empathize with them and as a result they are most likely to be satisfied with their treatment (Pollak, Alexander, Tulskey, Lyna, Coffman, Dolor, Gulbrandsen, & Ostbye, 2011). In therapy, therapist empathy is essential to help create a safe environment for the development of a warm and secure therapeutic bond where clients feel they can disclose their most vulnerable and painful concerns (Angus & Kagan, 2009). In Angus and Kagan (2009) they found that the therapist's ability to communicate empathically helped clients with Generalized Anxiety Disorder (GAD) reflect on change and gain mastery over their worry in their lives. Sharing the most painful emotions and creating a secure bond can facilitate a client's interpersonal experience as well as set the stage for an emotionally corrective experience. In turn, this gives clients hope as well as a sense of mastery based on the ability to communicate their feelings and being understood by an empathic therapist. Clients who view their therapist as understanding and compassionate result in positive changes towards self-perception and consequential behaviour towards self as well as to others (Steckley, 2006). The client needs to feel the empathy and concern of another person, someone worthy of the client's trust (Sullivan, Skovholt, & Jennings, 2005). As one of the GAD clients in Angus & Kagan (2009) study said "the therapist carries with me the experience" (p.1166). This in turn results in productive outcomes in psychotherapy (Orlinsky et al., 1994). Thus, empathy is key to building therapeutic alliance, creating a safe space to self-explore and increase client's ability to feel understood as well as gain trust in self.

In particular, Rogers (1957; 1959) viewed empathy as an attitude such as the therapist experiencing an accurate understanding of the client's inner world, the ability to relate to the client's experience and communicating this understanding back to the client (Rogers, 1957; Truax & Carkhuff, 1967). If a client feels that the therapist can understand what they are experiencing, clients come to trust and accept themselves (Greenberg & Elliot, 1997) as well become more engaged in the therapy process (Truax, 1961). Through accurate empathy (Rogers, 1959; Truax & Carkhuff, 1967), understanding the client's internal frame of reference and conveying the heard meaning back to the

client via reflective listening, therapists can help clients feel empathy towards themselves and others, which Barrett-Lennard (1997) defines as self-empathy. Through self-empathy clients increase their awareness of their internal state and this opens the way to interpersonal empathy. Clients will be more aware of their internal world, breaking away from their psychological isolation and becoming more sensitive to the internal states of others. The therapist's role here is to act as a co-explorer (Greenberg & Elliot, 1997) to facilitate the client's exploration and lead to new awareness. It is an experiential process of understanding. As a consequence, discovery leads to internal reorganization, reorganizing patterns of behaviours across situations and changes in therapy occur as a consequence of how clients relate to themselves, their experience and others (Barrett-Lennard, 1997). However, many therapists sometimes still fail to appreciate its power, or understand how it can lead to change (Watson, 2002).

Empathy in therapy is fundamental and necessary since as Gibbons (2011) suggests, an unempathetic therapist is unwanted. Psychotherapeutic change can stall if there is a resistance to change (Miller & Rollnick, 1991), which can occur if the client perceives the therapist as cold or unconnected (Laing, 1965; Adams, 1993; Carling, 1995). Therapy can be ineffective if the therapist is unempathetic and is unable to bond with the client (Carr, 2011). As a result, clients may prematurely terminate or drop out of therapy (Moyers & Miller, 2013) due to therapist's low empathy (Burns & Nolen-Hoeksema, 1992) and dissatisfaction with the therapist or their interventions (McCarthy & Frieze, 1999). This reflects in a weaker therapeutic alliance as well as a decrease in positive changes in clients. Limited perceived empathy or poor therapeutic responsiveness can be "toxic" to patient outcomes (Moyers & Miller, 2013) and is one of the best predictors of negative outcome (Marci et al. 2007; Fauth, Gates, Vinca, Boles, & Hayes, 2007). Therefore, therapist empathy is important due to repercussions it may have on client engagement and treatment outcome.

1.7. Teaching Empathy

Although empathy remains difficult to define, it can be taught (Shapiro, 2002). In particular, it is an important skill to screen and teach therapists (Moyers & Miller, 2013). Though, is it possible to teach empathy? As mentioned above, individuals with autism experience difficulties in recognizing emotional and mental states of others. Baron-Cohen, Golan and Ashwin (2009) found that

participants who engaged in empathy training improved significantly compared to a clinical control group whilst Charlop-Christy and Daneshvar (2003) successfully used video modelling to teach perspective taking in children with autism. Moreover, empathy can also be improved amongst therapists. Nedrum and Rønnestad (2004) investigated quantitatively and qualitatively the experience of therapists participating in an empathy-training program. They found an increase in empathic communication as a result of participating in empathy training. Therapists reported a better understanding of their feelings and when changing their therapeutic style this had a positive effect on their clients in that they described their clients being more open and involved as well as less defensive. Therapists with high empathy will respect the client's experience and will therefore give strength to the client's experience of autonomy. Konrath, Falk, Fuhrel-Forbis, Liu, Swain, Tolman, Cunningham, and Walton (2015) also found that it is possible to increase indicators of empathy through an empathy building text message program. Given the significant role of the therapist in the therapeutic alliance, there could be improved treatment outcomes if therapists were trained to improve their empathy and develop as well as maintain strong therapeutic relationships (Moyers & Miller, 2013).

In summary, empathy, the ability to understand and share the emotional state of another, plays a fundamental role in interpersonal relationships, particularly in therapy. It is a multidimensional construct composed of affective and cognitive processes. In the recent years, there has been an increased interest in the domain of empathy in different academic domains including developmental psychology, cognitive neuroscience, social psychology as well as leadership and medicine. It is a fundamental aspect of therapy across all therapeutic approaches and helps the therapist build therapeutic alliance, facilitate therapeutic change and generate positive outcomes. Furthermore, it appears that individuals with high empathy are more likely to engage in prosocial as well as helping behaviours whilst individuals lacking in empathy may behave more aggressively. Overall, empathy encompasses understanding what clients say literally as well as in between the lines about their inner world and communicating this back to them, to increase and facilitate self-exploration and sense of autonomy. The following section will critically examine age-related studies of empathy and the role of empathy in Internet and social media.

LITERATURE REVIEW

Chapter Two

2.1. Overview

Having discussed the definition, importance and role of empathy in therapy and in counselling psychology in the previous chapter, this section will focus on a systematic review of age-related empathy research and the role of empathy in Internet and social media.

2.2. Empathy across the Lifespan

It has been strongly suggested that therapist empathy is important for treatment outcomes however the question remains whether empathy varies between generations and across ages. The ability to empathise with others begins early in life with infants as young as 18 hours old responding to other infant's distress (Zahn-Waxler, Radke-Yarrow, Wagner, & Chapman, 1992). Studies have shown that young children are capable of exhibiting empathy related behaviours and this tendency tends to develop progressively with age throughout childhood and adolescence in more complex forms with the progression of cognitive and emotional development (Khanjani, Jeddi, Hekmati, Khalilzade, Nia, Andalib, & Ashrafi, 2015; Eisenberg, 2000; Damon & Eisenberg, 1998). However, Gruhn, Rebucal, Diehl, Lumley, and Labouvie-Vief (2008) argue that the foundations of empathy occur in an individual's early life rather than develop progressively over the adult lifespan, thus remaining well preserved and stable in older age (Konrath, 2012). Studies on age-related empathy have primarily been cross-sectional providing a mixed and contradicting pattern of results with older adults scoring lower cognitive empathy than younger adults, recent generations of younger adults scoring lower overall empathy, peaks in middle adulthood or no observed differences in empathy across ages.

2.2.1. Decreased Empathy with Aging

In older adults, empathy, specifically the cognitive component can decline with age (Khanjani et al., 2015; Isaacowitz & Stanley, 2011; Bailey, Henry, & Von Hippel, 2008; McKinnon & Moscovitch, 2007) whilst affective empathy may be spared. In a study comparing the cognitive and affective

empathy of young and older adults in self-reported empathy and performance based tasks, Bailey et al. (2008) found older adult's cognitive empathy was significantly reduced but there were no age-related differences in affective empathy. This may be because impairment with cognitive processing may not occur with affective empathy as the process may rely on simulation and mimicry of another's feelings (Khanjani et. al., 2015). Bailey et al. (2008) suggested that on one hand reduced social participation may impact social skills such as cognitive empathy but on the other, that reduced social functioning in older age occurs because individuals have a reduced ability in understanding others mental states and difficulty in judging as well as processing aspects of facial emotions, particularly negative facial expressions (Keightley, Winocur, Burianova, Hongwanishkul, & Grady, 2006). This may be because older adults have difficulty with controlled cognitive processing (Khanjani et. al., 2015). Isaacowitz and Stanley (2011) found that older adults performed worse on traditional tests of emotion recognition accuracy and are less accurate compared to young adults at recognizing facial expressions of emotion. Although, implicit processing of facial expressions is found to be maintained in older adulthood (Bailey & Henry, 2009), in Isaacowitz and Stanley's (2011) study, the participants were invited to recognize emotions from photographs of strangers. As a result, older adults might be more motivated to interpret emotional expressions when the targets of the photographs are familiar people instead of strangers. Indeed, a later study of Stanley and Isaacowitz (2015) examined socioemotional factors and found that age differences in emotion perception accuracy were attenuated when it consisted emotion perception of a familiar person compared to a same-age stranger. Therefore, these findings seem to suggest that affective empathy may not show differences with aging, though cognitive empathy may decline but differences in cognitive functions can be attenuated if the tasks are relevant and meaningful (Richter & Kunzmann, 2011).

Affective emotional processing may also not change with age because cognitive processing for empathy might be more demanding with the decline of cognitive abilities (Wieck & Kunzmann, 2015; Salthouse, 1996). This may be because with age, older adults have a reduced number of cognitive, social and physical resources. For example, Hughes, Andel, Small, Borenstein, and Mortimer (2008) found that reduced social support was associated with decline in cognitive function. Therefore, motives for older adults may change from growth to maintenance or loss prevention later in life (Hess, 2014). The decline could also be due to a range of personal as well as environmental social conditions experienced by the older individuals such as widowhood, physical

impairment and retirement, which decrease the potential for interaction and emotional exchange (Schieman & Van Gundy, 2000). Furthermore, deficits in cognitive empathy in older adults are associated with fewer social activities (Bailey et al., 2008). Therefore, older adults with age may need to become more selective in how they invest their cognitive resources and choose to focus on only emotionally close partners (Cartensen, Fung, & Charles, 2003).

2.2.2. Decreased Empathy in Younger Generations

Interpersonal and societal trends however suggest that individuals nowadays are not as empathic as previous generations (Bellini & Shea, 2005; Konrath et al., 2011; O'Brien, Konrath, Gruhn, & Hagen, 2013). Undeniably, individuals raised in the 1950s were brought up and exposed to different socio-cultural norms compared to people in the 1980s. Recent studies suggest that empathy and concern for others has decreased in recent young adult generations (Konrath, et al., 2011; O'Brien et al., 2013). Twenge, Campbell, & Freeman (2012), examined the difference in concern for others among American high school seniors and entering college students. Compared to Baby Boomers (individuals born after 1946) at the same age, they found Millennials (born after 1982) scored lower than Baby Boomers on items measuring concern for others. In particular they found Millennials were less likely to donate to charities and express empathy for out groups. They argued that the downward trend began with Generation X'ers and is consistent with previous research about increases in individualism (Twenge, 2006) and narcissism. However, their research looked at concern for others within community feeling but did not specifically focus on empathy.

Another study instead specifically examined the changes in empathy of college students over time. Konrath et al. (2011) examined the dispositional empathy of 13,737 college students using the Interpersonal Reactivity Index (IRI). They analyzed samples of college students of the same age at different points of time, and as a result of different birth cohorts. Their study found a 43% decline in Empathic Concern and 34% in Perspective Taking in college students over a 30 years' period. Furthermore, they also found that declines were particularly pronounced in samples from after 2000. O'Brien et al. (2013) similarly found that young adults in 2010 reported lower Empathic Concern compared to young individuals 10 years earlier. According to Konrath et al. (2011), societal changes can explain the decline in empathy. They suggested that the sharp decline in empathy occurred at the same time of major electronic advances and in the rise and prominence of electronic media use, contributing to a multi-tasking social environment against slowing down and listening to

others. This supports the view of “Generation Me” with generations more concerned with their own successes and wellbeing compared to others (Konrath et al., 2011). In particular, O’Brien et al. (2013) found that individuals born in from 1980s onwards, reported having the lowest empathy of all Americans. Given the importance of empathy for interpersonal relations and social connections this issue goes beyond individual benefits and extends to society at large. According to Konrath (2012), if we continue on the current path of decline in focus and concern for others, there will be implications for society.

This trend in decreased empathy can also be explained by an increase in narcissism (Twenge, Konrath, Foster, Campbell, & Bushman, 2008a), individualism (Twenge, 2006; Twenge & Foster, 2008) and self-esteem (Twenge & Campbell, 2001). Over the years, people have become more narcissistic having inflated self-views and seeing others mainly for their usefulness instead of for an interpersonal relationship (Campbell, 1999). Furthermore, in addition to being platforms for social interaction, social network sites have furthermore become mediums for user’s self-interest, an opportunity to broadcast their life, personal information and market themselves, socially, professionally and personally. There have been patterns of high school as well as college students since the 1960s displaying increased levels of positive self-regard (Gentile, Twenge, & Campbell, 2010). According to Konrath (2012) the increase of self-esteem could be a result of the self-esteem movement during the 1980s, where adults encouraged children to feel good about themselves rather than provide constructive feedback on their performance. Furthermore, as there has also been a decline in families having children, there have been more single child families and as a result individuals miss out on the opportunity to develop empathy skills with siblings (Tucker, Updegraff, McHale, & Crouter, 1999). Therefore, technological and societal advances and changes may affect the reported differences of empathy in recent generations.

2.2.3. Empathy Peaks in Middle Adulthood

Most of the studies mentioned above assume empathy takes a linear path in life. Labouvie-Vief, Gruhn and Struder (2010) however argue empathy is a complex emotion, which performs an inverse-U-shaped pattern during an adult’s lifespan with empathy peaking in middle adulthood. Labouvie-Vief’s (2009) dynamic integration theory argues that emotional representations are based on basic cognitive representations that through experience develop from simple to more complex schemes. Therefore, there are increases in early phases of life due to cognitive development and

smaller increases in middle adulthood as a result of accumulated life experiences. Emotional representations reach their peak in middle adulthood (Labouvie-Vief et al., 2010), however in older adulthood the decline of both physical, biological and cognitive functions may challenge satisfactory emotional representations. O'Brien et al. (2013) investigated the effects of age on self-reported empathy across three large cross-sectional samples of adults ($N= 75,263$) ranging in age between 18 and 90 years old. Participants completed the IRI (Davis, 1980) and the researchers found an inverse-u-shaped pattern across the lifespan for Empathic Concern and Perspective Taking with peaks in middle adulthood, around 50-60 years of age. However, they were unable to explain whether their result was based on age or cohort effect. If it were cohort they stated it would reflect generational influences, particularly as these individuals grew up in societal changes where feelings and the perspective of others was emphasized.

2.2.4. No Differences in Empathy across Ages

Other studies still, suggest no observed differences (Diehl, Coyle, & Labouvie-Vief, 1996; Eysenck, Pearson, Easting, & Alsopp, 1985) or a pattern of negative age differences in empathy (Phillips, Maclean, & Allen, 2002; Schieman & Van Gundy, 2000; Gruhn et al., 2008). Two cross-sectional self-report studies with large samples indicated no observed differences in empathy across ages. Diehl et al. (1996) found no difference in self-reported empathy using the California Psychological Inventory (CPI; Gough & Bradley, 1996) in a sample of 381 individuals ranging from 15 to 87 years of age. Similarly, Eysenck et al. (1985) found no self-reported age differences in a sample of 1,320 individuals using the Impulsiveness Questionnaire. Both studies therefore suggest that there are no observed differences in self-reported empathy across ages.

Only two longitudinal studies explored associations between age and empathy. Helson, Jones and Kwan (2002) tracked self-reported empathy (defined as interest and resourcefulness in understanding others) in two separate samples over a 40-year period. A small overall negative linear association between empathy and age was found across adulthood. Although Gruhn et al.'s (2008) cross-sectional study found a decline with age, they also conducted a longitudinal study tracking self-reported empathy of individuals across the ages of 10 and 87 over a 12-year period however unlike Helson et al. (2002) they found no age-related decline. Furthermore, although they found differences in empathy between cohorts, empathy remained moderately invaried within each cohort and they attributed this finding to cohort rather than age effect. Similarly, both studies used the CPI

to assess empathy, which is a unidimensional construct of empathy and does not take into account the complexity and multidimensionality of empathy.

One explanation for this lack of observed differences in empathy has been found in education, particularly that more of it moderates the age-related differences. Phillips et al. (2002) compared the emotional functioning of 30 young adults aged (20-40) and 30 older adults (60-80) with years in education ranging from 12.20 to 14.45 years. They measured emotional functioning using a number of measures including the Mehrabian and Epstein (1972) Empathy Questionnaire to measure empathy and Wechsler Adult Intelligence Scales (Wechsler, 1981) and the Multifactor Emotional Intelligence Scale (Mayer, Salovey & Caruso, 2001) to measure intelligence. They found that older adults scored lower on empathy compared to younger however, the age effect was no longer significant when education and intelligence were controlled. The researchers however used the Mehrabian and Epstein (1972) Empathy Questionnaire, a scale known for measuring affective empathy, which is also conceptualized as a unidimensional construct. It therefore does not assess empathy as a multidimensional concept and fails to include other components such as cognitive empathy. Schieman and Van Gundy (2000) similarly found in their cross-sectional study that education moderated the negative association of age and empathy. They conducted a study examining the relationship between age and self-reported empathy in a large sample of 1,567 individuals aged 22 to 92 years and although physical impairment, widowhood, socioeconomic status and dispositional attributes contributed to the negative association between age and empathy, education significantly moderated the negative age-empathy association. This finding was further supported by Gruhn et al. (2008) who found that the higher the participant's education, the greater the empathy.

These studies therefore suggest that older adult's score lower on empathy compared to younger adults however age-related differences in empathy can be in part associated with differences in education. Education may facilitate individual's social experiences and enhance social interactions as well as social-cognitive abilities whilst increasing exposure to more complex social environments (Gruhn et al., 2008) and as a result, it seems to be positively related to empathy.

2.2.5. Possible explanations for Empathy Differences across Ages

Some factors may explain the differences in adult empathy. In Schieman and Van Gundy (2000)

and in Phillips et al. (2002) education was found to make a difference. This could be because education may enhance social connection as well as social cognitive abilities (Hermans, Rimè, & Mesquita, 2013). However, differences in empathy between ages may also be as a result of context and emotion specific. In Richter, Dietzel and Kunzmann (2011), participants watched film clips of participants reliving a happy, sad or angry autobiographical experience. When only videos were presented without sound, the younger women were more accurate than the older adults in recognizing sadness and anger compared to the older women. However, when audio was also provided younger adults performance was similar to the older adult's level. Therefore, the authors concluded that older adults have higher emotional abilities with regards to relevant situations and low empathic accuracy for non-relevant situations. Indeed, social factors can play a part in the differences in empathy between ages (Hermans et al., 2013). Schieman and Van Gundy (2000) found older people who reported more positive personal relationships and religiosity limited the decline in empathy with age. These factors were associated positively with higher empathy but were also found to conceal the otherwise lower self-reported empathy in older adults. This is because these forms of emotional involvement represent strong social bonds, which can increase a commitment to others as well as feelings of integration and an increased opportunity of being exposed to socioemotional environments. Furthermore, adjusting for other factors in addition to education such as widowhood, retirement, concern for social approval and health also contributed to a reduction in age-empathy association (between 7.2% to 27.3% for subsets). Therefore, education, context, familiarity and social factors may explain a decrease in age-related differences.

Though as most age-related studies on empathy have been cross-sectional, the difference found across ages may also be as a result of birth cohort (Gruhn et al., 2008) rather than age effect. For example, some argue that the generation following World War II has a greater capacity for emotional empathy given their experience with widespread suffering and that at the same time they grew up in an environment that left little space for expression and reflection on their feelings (Sze et al., 2012; Richter & Kunzmann 2011; Gruhn et al., 2008). As a result, this could have affected their ability to attune to others in social interactions. In contrast, more recent cohorts belong to a generation who grew up when there was a wider distribution and access to psychological research (Gruhn et al., 2008) thus encouraging more psychological thinking and where expressing one's feelings was recognised as increasingly acceptable (Konrath, 2012). Therefore, historical, educational and societal experiences may have shaped the development and expression of empathy.

The range of literature on cross-sectional age-related empathy refers to the general population and at the time of this research, no literature was found on cross-sectional age-related therapist empathy. There is however significant research exploring empathy in helping professions such as physicians and medical students. In the medical field, empathy is fundamental for treatment outcome as doctors need to be good listeners and empathy helps them work with patients coping with illness. Most literature in this particular field has focused on the decline in empathy of medical students during training (Dehning, Gasperi, Krause, Meyer, Reiß, Burger, Jacobs, Buchheim, Muller, & Siebeck, 2013; Quince, Parker, Wood, & Benson, 2011). The reason for this reported decline may be that empathy declines during residency as a form of self-defence and coping mechanism (Neumann, Edelhauser, Tauschel, Fischer, Wirtz, Woopen, Haramati, & Scheffer, 2011) but also that physicians down-regulate their pain reaction as to diminish their negative arousal in response to the pain of others and free up cognitive resources necessary for them to help patients in pain rather than being overwhelmed by empathy (Decety, Yang, & Cheng, 2010). In therapy though experiencing empathy is at the centre of the therapeutic work and as there is no literature exploring age-related therapist empathy, it is imperative to explore this specific field given the fundamental role empathy plays in therapy.

In summary, the research literature seems to show a mixed pattern of empathy across the lifespan including a decline in cognitive empathy in older adults, decline in cognitive and affective empathy in most recent generations of young adults, peaks in middle adulthood as well as no observed differences across ages. Though it is important to bear in mind that most age-related empathy studies have been conducted on samples from the general population. The literature review however also reveals that some factors such as education, relationships and social features have been found to moderate these differences. Nonetheless, across age-related empathy studies one factor that has frequently been consistent is that between genders, women tend to self-report more empathy compared to their male counterparts. This aspect of age-related empathy studies will be discussed in the following section.

2.3. Gender Differences in Empathy

Previous research has consistently found that women self-report higher dispositional empathy compared to men (Davis, 1980; Michalska, Kinzler, & Decety, 2013; Lennon & Eisenberg, 1990;

Derntl, Finkelmeier, Eickhoff, Kellermann, Falkenberg, Schneider, & Bale, 2010), and that that increases with age (Michalska et al., 2013). O'Brien et al. (2013) investigated self-reported empathy in three large cross-sectional samples of American adults ranging in age between 18-90 years. Participants completed the IRI and found a consistent gender difference with women self-reporting more empathy than men, particularly Empathic Concern and Perspective Taking. Women have also scored significantly higher than males also in different kind of population groups, adolescents (Davis & Franzoi, 1991) and other cultures (Preti, Vellante, Baron-Cohen Zucca, Petretto, & Masala, 2011). However, differences in male and female self-reporting empathy have generally been grouped as being as a result of two main factors, biological or socio-cultural (Clarke, Marks, & Lykins, 2015).

One explanation for females having higher empathy compared to males is reflective of biological differences in the brain and function. According to Baron-Cohen, Lutchmaya and Knickmeyer (2004) male and female brains are affected by the influence of testosterone that a foetus is exposed to during pregnancy, particularly males are exposed to more of it than females. Some animal studies have shown that foetal testosterone can affect the anatomy of the brain, such as the hypothalamus and limbic system (Gerschwind & Galaburda, 1985). These parts in the brain in turn can affect sexually dimorphic behaviours (Arnold & Gorski, 1984) such as aggression, which is considered to require low levels of empathy. Auyeung, Baron-Cohen, Chapman, Knickmeyer, Taylor, and Hackett (2006) found that females scored higher in empathy compared to males when measuring amniotic measures of foetal testosterone and these sex differences in behaviour partly reflected sex differences in the brain. In a twin study, Cohen-Bendahan, Buitelaar, van Goozen, Orlebeke and Cohem-Kettenis (2005) found that opposite sex twins, particularly the female twin exposed to natural testosterone produced by the twin brother increased aggression post-natally compared to same sex female twins.

Biologically, it would be advantageous for females to have more empathy in order to protect and care for their young (Michalska et al., 2013). As a result, Baron-Cohen's Empathizing-Systemizing (2003) theory of psychological sex differences suggests that on average female brains have a stronger drive for empathy whilst the male brain is built to analyse, systemize and construct systems. Therefore, some studies suggest that pre-natal biology plays an important part in empathy as mediated by levels of foetal testosterone during pregnancy and androgen effects in the brain.

The sociocultural perspective instead argues that gender differences are a result of motivational differences instead of empathic abilities (Gruhn et al., 2008) that occur post-natally. Stereotypically, women are seen as more empathic and caring, whilst men as more pragmatic and this may be due to a socialization process. Through social interactions beginning in the family, individuals develop a sense of self to help them fit into society (Lindsey, 2016), including the cultural, appropriate, expected behaviour associated with their biological sex, such as masculinity and femininity (Eagly, 1987). This occurs at an early age and parents start to socialize boys to express emotions differently from girls in a way that it supports their gender role in greater society. Therefore, men are socialized to be masculine, which includes suppressing and controlling a range of emotions (Addis, 2008) such as compassion and empathy, inconsistent with male power but instead associated with female behaviour. This does not mean that the emotions disappear though that they are restrained in a way that they do not take an active role in their lives (Bannon & Correia, 2006). Gender socialization then continues in school and in the greater society in job roles, activities and so on. As a result of the gender socialization process, participants may be willing to change their self-perception of empathic ability to match more closely their gender normative role, for example in females, empathy is more integral to female's self-concept in comparison to men therefore they may be more aware of their traditional empathy role obligation and be motivated to outperform men (Thomas & Maio, 2008). In Clarke et al. (2015) the gender normativity of empathy was manipulated by randomly assigning 330 male and female participants to read one of three fictitious neurological research evidence narratives, which claimed that either males, females or neither gender scored higher in empathy. Results demonstrated that females scored higher in empathy when they read the narratives claiming women had higher empathy than men or that there was no difference between genders. Though in the condition where the narrative claimed men had higher empathy, no gender differences were reported. However, as the participants were predominantly psychology undergraduates in this study it is therefore difficult to generalize the results to the general population.

Gender differences in empathy may also be an artefact of the method of measurement. Eisenberg and Lennon (1983) conducted a meta-analysis of 16 studies and found there were larger differences between genders when empathy was measured with self-reports, particularly that females scored higher than males. They speculated this was either because women respond in a way consistent with their sex role stereotype or as a result of socialization processes women may be more likely to

respond sympathetically to others compared to men.

Most research suggests that females may be more empathic than males and the little empirical research on gender difference in empathy in therapists has found female therapists report higher empathy than males. Hatcher, Favorite, Hardy, Goode, Deshetler, and Thomas (2005) investigated the empathy of 93 therapists. Participants were asked to complete the IRI as well as were shown five to six clinical vignettes as well as were asked to complete a range of different empathy measures such as a self-perceived difference measure, reference point questionnaire and therapist self-perceived empathy measure. Female therapists scored higher in Empathic Concern compared to their male counterparts. However, as the therapists were asked to complete the empathy measures in a small group setting, therapists might have felt judged by their peers and may have responded in a socially desirable manner. Saarnio (2010) instead investigated the personality traits and interpersonal functioning of 162 therapists and found female therapists scored better than men in dimensions of interpersonal functioning such as empathy. However, as the study was examining personality and interpersonal functioning of substance abuse therapists, it was not specifically measuring empathy or taking consideration the multidimensionality of empathy in the general therapist population. Therefore, it seems that in the overall limited literature, female therapists report and score higher empathy compared to male therapists.

In summary, prior work in gender differences in empathy seems to suggest that females report higher dispositional empathy compared to males. This may be due to biological factors resulting from more foetal exposure to testosterone during pregnancy in males than females affecting brain anatomy or sociocultural factors where women have been socialized to be more empathic fulfilling their gender role in society. However, as discussed above, empathy differences may arise also as a result of how empathy has been measured. Consequently, the next section will focus on reviewing the different ways empathy has been measured so far in age-related empathy research.

2.4. Measuring Empathy

Studies on age difference or age-related changes in empathy vary, even when considering similar research designs. This may partially as a result of the variety of methods used to measure empathy as well as the multidimensional nature of the empathy construct itself.

Although there is evidence that empathy continues to change throughout the life span (Gruhn et al., 2008), the majority of empathy research in age differences has been cross-sectional (O'Brien et al., 2013; Richter & Kunzmann, 2011; Konrath et al., 2011; Gruhn et al., 2008; Schieman & Van Gundy, 2000; Diehl et al., 1996; Eysenck et al., 1985). Only two studies were found to measure age-related empathy longitudinally (Gruhn et al., 2008; Helson et al., 2002). Cross-sectional design offers a number of advantages compared to other designs. They are primarily used to determine the prevalence of a particular attribute, like empathy (Langridge & Hagger-Johnson, 2009). These studies can also examine a large-scale and representative sample, enabling different groups to be compared contemporarily (Coolican, 2009). Another benefit is it allows researchers the opportunity to compare many different variables at the same time, such as gender, generation, professional role, Internet and social network usage whilst assessing more than one outcome in the study (Coolican, 2009; Langridge & Hagger-Johnson, 2009). Furthermore, cross-sectional studies are also generally quick, easy and inexpensive to conduct compared to case-control studies.

Nonetheless, like all study designs, cross-sectional designs incur some limitations. These studies may not provide definite information about the cause and effect relationship as data on each participant is recorded only once (Langridge & Hagger-Johnson, 2009) and it does not take into consideration other confounding variables about what happens before and after the snapshot (Evans & Rooney, 2014). Although some confounding variables like gender (Youssef, Nunes, Sa, & Williams, 2014; Eisenberg & Lennon, 1983), education (Gruhn et al., 2008) and ethnicity as possible covariates of empathy have been previously considered in research (Gilet et al., 2013; Perez-Albeniz, de Paul, Etxeberria, Montes, & Torres, 2003), it would not be possible to chart individual variations in development, changing social processes over time or their significance. Consequently, using a cross-sectional design might prevent from drawing clear conclusions due to generational differences in experience and other confounding variables such as intra and inter-individual differences which might affect empathy scores across generations.

In studying empathy, different measures and methods have been used including self-report (Barrett-Lennard, 1962), particularly using Davis (1983a) IRI (Konrath et al., 2011; O'Brien et al., 2013), performance based tasks (Khanjani et al., 2015), reports from others (Truax & Carkhuff, 1967), observer ratings (Elliott et al., 2011) as well as physiological measures (Dziobek, Preble, Grozdanovic, Hesuer, Heekeren, & Roepke, 2011). Studies also have frequently focused on the

correlates and consequences of empathy such as prosocial behaviour (Stocks et al., 2009), aggression (Barchia & Bussey, 2011) and cyberbullying (Schultze-Krumbholz, Schultze, Zagorscak, Wolder, & Scheithauer, 2016). The wide range of theories of empathy, measures and methods used reflects the difficulty in establishing a general agreement on the definition, causes and measurement of empathy.

Therapist empathy has instead been measured using different assessment methods involving observer ratings (Truax & Carkhuff, 1967), client's ratings of therapist empathy (Barrett-Lennard, 1962) and self-report ratings (Barrett-Lennard, 1962; Mercer, Maxwell, Heaney, & Watt, 2004). Observer ratings such as the Accurate Empathy Scale (Truax & Carkhuff, 1967) ask the observer to rate the therapist's response and level of empathic responding in relation to the client's response. Scales such as these can be advantageous as they provide objective information (Decker, Nich, Carroll, & Martino, 2014), however they also tend to rely on empathic reflections as well as include client's responses rather than concentrating on the therapist's attitude and behaviour alone (Watson & Prosser, 2002). According to Elliott et al. (2011) scales such as the Accurate Empathy Scale tend to focus on certain types of empathic response and therefore they are more appropriate for measuring empathy in person-centred approaches but less so for other approaches. Indeed, the British Association for Counselling and Psychotherapy (BACP) counts a range of at least 29 therapeutic approaches (BACP, 2017). Therefore, it would not be appropriate when studying a wide and varied range of practicing therapists using different therapeutic approaches.

Client's perception of therapist empathy has been found to predict outcomes better than therapist perceptions of empathic accuracy measures (Elliott, Bohart, Watson, & Greenberg, 2011). When examining client rating measures of empathy, the Barrett-Lennard Relationship Inventory (1962) is one of the most used client rating measures of empathy. According to Elliott et al. (2011), the Barrett-Lennard Relationship Inventory measures client's perceptions of therapist's facilitative conditions including empathy as hypothesized by Rogers. However, client ratings do not tell much about the therapist behaviour. Duan and Hill (1996) argue client ratings measures are limited by factors or errors of human perception, such as client's mood or cognitive maladaptive beliefs, unrelated to therapist behaviour. Therefore, client ratings can be limited by internal factors that are separate from the therapist's ability to empathise.

According to Elliott et al. (2011) another method to measure therapist empathy is through empathic

accuracy, also known as predictive measure of communicative attunement (Ickes, 1993). This involves therapist rating clients on how they think the clients would respond themselves on a personality inventory and these results are then subsequently compared to the client rating themselves on the same measures and the results are compared. In particular, this examines therapist ability in reading their clients thoughts and feelings. Although this would be a suitable measurement as it would be closer in measuring a therapist's ability in understanding a client's experience compared to self-reported empathy without client outcomes, observer ratings may miss out on fundamental therapist behaviours and client ratings may be skewed by client's mood or cognitive and affective distortions.

Although age-related empathy studies largely have used self-report measures to assess empathy (Gruhn et al., 2008; Konrath et al., 2011), therapist empathy self-rating scales are less common. The Barrett-Lennard Relationship Inventory (1962) for example has a section for therapists to rate their own level of empathy. Saarnio (2010) instead used a personality self-report to measure therapist empathy. One reason for the scarcity in therapist self-rating scales may be because self-reports in therapists have been found to be unreliable as therapists tend to overrate their empathy (Barrett-Lennard, 1962). Nevertheless, therapist-related empathy can predict outcome (Bohart et al., 2002), even if lower compared to observer or client ratings. For this reason, the present study disguised the nature of the study to the participants as measuring how therapists "relate to others" rather than "empathy" however this will be discussed further in the methodology and discussion chapter. Decker et al. (2014) argue that single rating therapist empathy scales risk also not capturing all the components of empathy and in particular are less likely to be used to examine empathy across different therapeutic approaches as often scales may be tied to a particular therapeutic approach such as the Accurate Empathy Scale developed for the person-centred approach (Elliott et al., 2011).

The majority of age-related studies have largely been cross-sectional using self-report measurements such as the IRI and CPI. In order to replicate earlier research and gather a representative sample, a cross-sectional study measuring self-reported empathy disguising the true nature of the questionnaire was identified as the most suitable instrument to measure empathy in a large sample of therapists across different generations in a limited time. Therefore, having now reviewed age-related empathy research and the different factors that can moderate differences including gender and different measurements for empathy, it is important to take in consideration the wider context of age-related empathy research, that is, the backdrop of progressive and

advancing technologies. In particular, the last 20 years have seen marked technological changes revolutionizing how people communicate with each other and given the importance of communication in therapy between the therapist and client, it is therefore also important to examine the relationship between empathy and emerging Internet technologies such as social media.

2.5. Empathy in Internet based communications and Social media

As discussed above, empathy is a fundamental element in social relationships, and social connection promotes both physical and psychological health (Konrath, 2012). Some studies however have suggested that the advancement of new media has affected individuals' ability to empathize (Konrath et al., 2011, O'Brien et al., 2013). In recent years, there has been a significant increase in research focusing on use of online social media technologies and the long-term impact on wellbeing of individuals and communities (Vallor, 2012) including empathy (Carrier, Spradlin, Bunce, & Rosen, 2005) due to the increased popularity of social networking sites (Valkenburg & Peter, 2008). Some studies suggest Internet and online social network use has increased connection and empathy (Alloway, Runac, Qureshi, & Kemp, 2014; Carrier et al., 2005) whilst others argue the contrary, particularly that there has been a significant decline in younger adult's ability to care and connect with others (Konrath et al., 2011) with an increase in self-focus and a decrease in a focus on others (Konrath et al., 2011, Twenge & Foster, 2008; Gentile et al., 2010). Empathy though involves a concern for others perspectives and feelings (Konrath et al., 2015). We are globally now more connected and interdependent but less so at an individual level, which Konrath (2012) defines as the "empathy paradox".

2.5.1. Advances in Technology

The rapid advancement of technologies allows us to connect with people geographically distant and increase individuals' "sense of connection" (Valkenburg & Peter, 2009). Over the decades, technology and more specifically electronic media has evolved exponentially. In the 1930s the most prevalent forms of electronic media were the movies, records and radio resulting in a total of 10 hours of use per week, the equivalent of 1.4 hours per day. With time, electronic media has evolved with television in the 1950/60s, cable television in the 1970s, home video, computers and VCRs in the 1980s, cell phones, handheld electronic media in the 1990s and then Internet, tablets and

smartphones in the 2000s increasing media use up to nearly 11 hours per day (Gutnick, Robb, Takeuchim, & Kotler, 2010). Gutnick et al. (2010) data however refers to overall consumption of media by children aged between the age of 8 and 18, not adults. Communications watchdog Ofcom (2016a) reports UK adults spend an average of 21.6 hours online each week, with Millennials spending 27 hours compared to Baby Boomers who spend on average 12 hours per week. Children spend today more time using media per day than adults did in the 1930s in a whole week, nearly tripling their screen time per week.

In this era of the World Wide Web, people use the Internet to share information and in their social life to connect with people and maintain long distance relationships (Wellman, Quan-Haase, Witte, & Hampton, 2001). Over the past years, this is partly due to Internet becoming widely accessible and the emergence as well as exponential growth of social network sites like Facebook, Twitter and Instagram, which have become popular platforms for social interactions. For many people, using Internet social media networks have become a habit and part of an everyday daily routine (Utz & Beukeboom, 2011). As of April 2016, Ofcom (2016a) reports 87% of UK adults report using Internet, on any device including home or elsewhere and smartphone use has increased to 70% compared to 66% in 2015. There are approximately 87% of Millennials using Internet compared to an average 52% of Baby Boomers. In the time spent online, unsurprisingly UK 96% adults report they use their device (mobile or smartphone) for communication, with 73% using it to look at social media. Facebook is one the most popular social network sites with 1.13 billion daily active users (Facebook Newsroom, 2016), more than 18 times the population of the UK (Office for National Statistics; ONS, 2016a). In the UK, 84% social media users consider Facebook as their main social media profile Ofcom (2016a). With the advancement of technologies, therapy as well has found its way online with therapists offering counselling sessions over Skype or chat services to clients across the globe (Armfield, Gray, & Smith, 2012). This represents a major shift in Internet use and as such there is some concern that certain types of media environments may affect meaningful social connections (Konrath, 2012; Twenge & Campbell, 2009).

2.6. Impact of Technology on Empathy

2.6.1. Improving Empathy

The very nature of Internet and social media is to connect people across distances. Social skills are correlated positively with empathy (Ishak, Abidin, Yazid, & Bakar, 2014) and digital technology and social media use may facilitate supportive communication (Wright & Bell, 2003). It can also encourage and increase individual's empathic abilities as it gives individuals the opportunity to understand themselves as well as practice online their empathic responses (Alloway et al., 2014). Alloway et al.'s (2014) conducted a cross-sectional study with 410 participants ranging between 18 and 50 years to investigate the relationship in Facebook use, empathy and narcissism in adults. The Interpersonal Reactivity Index was used to measure empathy. Overall, they found a positive relation between Facebook activities such as chatting and empathy, particularly with some aspects of Empathic Concern as well as Perspective Taking in males. However, they also found that males were also less sensitive to other's distress, which is consistent with theories of desensitization and information overload, which will be discussed later in this chapter. The authors suggested that increased media usage provided males with opportunities to practice prosocial skills. Carrier et al. (2015) also employed a cross-sectional design investigating virtual empathy in a sample of 1726 participants through an online anonymous questionnaire measuring daily media usage as well as real-world empathy and virtual empathy. Overall, they found no significant relation between online activity upon cognitive and affective real-world empathy, however they found that virtual empathy was positively correlated with real-world empathy and improved time spent F2F. Furthermore, they also found that time spent online did not displace F2F time nor reduce real world empathy. As a result, time spent online can improve F2F interactions and create access to situations fostering empathic concern (Wright & Li, 2011).

Indeed, Rosen (2012) found that individuals who spent more time online showed more virtual empathy. The individuals who were better able to express empathy online were also better able to do this in person F2F. It may be easier to establish online a safe and secure environment to speak to others about personal matters as it involves less personal as well as social risks compared to F2F interactions (Caplan & Turner, 2007). This, for example, may be particularly true for lonely and social anxious individuals who feel more comfortable talking to others in a nonthreatening environment (Barrera, Glasgow, McKay, Boles, & Feil, 2002).

2.6.1.1. Hyperpersonal Communication and Self-Disclosure

Speaking to others online may also assist people reluctant to communicate with others and to do so in a more honest, intimate and self-disclosive way. Walther's (1996) theory of hyperpersonal communication suggests that CMC encourages people to be selective in their self-presentation compared to F2F communications. As a result, the absence of cues (visual, auditory, olfactory and tactile) on one hand allows others to fill in the blanks though, on the other hand can lead others to project and form idealized impressions of their conversational partners. As a result, communications become "hyperpersonal" yet at the same time encourage individuals to be more intimate. This is because individuals feel more comfortable, less self-conscious and more open in disclosing personal feelings compared to F2F interactions.

Compared to F2F interactions, CMC appears, at least in the beginning, to produce more intimate disclosure compared to F2F conversations (Tidwell & Walther, 2002). This can be particularly true for individuals belonging to a stigmatized group, such as physical disabilities. Through CMC they may find the necessary emotional support due to limited mobility or difficulty discussing sensitive topics (Caplan & Turner, 2007). Easy and frequent access to other people experiencing similar situations can enhance empathy. Preece (1999) found empathy was one of the main ingredients of online support group conversations and participants reported they could strongly identify with the feelings expressed by others. Wright (2002) found that group members of a cancer support website reported empathy as one of the advantages of the online support forum.

According to Collins (2014), social media may be related to engaging emotionally with others. Rosen (2012) found that people who frequently use social media networks and instant messaging express empathy better online. Derks, Bos and von Grumbkow (2008) also found individuals shared feelings similarly in CMC as in F2F and overall individuals communicated somewhat more via CMC compared to F2F. CMC may increase empathy amongst individuals as online people may find it easier to find individuals who show empathy. Compared to F2F, CMC offers individuals the opportunity to gain emotional support through anonymity by discussing sensitive topics. It also allows the practice of empathic skills, greater control over self-presentation whilst in the safety behind a screen. Therefore, Internet and social networks provides individuals with opportunities to meet people and be exposed to situations they would otherwise not encounter or choose to encounter in F2F interactions.

Being protected behind a screen can also encourage self-disclosure. Studies have found that online communication promotes self-disclosure (Trepte & Reinecke, 2013; Valkenburg & Peter, 2009) and social connectedness (Grieve, Indian, Witteveen, Anne Tolan, & Marrington, 2013). Social media is also used to practice social skills including self-disclosure (Valkenburg, Sumter, & Peter, 2011). Vossen and Valkenburg (2016) conducted a longitudinal study with 942 Dutch adolescents and data was collected in two waves over a 1-year period. Participants completed an online questionnaire on social media use and empathy. Overall, social media use was related over time to an increase in cognitive and affective empathy, however the study was limited to adolescents. Although some studies argue that the negative consequences of social media use on empathy refer to substantial media use, the authors found that the frequency of social media use was not related to changes in concern about another's distress. Therefore, increased use should not imply less concern about others though that social media use helps individuals practice social and prosocial skills.

2.6.2. Reducing Empathy

Studies however, have also investigated how the increased use of Internet and social media may promote lower empathy. Internet and social networks are important facilitators for social relationships and have undoubtedly altered the way people interact with each other, redirecting many F2F interactions to CMC, such as emails, texts and instant messaging. Some studies suggest that Internet and social networks have had a negative impact on individuals by reducing F2F interactions and increasing levels of loneliness (e.g., Nie, 2001; Kraut, Patterson, Lundmark, Kiesler, Mukhopadhyay, & Sherlis, 1998) in addition to undermining social and emotional skills and overall, losing interpersonal skills. In F2F interactions, individuals are exposed to a wide range of rich non-verbal cues including posture, facial expression, tone of voice and speed, body language as well as olfactory cues important for reading emotions. As social relationships are complex, it is in these multisensory environments that empathy skills can be developed and honed. With the advancement of technology though, some senses get lost. For example, we might ask a friend how they are and if they said they were "fine" we could perceive in an instant by their tone of voice and body language if that were true. Over CMC interactions and social media it may be harder to detect these subtle differences. As such, some suggest Internet is an "impoverished and sterile form of social exchange compared to F2F interaction" (Bargh & McKenna, 2004, p.575) and has been found to be less useful than F2F communication (Schiffrin, Edelman, Falkenstein, & Stewart, 2010).

However, Derks et al. (2008) found that there is no evidence to suggest that CMC is less emotionally and personally involving compared to F2F. If anything, they found CMC offered more frequent and explicit expression of emotions.

2.6.2.1. Brain Alteration

Displacement of F2F time by online-based activities may also negatively impact empathic skills by rewiring neural connections (Small, Moody, Siddarth, & Bookheimer, 2009; Small & Vorgan, 2011) and in turn affect human relations (Steiner-Adair, 2013). According to Small et al. (2009) our brain is evolving and shifting towards new technological skills and drifting away from fundamental social skills. Physically, Small et al. (2009) argue the more time individuals focus on a specific activity, the stronger the neural pathways respond to that particular area. In particular, mirror neurons are activated not only when performing an action but also when observing another performing that action. Through observation, individuals learn to understand the behaviour of others (Iacoboni, Molnar-Szakacs, Gallese, Buccino, Mazziotta, & Rizzolati, 2005) and the lower the activation, the more the social impairment (Dapretto, Davies, Pfeifer, Scott, Sigman, Bookheimer, & Iacoboni, 2005). Consequently, the brain circuits involved for F2F interactions may become weaker in time due to more time and exposure to digital media. As such Small and Vorgan (2011) report particular concern for young people who spend significant time using technology at an early age as desensitization may occur during the prime years when they should be acquiring fundamental empathy skills. During adolescence, the brain is re-mapped for the development of new neurons. Neural connections and neural pathways that are frequently used remain however other neural connections consequently are eliminated through a pruning process (Maguire, Gadian, Johnrude, Good, Ashburner, Frackowiak, & Frith, 2000). As a result, the types of experience children have at a young age will influence how their brains will be wired as adults (Jones-Smith, 2014), including their empathic skills. Online social interactions may affect how friends support one another growing up given the lack of nonverbal cues that provide clues to an empathic reaction (Valkenburg & Peter, 2011). Thus, it is possible that the increased use of Internet and social media may have adverse effects on rewiring human brains and consequently on our social selves.

2.6.2.2. Anonymity

Individuals may also be less empathic as a result of social media because users may remain virtually

anonymous. Online, individuals can express thoughts and emotions without the fear of being identified and socially evaluated yet it may also give users a sense of extreme freedom to engage in new behaviours that normally would be disapproved by others and result in social consequences (Christopherson, 2007). As a result, “deindividuation” may occur (Zimbardo, 1969), where certain social conditions reduce our self-observation and evaluation as well as concern with the appraisal of others, consequently leading to a weakening of inner limits such as guilt, shame and fear in the expression of otherwise undesirable behaviour (Christopherson, 2007). Indeed, Lapidot-Lefler & Barak (2012) found that lack of eye contact was the chief contributor to toxic online disinhibition. Therefore, due to a reduction in social cues during interaction and feeling of constraint by social norms, people online can be more easily be disinhibited and say hurtful things ignoring how others feel.

According to Suler (2004) anonymity online helps people compartmentalize their online selves in such a way that they rationalize their online behaviours as not reflecting their true self. Furthermore, in recent years, social networks have become a platform for people to distance themselves from others making it easier to ignore and avoid feeling by desensitizing the pain of others (Bushman & Anderson, 2009) as well as inflicting pain. Indeed, cyberbullying has been found to be higher when anonymity was high (Barlett, 2015) and has occasionally resulted in tragic consequences like suicide (See the Amanda Todd story, BBC News, 2017). Cummings, Butler and Kraut (2000) found that F2F communication was associated with stronger relationships compared to phone and email interactions. Being in proximity and in person F2F interaction creates more empathy in individuals and people are more likely to be more concerned about the impact of their behaviour on someone they know compared to a stranger (Mishra & Monippally, 2014). However, according to Vossen and Valkenburg (2016) contemporary social media is no longer as anonymous nowadays as there is often an overlap between the online and offline world (Valkenburg & Peter, 2011) and Rosen (2012) also reminds that social networking helps young people learn to socialize behind the safety of a screen.

Today we spend more time using electronic media compared to the 1930s, which also means less F2F interactions with others. A tool developed to connect people and manage relationships is also an instrument for individual and isolated activities like gaming and entertainment, taking people away from socializing F2F and engaging in deep and meaningful conversations. More time spent online leaves less time and resources for participating in F2F social activities and communicating

with others (Konrath, 2012). Therefore, being online may reduce one's capacity for empathy (Small & Vorgan, 2008). Increased use in social media results in individuals isolating themselves and developing relationships online rather than in person, thus remaining difficult to remain empathetic with people who are in physical proximity. Kraut et al. (1998) examined the impact of internet use on social involvement and found that greater Internet use was associated with declines in participant's communication with family members in the household, reductions in the size of the social circle and increased depression and loneliness. Consequently, resulting in less time and resources to give to others (Konrath, 2012) and making their interpersonal skills rusty for lack of practice. Nowadays, people are multitasking, using multiple medias at the same time (Ofcom, 2016b) and individuals are also managing multiple simultaneous conversations in chats likes Whatsapp or Facebook using a multitude of different and contrasting emotions contemporarily (i.e. being supportive for a friend, being angry with another and being excited for another). Technology has evolved into portable personal technologies like smart phones, increasing the amount of online interaction compared to previous F2F. It is not surprising that in over two decades, individuals report having fewer friends in whom to confide in (McPherson, Smith-Lovin & Brashears, 2006).

According to Konrath (2012), empathic abilities may further be impaired by the availability of information via Internet and social media. Essentially, there is an information overload as individuals are constantly subjected to a wide variety of positive but also highly negative emotions in other people's lives that normally they would not be exposed to (Alloway et al., 2014). To compensate, people become desensitized and numb to emotional experiences. Compared to 1986, individuals take in five more times more information nowadays (Hilbert & Lopez, 2011). Over 45% find the stress of data overload has affected their relationships with family or colleagues, 61% feel that keeping track of information is a source of major concern in their lives and 35% of UK citizens reported debilitating stress from data overload (Esri UK, 2015). Misra and Stokols (2011) found that individuals with higher perceived cyber-based overload predicted self-reports of greater stress, poorer health and a reduction in time for contemplative activities. Overload of information and constant communication about world life problems such as natural disasters, terrorism and violence can lead to "compassion fatigue" and "information fatigue syndrome" (Milivojevic & Ercegovac, 2015), desensitization, emotional burnout and essentially a numbing effect (Kinnick, Kurgman, & Cameron, 1996). Individuals become desensitized as they recognize others emotions but avoid identifying with them and acting upon them (Milivojevic & Ercegova, 2015). To protect themselves

individuals withdraw and enter a state contrary to empathy, numbness. Neumann et al. (2011), for example, found a significant decrease in medical student's empathy, which they attributed to distress and burnout. Thus, individual's empathy may become dulled by information overload. However, users are not passive and they are nonetheless allowed to filter and choose the content they are interested in rather than being overwhelmed by everything (Milivojevic & Ercegovac, 2015). Nonetheless, Vossen and Valkenburg (2016) argue there is still a shortage of direct empirical evidence on the relation between social media and the decrease in empathy.

Internet and social media use allows individuals to get closer to one another, build meaningful and lasting relationships. At the same time though, it is a tool that can also be used by individuals to distance themselves from others to avoid connecting and getting involved with others. People find that the ability to connect with the technology is more important than the use it is made for, connecting with others (Milivojevic & Ercegovac, 2015). Even though research has explored the relationship between Internet and social media use with empathy, there is no existing paradigm establishing a direct relationship between the two. Moreover, in the context of therapy, there is no empirical evidence, found at the time of this research, examining the relationship of Internet and social media use on therapist's empathy skills. As Millennials were raised in the digital age, it is important to explore the relationship between technology and empathy in recent generations of therapists whilst also considering the role of time and how it can shape the course of adult development.

2.7. Time and Generations

At an individual level, how an individual develops is about understanding and recording the nature and causes of change over time as well as change with the passage of time (Merriam, Courtenay, & Reeves, 2001). This includes taking into consideration historical and cultural norms together with chronological age. In the study of adult development, time is one of the most powerful influences as it includes not only the actual passage of time, but it can also account for changes in behaviour and beliefs, which might explain for patterns of change over time (Clark & Caffarella, 1999). Merriam et al. (2001) suggest there are three different time models that can mould development.

First, historical time, the period of history in which an individual lives. This involves long-term processes such as urbanization, as well as historical events (e.g. social, economic and political),

which can influence the life course of the people experiencing them. Therefore, historical time takes into consideration the historical context as an important element of development. Merriam (1999) highlights that the interaction between historical time (processes and events) and chronological age is important because of the influence historical events may have on individuals and their development depending on their age as well as where they are in their life cycle. For example, younger generations who have grown up with digital media feel more comfortable using computers compared to older adults who learned to use computers later in life.

Second, chronological time (or life time) is the number of years an individual has lived since birth measured in days, months and years. Hoare (2006) argues that chronological age is the most useful measurement particularly when used in relation to biological changes, especially in the early stages of life. However, age in itself does not cause changes to take place over time and therefore it is important to also take into consideration other time dependent and independent processes involved which contribute to development.

Third, Merriam et al. (2001) argue that development can also be moulded by social time. This form of time outlines the obligations, rights, and behaviours that are expected to happen during the various stages in the life cycle in every society (Neugarten, 1976). According to Neugarten (1976), there is a socially accepted timetable for key life events for which certain behaviours are expected. These include when individuals are expected to marry, have children and retire so that individuals may determine whether they are on schedule or not compared to the events occurring in other people's lives. Although people vary in experiencing these events overall, the normative pattern is mostly maintained by a majority of the people in the social group. The timetable furthermore serves to give individuals direction and guidance, so they can prepare for the future whilst also finding support from members of the social group who are experiencing similar events (Merriam, 1999). Therefore, historical and social contexts create expectations on what and how adults will develop, and this may vary depending on the historical time period as well as culture.

Overall, time is a multidimensional concept that encompasses historical, biological as well as sociocultural elements. Academics use different conceptualizations of time to understand development (Merriam, 1999) including age, gender, race, socioeconomic class, ethnicity, generation and job tenure. Across research though age (chronological time) is one of the most

common characteristics and predictors of differences in attitudes and behaviours as well as the most frequently used time metric as it captures the passage of time in an individual's life. According to Merriam (1999) age seems to be the most appropriate metric when studying adult development as it is a proxy for a number of factors including biological, psychological, social as well as self-perceived changes. Indeed, of these time metrics, empathy research has frequently used age as a time metric and one way to group age cohorts is by generations.

2.7.1. Generations

A generation is a frequently used term in everyday language to refer to groups of people born across a 15-20-year span and to differentiate between age groups in society as well as locating individuals and others within a historical time. Defining generations though can be a difficult and challenging task particularly when taking into consideration sociological concerns such as time, personal and social change as well as changing media landscapes.

According to Mannheim (1928) generations are a cohort of individuals who experience a similar relation to societal events and share similar experiences of historical processes during their formative years of youth. Adolescence for example, is a key period in individual's lives for the formation of political and social positions, which can impact how an individual thinks and feels. This is because adolescent's value systems are shaped during the first years of their life via family, friends, community and significant events providing consistent social and cultural guidelines. Therefore, the period of time in which a person is born can shape the development of how an individual views the world and socio-historical events group cohorts of people with similar ages in the same context together. Indeed, Durkheim (Schulz, 2012) argues time is a "collective representation", that is a system of symbols that share a common meaning to members of a social group. As a result, people use and rely on collective representations to experience the objective world. Consequently, the cohort forms a specific identity that relies on a common experience and this in turn may influence the identity of an individual. Essentially, a generation is a group of people who were born at the same time, shared similar opportunities available to them at the given point in history (Edmunds & Tuner, 2002) and may have some defining characteristics, for example significant media consumption in Millennials.

Mannheim (1928) differentiates two issues though when examining generations: location and actuality. Location is the year of birth therefore individuals born in the same year have a common location in the historical dimension of the social process. However, it is important to take into account not only time alone as this would reduce a generation to an age cohort but Mannheim (1928) argues a generation should also be seen against “actuality”, that is individuals who share the same historical location also experience similar experiences triggered by historical-political transformations such as World War II and technological advances. Indeed, Gumpert and Cathcart (1985) argue that before the 19th Century media explosion, there were fewer differences between generations.

Oh and Reeves (2011), however argue birth years are just one of the many factors to take into consideration when looking at differences between generations. Howe and Strauss (2000), for example, argue that there are three attributes that can identify the nature of a generation. First, perceived membership, the self-perception of membership within a generation begins in adolescence and continues during young adulthood. Second, common beliefs and behaviour, which include the attitudes such as those towards family, personal life, profession, politics, religion and the behaviours including the choices made with regards to employment, marriage, children and drugs that may describe a generation. Third, common location in history, which include significant events in history occurring during a generation’s formative years.

On the whole it seems age cohorts can be grouped in generations by shared beliefs, perceived membership, experiences and behaviours based on when individuals were born and location in historical time period. However, the classification used to label different generations is not standardized as different researchers have created a range of names to label specific generations and there is also significant disagreement among various authors which range of years should be included within any one generation.

In this research, the focus will be largely on three generations, Baby Boomers (born 1946-1964), Generation X (born 1965-1980) and Millennials (born 1981-2000; Pew Research Centre, 2015a) as they are largely part of the current workforce. A unique mix of factors has defined each commonly used label for the current generations. The Baby Boomer generation, for example, is a generation mostly marked by demography. They are defined in the literature as such due to a dramatic increase

in birth rates following World War II when many servicemen and women returned to civilian life (Colby & Ortman, 2014). Its youngest members were born in 1964, shortly after a significant decline in fertility that occurred after the birth control pill first went on the market (Pew Research Centre, 2015). They were the first generation to grow up with analogue media like TV and radio and learned to use social networks later on in life as a tool for communication. For this reason, they are also known as 'Digital Immigrants' (Prensky, 2001).

Following the post-baby boom era, two generations less strictly defined by demography followed, Generation X and Millennials. Generation X'ers were born between 1965 and 1981 (Pew Research Centre (2015a) and it was labelled as such due to a popularized book by Douglas Coupland called *Generation X: Tales for an Accelerated Generation* (Pew Research Centre, 2015a). This generation lived in a time of relative prosperity and peace (McCrindle & Wolfinger, 2010) and is defined by the relatively low birth rates in these years compared to the Baby Boomer and Millennial generation (Pew Research Centre, 2015a). During this period, Internet was invented in 1969 and became commercially accessible in the mid-90s (Athreya & Mouza, 2017) therefore Generation X'ers gained access to and learned to use Internet during their formative years.

Millennials instead are the generation born between 1981 and 2000 (Pew Research Centre, 2015a). They are largely made up of the children of the Baby Boom generation. The label for this generation is due to them being the first generation to enter adulthood in the new millennium (Pew Research Centre, 2015a). Furthermore, they are also defined as the 'Digital Natives' as they have spent most, if not their whole life within the digital environment (Wesner & Miller, 2008).

Generational differences however may also be affected by different factors and Reither, Hause, and Yang (2009) identify three separate effects that may impact differences in attitudes between age and groups. These are age (also known as life cycle effect), period and cohort effects. Age effects is when differences between older and younger individuals are mostly due to where they are in their life cycle (young, middle adulthood or retiree) as well as the membership to a cohort of individuals born during a similar time. Essentially, they reflect biological as well as social processes of aging that are specific to the individual as well as developmental changes across the life course. For example, young individuals are less likely to vote and participate in politics compared to older individuals. This may initially be due to a lack of interest that changes with age as voting rates tend

to increase with age. Period effects instead may impact differences in attitudes between age groups. This occurs when historical events and environmental factors such as wars, social movements, recession, or technological advancements influence all age groups simultaneously. For example, people's view on terrorism and security changed worldwide following the 11th September 2001 terrorist attacks. Finally, cohort effects occur when the differences between generations can be the result of the unique historical situation each member of the cohort experiences, particularly if this occurs during formative years such as adolescence and young adulthood.

Overall, age cohorts can provide researchers with a very useful instrument to analyse changes over time. However, an age cohort over a 15-20-year period will consist of a wide variety of people that may include smaller meaningful cohorts within these generations. Therefore, people within a cohort may have different formative experiences between each other as a result of changes in political situations, economic circumstances and societal customs. Furthermore, the labelling of people born during specific decades such as the Baby Boomers makes any attempt to draw sharp lines between generations difficult (Bolin, 2017). Particularly, as it can refer to the people born in that decade or those individuals who had their formative years in that decade. Essentially, at what point can it be meaningful to distinguish between someone born in 1964 and 1965? Lancaster and Stillman (2002) define individuals born on the edges of various generations as cuspers. Therefore, the lines defining generations are useful tools for analysis however it is important to bear in mind that they are only guidelines rather than strict distinctions as it may also pose limits to the generalization of generational traits.

When discussing the increased use in electronic media in recent generations, it is important to understand that this is particularly related to the generation of Millennials (individuals born between 1980-2000), who are the largest consumers of social networking sites with 89% (Brenner & Smith, 2013). In the literature they are also known as "Generation Y" (Bolton Parasuraman, Hoefnagels, Migchels, Kabadayim Gruber, Loureiro, & Solnet, 2013) and "Digital Natives" (Prensky, 2001; Palfrey & Gasser, 2008). They are the first generation to have spent most, if not their entire lives, in the digital environment; in stark contrast to previous generation's F2F method of socializing. Information technology profoundly affects how they live and work (Bennett, Maton & Kervin, 2008; Wesner & Miller, 2008). Although they are technological savvy and computer literate, they lack in critical interpersonal and communication skills (Hartman & McCambridge, 2011). The prevalence

of text-based communications replaces human contact and users can selectively manage their identity and how others perceive them online. Something that otherwise cannot be done as easily in F2F interactions. In CMC, the absence of physical and nonverbal cues denies users of important information about the other person (Walther, 2005) and risks there being over attribution of CMC from cues found in the instant message (Walther, 1996) because users are advantaged over F2F communication by selectively editing and managing the content of their message.

Some studies, as discussed above, have indicated that social networking has a positive impact on social connectedness and wellbeing (Valkenburg & Peter, 2009) as well as concern for others (Wright & Li, 2011; Wandel, 2009). Individuals are able to build relational intimacy more quickly through these means (Ellison, Heino, & Gibbs, 2006) and can produce greater feelings of love and support (Whitty, 2008), such as for those who find F2F contact difficult including the shy and introverted (Wolfradt & Doll, 2001). However, an increased body of literature suggests the latest generation is lacking in interpersonal skills (Lower, 2008) and that time spent online is substituting time previously spent engaged in social activities (Subrahmanyam, Greenfield, Kraut, & Gross, 2001). In particular, the simulated interactions within social media networks are not reflective of typical real-world interactions. Here, users do not gain opportunity, or substantial experience, to practice interpersonal competencies (Doo, 2006).

The Internet can be beneficial for many individuals for a variety of reasons. Different generations use it in different ways (Jones & Fox, 2009) and as a result generation gaps have become more apparent. Baby Boomers use social networks to reconnect with people from the past, keep in contact with children and seek support from others living with chronic disease (Madden, 2010), Generation X'ers use Internet and social networks for online shopping, banking, searching online for health information and connecting with others (Jones & Fox, 2009) whilst Millennials uses it principally for entertainment, gaming and connecting with and meeting new people (Bolton et al., 2013). Millennials feel more comfortable with computers compared to their parents and as a result are more likely to be online consumers as well as users of social media (Leung & Zheng, 2012). Though, Twenge et al. (2012) argue, "generational differences are cultural differences and as cultures, change the youngest members are socialized with new and different values" (p. 1045). Indeed, in comparing influences of CMC on interpersonal communication between Baby Boomers and Millennials, Turnbull (2010) found that Millennials experienced a decrease in quality of interpersonal communication. However, the more people learn about the capabilities of Internet

perhaps the differences between generations will diminish.

2.8. Problem Statement and Study Purpose

In the current study empathy is defined as the ability of a therapist to sense, share and understand the client's world and experience as if it were their own. Empathy plays a significant role in mental health treatment, particularly the therapeutic relationship. The clinician created supportive empathic bond provides an essential foundation of psychotherapy (Brock, Cassell, Tyrone, Maureen, Dubey, Halia, Leigh, & Laurel, 2013), which can have a significant impact on client engagement, treatment outcome and client self-disclosure. With the explosion of social media networks as major communication vehicles that have permeated the life of many people, there has been little time to learn how to integrate these effectively into our daily lives (Rosen, 2012). The therapeutic setting is, in stark contrast to the volatile Internet world and requires patience, introspection and an ability to stay fully present. Undoubtedly, new advances in technology have increased ways individuals connect, develop as well as maintain interpersonal relationships however, some theorists argue this could be to the detriment of important interpersonal skills, namely empathy. As a result, empathy differences between generations may be of particular interest nowadays.

This study is motivated by a profound interest in the increased use of social networks as facilitators for social interaction and their long-term effect. However, as the literature review above demonstrated, there is currently no existing paradigm between Internet and social media use with empathy. Consequently, the focus here is to conduct an exploratory study comparing therapist empathy across generations and the relationship of Internet and social media use with therapist's self-reported empathy. The systematic review of past empathy research has demonstrated a mixed pattern of findings including a decline in cognitive empathy in older adults, declines in both cognitive and affective empathy in younger generations, peaks of empathy in middle adulthood as well as no observed differences across ages whilst focusing primarily on a sample of the general population. The researcher was unable to find studies comparing therapist empathy between generations therefore, the present study aims to fulfil this gap in the literature by investigating whether there is a difference in empathy across generations of therapists and further exploring the relationship of Internet and social media use with empathy.

2.9. Research Relevance in Counselling Psychology

As discussed above, empathy is an important source of connection between people in social and professional relations, which can lead to positive ways of relating to others (Staub, 1990). It is a particularly important ingredient in therapeutic interactions. Coming from a humanistic tradition, counselling psychologists give primacy to the therapeutic relationship. Empathy skills are fundamental to counselling psychologists in practice and training. For counselling psychologists working with clients, to be empathic and able to build a therapeutic relationship that facilitates the client's process of critical understanding, growth and wellbeing is essential. This sort of relationship involves using a multidimensional and collaborative approach with clients to understand and appreciate individual's subjective and unique accounts of how they perceive and attribute meaning to the world and their experience (Woolfe, 1996). It also involves searching meanings and developing a joint understanding collaboratively between the client, therapist and the wider world to address client's concerns. Therefore, the ability of the therapist to empathize with the client comes from a place of learning and working with the client rather than being an authoritative expert. It is the little narratives, as Milton, Craven and Coyle (2010) suggest that are important to listen and gauge the client's behaviour and experience within the biological and social contexts. Therefore, counselling psychologists go beyond limited conceptualisations. As Rafalin (2010) argues, counselling psychologist's mission is to acknowledge, value and support clients towards the change they want. As a result, this research could help investigate empathy across generations, particularly in Millennials who are part of the current workforce, to ensure clients receive empathic care where client's point of view is valued and thus promoting positive treatment outcomes.

The rising costs of healthcare have led to an increase in manualised treatments and situations where professionals are asked to provide brief therapy to a large number of clients requiring help, however as Oelofsen (2012) argues this process may be at the risk of overlooking important aspects such as human interaction. National Institute for Health and Care Excellence (NICE) guidelines (2011) suggest that working with people using mental health services it is necessary to "take time to build trusting, supportive, empathic and non-judgemental relationships as [they are] an essential part of care" (p.10). Undoubtedly, empathy is an essential aspect of therapeutic interactions and this is further emphasized in counselling psychology where the relationship is at the heart of the work, so for this reason research into exploring differences of empathy across generations, particularly in more recent generations is necessary. The mission of counselling psychologists is to help people

achieve their potential by facilitating their journey towards wellbeing. As a result, the findings could not only enhance age-related empathy studies but also have implications for the on-going training of therapists in the current workforce as well as for future therapists.

Overall, it is suggested that investigation regarding age differences in therapist empathy is a warranted research area, which addresses a number of gaps in the literature. Given previous research on age differences in empathy outlined above, the findings point to a number of hypotheses:

2.10. Hypotheses:

H¹. There is a difference in cognitive and affective empathy between generations of therapists.

H². Female therapists will self-report more empathy than males.

In addition to testing the stated hypotheses, an exploration of therapists Internet based communication and social media use is included in the current study to enhance the findings.

METHODOLOGY

Chapter Three

3.1. Overview

A systematic and critical review of the literature demonstrated a gap in empathy studies across different generations of therapists. The current chapter describes the methodology and procedure employed for this research study. The first section focuses on the rationale for the chosen study, reflexivity, epistemological position and data collection tools to best respond the research question whilst the subsequent section provides details on the participants, design, measures and procedure.

3.2. Rationale for the Study

The primary aim of this research is to explore whether there is a difference in self-reported dispositional empathy between generations of therapists and if there is a relationship with Internet based communication and social media usage.

Empathy is a fundamental variable in therapy for the development of a positive therapeutic relationship and is strongly correlated with therapeutic outcome (Lei & Duan, 2014; Moyers & Miller, 2013; Elliott et al., 2011). It is a basic relationship skill (Bohart & Greenberg, 1997) necessary to comprehend and emotionally respond to others even at the simplest level (Gould & Gatreau, 2014; Feshbach, 1997), particularly in therapy (Elliot et al., 2011).

When looking at age differences in empathy, studies have shown mixed results. Some have found empathy decreases in older adults (Bailey et al., 2008), younger adults report lower empathy but also no observed differences in empathy across the lifespan (Gruhn, et. al., 2008, Phillips et al., 2002). There is evidently contradictory literature about how empathy changes across ages. This might be due to the multifactorial nature of empathy or variety of measurement tools used across studies measuring different dimensions of empathy (Khanjani et al., 2015).

The rapid advancement of technology, particularly Internet and social networks, has helped connect individuals across the world as well as shifted traditional modes of communication, the way people interact and how relationships develop and are maintained. Younger generations like Millennials,

use Internet based communication more and social media than any other method to communicate and socialize with others compared to older generations (Ofcom 2016a). Some studies report frequent Internet use makes individuals feel more connected (Valkenburg & Peter, 2009) whereas in other cases, that it inhibits the development of interpersonal skills (Lower, 2008). Gruhn et al. (2008) as well as O'Brien et al. (2013) suggest that there is a question whether empathy is declining in most recent cohorts and Konrath et al. (2011) speculate that the rising prominence of personal technology and media use may act as a contributor to this decline. In therapy though, the lower the therapist interpersonal functioning and empathy, the more likely clients drop out of treatment (Sarnio, 2002; Moyers & Miller, 2013), whilst therapists who form stronger alliance with their clients statistically show better outcomes (Baldwin et al., 2007). However, as a direct link between Internet and social media use with empathy has not yet been established based on the review of the literature and given the absence of a validated and widely used Internet based communication and social media use questionnaire at the time of this research, investigation of a relationship between Internet and social media with empathy is only explorational at this stage. It was therefore not possible to formulate a hypothesis without stronger research evidence to support it.

The aim of this study therefore is to explore whether there is a difference in empathy between generations of therapists and explore possible relationships with Internet and social media usage. As empathy is a fundamental and necessary (Rogers, 1957) interpersonal skill in therapy, further examination exploring the difference across generations of therapists is justified, particularly as low empathy may increase the likelihood of clients dropping out of treatment and it may affect therapeutic outcome. Although, there has been significant research in age differences in empathy with mixed results and limited research with individuals born after 1982, age difference in therapist empathy has not been investigated, thus resulting in a gap in the literature. The present study, therefore seeks to enhance empathy research in this particular area. If a difference of empathy is detected, this study seeks to collect and disseminate research information to contribute as well as encourage further research into therapist empathy. The findings will then be discussed with existing literature, keeping in mind that the three generations are positioned at a different point in their lifespan development and research is mixed on expected age differences in empathy.

3.3. Personal reflexivity in relation to the research

Reflexivity, a key feature and significant concept of qualitative research, can be argued to be a key aspect for quantitative research as well (Donati, 2016). In essence, reflexivity is the process in which the researcher reflects on how their own beliefs, perceptions, values and assumptions about the research topic and the world might influence the research question, data collection as well as the interpretation of results produced in the research study (Gerrish & Lacey, 2006; Langdrige, 2007; Willig, 2001). Romanyshyn (2010) argues we are unconsciously called to work on a topic and therefore it is the topic that chooses the researcher.

Being a reflective practitioner is at the core of being a counselling psychologist (Douglas, Woolfe, Strawbridge, Kasket, & Gailbraith, 2016), including research (Kasket, 2012). Reflexivity is important because it facilitates a critical approach towards understanding the researcher's subjectivity on the research design and interpretation of findings (Gough, 2003) by focusing on the personal relationship dynamics between a researcher and the research including personal, perhaps unconscious, reactions (Finlay, 2003). According to Gergen and Gergen (1991), "scientist practitioners have traditionally ignored the role they play in shaping the outcomes of their research" (p.76). Finlay and Gough (2003) go further to state that it is not possible for a researcher to view their research "objectively", thus separating the "knower" from the "known" (Gergen & Gergen, 1991).

During this process of research, I have reflected on my choice of topic and as Romanyshyn (2010) suggests, perhaps my topic chose me. When I was growing up my older brother was fascinated by technology and I developed an interest, perhaps, as a way to connect with him. I became interested in computer systems, emerging technologies and became quite capable with most forms of technology. Over time, our shared interest in technology has become an important part of our relationship.

In my later years, I pursued technology and worked in media as an online news producer and online film pr account executive. In both these professional roles, I watched how the development of new communication platforms and use of social media enabled laymen to become news providers (YouReporter). Through this same medium it was also possible to engage audiences as well as target advertising. In my personal life, I noticed contemporarily the different communication and

relational style between my generation and my parents. My verbal communications became short and to the point, similar to a Twitter 140-character message. If I could notice such a significant difference between our generations, I wondered how this would come across in therapy, particularly where clients are forced to relinquish part of that control that instant messaging grants them. Indeed, Hartman and McCambridge (2011) argue that the Millennials may lack some fundamental interpersonal and communication skills. Empathy, being a core skill in interpersonal communication makes me question about changes across generations, particularly with the increased use of technology replacing face-to-face interactions with computer-mediated communication. More importantly with new generation of therapists and how this may impact how they relate to their clients.

My interest in technology extended to the advancements and permeation of social media, essentially to all forms of “connection”. I was fascinated by the breadth and power of social media giants like Facebook and Twitter and their ability to engage masses of people such as what occurred on Twitter during the Arabian Spring in 2011. However, I also realised that checking my Facebook newsfeed often led me to compare myself negatively to others. Some part of me struggled with the platform that, on one hand allowed me to connect with many people, yet at the same time caused me to disconnect with myself.

With today’s rapid advancement of technology, I suddenly found myself overwhelmed by it. I felt I had unintentionally let technology occupy my personal, physical and emotional space. With my peers, I also noticed a shift in communication and social skills. My friends increasingly reported that they found speaking on the phone difficult, uncomfortable and overall preferred texting. Simultaneously, I noticed my parent’s generation instead preferring telephone and face-to-face conversations. Personally, I have tried to take a step back from technology choosing to develop some relationships via more traditional means such as exchanging telephone numbers and meeting people in person. The relationships I developed thereafter have felt more real and have allowed me the opportunity to meet people as they are whilst keeping boundaries to my personal life and slowly unpeeling layers of myself to those worthy of connection.

Therefore, even though I believe I chose this topic, as Romanyshyn (2010) would argue, perhaps the topic chose me, as a “wounded researcher” trying to make peace with my experience of technology. I am in awe of the potential of technology but I also wonder about its impact and our

capabilities to process and assimilate information at the same speed as the progress in technology. As a personal choice, I have slowed down my relationship with technology, following its evolution as a spectator and occasional user. I hope with this research to explore whether there is a difference in empathy across generations of therapists using an objective stance and that the findings of my research will encourage further studies assessing therapist empathy.

3.4. Reflections on Epistemological Stance

The researcher's' epistemological stance is positivist, as the observational study uses quantitative methods and adopts a scientific and hypothetico-deductive approach to investigation with a tendency for an objective understanding of reality. This means, all phenomena may be reduced to singular variables reflecting reality and truth (Sale, Lohfield, & Brazil, 2002), as they exist rather than how one would prefer them to be. As a result, the data will be measured objectively independent of the researcher. This is indeed the researchers preferred research method, as it will enable to measure empathy objectively as a phenomenon to inform professionals about any changes in empathy across generations and reflect on the relationship with Internet and social media use as well as direct future, and more in depth research on therapist empathy and needs in professional training.

3.5. Data Collection Tools to Address the Research Question and Hypotheses

3.5.1. Online Questionnaire Format

As cross-sectional studies are often based on surveys, this study employed the same established method. The focus of the study centres on empathy and it was decided that an online questionnaire based format using Davis's (1983a) Interpersonal Reactivity Index (IRI) to measure empathy would be most suitable to address the research question and hypothesis. This offered the researcher a quick picture of self-reported empathy in three sample populations with no follow-up required (Wilson & MacLean, 2011) as participants are questioned only once. Essentially, a questionnaire allows the answering of specific questions and related quantitative scoring for analysis of the factor under investigation.

Self-completion questionnaires are a widely used research tool and are useful when trying to collect

a large amount of participants. They can determine the incidence of behaviour and attitudes of a large group of people rather quickly (Langridge & Hagger-Johnson, 2009) as well as provide more privacy for participant responding (Tourangeau & Smith, 1996). Furthermore, using a computerized questionnaire can guide respondents through the questions whilst recording their responses at the same time (Clark-Carter, 2010).

Using an Internet based survey has additionally several advantages. Surveys are efficient and low cost (Buchanan, 2000; Skitka & Sargis, 2005), paperless without copying costs and gives participants the opportunity to respond when and where convenient (Shaughnessy, Zechmeister, & Zechmeister, 2012; Dillman, Smyth, & Christian, 2014). Participants may deem some questions as being intimate and online surveys encourages participants to respond more genuinely.

An online survey was the only mode of delivery used in this study as other modes such as postal and telephone would have been too costly, time consuming and invasive as data was to be collected anonymously. Therefore, an online survey was the preferred method for this research as it allowed access to a wider array of participants with the flexibility to answer questions when and where it was more comfortable and convenient for them whilst maintaining anonymity and confidentiality.

In summary, it was agreed that a quantitative methodology and cross-sectional research design using an online survey would best address the research question, in line with the researcher's epistemological position. Consideration was given to the researcher's personal reflexivity of the undertaken research and data collection tools. The following section describes in detail the method, participants, measures and procedure employed to best answer the research question.

3.6. Method

To best answer the research question and hypothesis, an online self-completion survey was administered. A random probability sample survey allowed the researcher to collect data from a representative sample of the therapist population in order to generalize the results to the larger population. It was the preferred method as it was cost and time effective compared to surveying everyone in this defined population. Therefore, the sample had to be accurately representative of the whole population from which it was drawn to improve survey estimates.

3.6.1. Participants

3.6.1.1. Inclusion/exclusion criteria

To participate, respondents had to fulfil two inclusion criterias, that they were therapists and were born between 1946 and 1996. According to Merriam Webster (2015), a therapist is a person “trained in methods of treating illnesses especially without the use of drugs or surgery [and] helps people deal with mental or emotional problems by talking about those problems”. Throughout the literature it is possible to presume these are individuals in a helping profession who meet clients to resolve problematic and painful feelings (Rogers, 1957), change behaviours such as self-destructive ones (Moyers & Miller, 2013) and challenge beliefs to improve relationships. The NHS Choices finds talking therapies to include psychological therapies, counselling, psychotherapy, cognitive behavioural therapy, family, couple and group therapy (NHS, 2014). There are many professional bodies in the UK for therapy and the following is a list suggested by the NHS (NHS, 2015) for approved therapists:

- British Psychological Society (BPS)
- British Association for Behavioural and Cognitive Psychotherapies (BABCP)
- Association for Family Therapy (AFT)
- British Association for Counselling and Psychotherapy (BACP)
- British Psychoanalytic Council (BPC)
- UK Council for Psychotherapy (UKCP)
- The Health and Care Professions Council (HCPC)
- Association of Cognitive Analytic Therapy (ACAT)

To practice psychology in the UK, psychologists are required to register with HCPC. It is illegal by any member of the public for any purpose, to use the title ‘Psychologist’ as it is a protected statutory title and must be registered with the HCPC (HCPC, 2015b). Therefore, it is expected that all practicing psychologists are registered with the HCPC. As of November 2015, the HCPC states there are about 21,756 registered practitioner psychologists in the UK. The BACP reports over 41,000 members (2015), UKCP over 7,800 individual therapists (2015), BPC around 1450 registrants (2015) and BABCP over 10,000 (2015) members. Unfortunately, no data was available for BPS, AFT and ACAT.

Generations, a group of people born over a 15-20-year span, was selected as a variable as opposed to age as it is one way to group age cohorts. With rapidly advancing media landscapes it is important to study generations, as they are the social contexts affecting individuals that reside within them. Cohorts can be conceived as a structural category, whereby the unique conditions, obstacles and resources through which cohorts are born into and in which they live through their collective lives may provide as well as shape unique experiences for that cohort including social and structural change (Keyes, Utz, Robinson & Li, 2010). In particular, age cohorts are a useful tool to analyze changes over time as they can provide a way to understand how different experiences may interact with the aging and life-cycle process to form people's attitudes, values and behaviours (Pew Research Centre, 2015a).

As this study sought to determine whether generation affected therapist's empathy, participants included Baby Boomer generation, Generation X'ers and the Millennial Generation. Pew Research Centre (2015b) defines Baby Boomers as those individuals born following World War II between 1946 and 1964, Generation X'ers are born 1965 and 1980, whilst Millennials are the generation of individuals born between 1981 and 2000. These generations were selected for this study as the Internet only became widely available in 1995 (Athreya & Mouza, 2017). Therefore, Baby Boomers were a generation that grew up with analogue radio and TV, hence without Internet and social networks, Generation X'ers grew up when Internet was being developed and distributed whilst the Millennial generation grew up immersed in the digital environment. Therefore, the focus of the study was measuring therapist's empathy; participants born outside these generations were excluded.

Individuals who have engaged in higher education, such as bachelor's degree, have shown higher empathy compared to individuals with only secondary school qualification (Gruhn et al., 2008). Indeed, Phillips et al. (2002) found that when education is controlled the age effect was no longer significant. Therefore, it was unnecessary to control education in this study as one of the inclusion criteria, therapist role, meant participants had to engage in higher education to qualify and achieve accreditation status. Furthermore, as empathy has been validated cross-culturally (Gilet et al., 2013; Perez-Albeniz et al., 2003) and has not revealed to show any significant differences (Gruhn et al., 2008), participant ethnicity was not of particular concern.

3.6.2. Sampling Technique

This study used random sampling so each member of the population being studied had the equal opportunity of being selected for the sample. Using a random sample, where each member of the population being studied had an equal chance of being selected for the sample (Clark-Carter, 2010; Langridge & Hagger-Johnson, 2009) and increased the chances to generalise the research findings to the whole population. Nonetheless, even with random sampling, sampling error is an unavoidable result of obtaining data from only some of the members of the population rather than all on the sample frame (Clark-Carter, 2010). By recruiting participants via personal contacts the researcher used opportunity, also known as convenience sampling method (Langridge & Hagger-Johnson, 2009). This included contacting colleagues at placements, work and online websites such as the counselling directory and BPS website. In order to recruit a wider array of participants, snowball sampling was also utilized to recruit participants, using the researcher's contacts to identify other potential participants. Although both sampling methods were not deemed the most ideal in research literature (Clark-Carter, 2010; Langridge & Johnson, 2009), it was the preferred method for this study due to limited financial resources. To reduce coverage error (Dillman et al., 2014) the researcher contacted the professional bodies approved for therapy by the NHS (2015) such as the BPS, BACP, BABCP, AFT, ACAT, UKCP and BPC. The aim in this study was to reduce sampling error as much as possible by creating a good enough heterogeneous sample of therapists in the UK.

3.6.3. Sample Size, Effect and Power

The study recruited $n = 299$ participants. The hypotheses for this research were that there would be a difference in cognitive and affective empathy between generations and female therapists would report more empathy than males. The aims of this study were that the results were statistically significant to the exclusion of other variables. However, statistical significance is insufficient alone because it is affected by sample size. To achieve this, it was important to establish effect size and calculate the power of the statistical test.

Determining the effect size gave a measure of the magnitude of a result that was independent of sample size (Clark-Carter, 2010). Using Cohen's d (1988), a measure of how many standard deviations apart the means are, the measure of effect size was established. Cohen (1988) however has defined, for each effect size measure, what constitutes, a small, medium and large effect. These

are d of 0.2, 0.5 and 0.8 respectively. Previous research in empathy did not report the effect size though means and standard deviations were, such as in Konrath et al. (2011). Consequently, the effect size was calculated using Cohen's measure of effect size:

$$d = \frac{\mu_2 - \mu_1}{\sigma}$$

where μ_2 is the mean for one population, μ_1 is the mean for the other population and σ is the standard deviation (Clark-Carter, 2010). The results demonstrated that medium to large effects were used in this study (Konrath et al., 2011). Rosnow and Rosenthal (2008), state that the importance of the effect size depends on the nature of the research being conducted. A large effect size of $d = 0.8$ was agreed for this research in accordance with previous empathy studies and was deemed important as it could investigate whether empathy in younger generations has decreased and as such, whether further research should investigate this phenomenon further.

The more powerful a statistical test the more likely a Type II error will be avoided. Statistical power is the likelihood that a study will detect an effect when there is an effect there to be detected (Clark-Carter, 2010) and is defined as the probability of avoiding a Type II error beta (β), thus failing to reject the null hypothesis when the alternative hypothesis is true. Consequently, the power of a test is $1 - \beta$. For the purpose of this study, it was important to avoid making a Type II error. By aiming for a level of power that is nearer to 1 as possible, it is possible to reduce the likelihood of a Type II error. According to Clark-Carter (2010), a reasonable minimum level of power to aim for is 0.8. Using a power of 0.8, the probability of making a Type II error (β) is $1 - \text{power} = 0.2$. Therefore, 0.8 was selected as the statistical power as the greater the statistical power in the research study the less likely the chances of making a Type II error.

To reduce the likelihood of a Type II error when reporting research findings, a priori power analysis was carried out using software called *G*Power* (Faul, Erdfelder, Buchner, & Lang, 2009) to estimate the sample size of this research. The significance level was set at $\alpha = 0.05$, as this is the commonly used statistical level adopted in psychological research literature (Clark-Carter, 2010). The prospective power analysis suggested a total sample of 70 participants, 35 per generation group (Appendix 1), would be needed to provide a 95% chance of detecting a large effect size ($d=0.8$) (as defined by Cohen, 1992). This would suggest a representative sample of the population that would

yield statistical significance. Although a large effect was determined in Konrath et al's (2011) study, Gruhn et al. (2008) did not report the effect size or means and standard deviation of their cross-sectional research therefore it was not possible to determine their effect size. Furthermore, it is important to note that the effect achieved in previous age-related empathy studies was based on samples from the general population instead of a sample of therapists. Given the very limited research in comparing therapists empathy, this study aims to use a large effect though acknowledges that further research in this area is warranted.

3.6.4. Participants and Sample Demographics

The study recruited 299 participants and 53 participants were excluded from the final analysis, as they failed to provide any data on the empathy questionnaire, which meant their empathy subscale scores could not be calculated. As this represented nearly an 18% of the total participant sample, a Little's MCAR test was run on SPSS to investigate whether there was a pattern in the missing data or whether it was missing completely at random. The test demonstrated that it was not statistically significant resulting in a chi-square = 77.49.546 ($df= 9316$; $p > 1.0$) thus failing to reject the null hypothesis and thus suggesting that the data missing was completely at random. In particular, as empathy is the variable of interest of this research, the analysis was therefore only run on the cases that had a complete set of data. This approach is defined as a complete-case analysis (also known as listwise deletion; Enders, 2010), which essentially discards the data for any case that has one or more missing values. It is one of the most common approaches to handling missing data in social and behavioural sciences (Enders, 2010; Hayes, Slater, & Snyder, 2008). The main advantage of this method is that it is convenient to implement and is a standard option in statistical software packages. Furthermore, this approach has also an advantage in producing a common set of cases for all analyses. However, using complete-case analysis also encounters several disadvantages. Enders (2010) argues this approach assumes that the data is missing completely at random (MCAR) unrelated to exposure, covariate or outcome and the remaining sample after the complete-case analysis remains a random sample from the original population. If this assumption is unmet and the missing data is only missing at random (MAR), data may be missing in a systematic way conditional on some other measured variable and excluding subjects with missing data may produce distorted parameter estimates which will likely bias the analysis. Furthermore, it may appear wasteful, particularly when it incurs a reduction of sample size and the discarded cases have data on

a large number of variables, which in turn reduces the sample size and statistical power at detecting effects. However, Miettinen (1985) also argues that complete-case analysis is the only approach that assures that no bias is introduced under any circumstances. According to the literature, leading authors are wary of providing advice on an acceptable percentage of missing cases below which is still acceptable to do complete-case analysis. Consequently, there is no established cut-off (Dong & Peng, 2013), particularly as Little and Rubin (2002) argue that it is difficult to formulate one since the consequences of using complete-cases analysis depend on more than the missing data alone. Although Cameron and Trivedi (2005) argue that listwise deletion is acceptable if incomplete cases represent 5% or less of the total number of cases as the sample after the complete-case analysis must be representative of the population under study, Enders (2010) suggests that complete-case analysis should eliminate approximately 18% of the data records on average and as this is the case in this research sample it is deemed within the norm.

A total of 246 participants successfully completed the survey. Of these, 188 were female (76%) and 55 were male (24%). There were 78 Baby Boomers (52 females (67.5%) and 25 (32.5%) males), 91 Generation X'ers, (70 females (76.9%) and 21 males (23.1%) male) and 77 Millennial therapists (66 females (84.6%) and 12 males (15.4%). The majority of participants described themselves as counsellors (43%), psychotherapists (43%), psychologists (33 %), whilst the minority described themselves as specialist therapists (4.5%) and as other type of therapist (2%). When looking at the therapeutic approach, participants described their closest practice style as Cognitive Behavioural (21.5%), as Psychodynamic (26%), as Humanistic (24%) and as other therapeutic approach (39%). As the survey did not question participants exact birth year to maintain the survey anonymous and free of identifiable information, it was not possible to gather information about the participant's age range.

As participants were recruited for the Internet survey through convenience and probability sampling it was not possible to calculate the response rate, that is the percentage of people who were invited to respond to the survey and answered it. This is particularly the case in this research study as it was difficult to establish the reach of the survey as the survey was advertised via multiple means including personal contacts, direct emails and flyers and allowed for anyone with the survey link to complete it. De Vaus (2014) argues it can become impossible to calculate accurate response rates in Internet surveys as it is difficult to know whether the non-response rate is due to non-contact and

ineligibility on the one hand or a refusal to participate in the survey on the other. Ideally, to obtain a random sample where there is a known probability of all members of the population being selected, it is necessary to control who completes the questionnaire, however in Internet surveys it is more difficult to control who completes the questionnaire, particularly as it is not possible to be sure that the targeted person is the person who finally replies.

Although it was not possible to calculate the response rate it is important to consider the risk of non-response bias, which is the error resulting from distinct differences between the people who responded to the survey compared to the people who did not respond. Non-responders tend to be different from those who respond. Internet surveys can face problems in obtaining representative samples of the general population. Lavrakas (2008) suggests there are three basic types of survey non-response. First refusal, which occurs when individuals decline to participate. Second, noncontact, that is individuals who are never reached as a result of limited or no Internet access, being sufficiently comfortable with electronic devices such as computers or mobile phones, providing outdated emails or checking emails infrequently. Thirdly, the researcher is unable to communicate with the sample person due to language, physical or mental barrier. Indeed, access to Internet can be linked to age, social class and other social characteristics, which may bias the sample. De Vaus (2014) though argues that the broadening of Internet access is reducing this source of sampling concern and bias. Consequently, the final outcome may be an overestimation (or underestimation) of the true population parameter. Lavarakas (2008) furthermore suggests it is important to consider non-response due to refusal and non-contacts separately as each group may have different characteristics among them. In conclusion, it is important to take into consideration potential non-response bias as this may impact the generalizability of the data.

Furthermore, examining the participants who responded to the survey and looking at the time for participants to complete the survey is an important consideration when deciding what participants should be included in the sample to reduce potential bias. Overall, participant's average time to complete the survey was approximately 9.4 minutes with range of time between 3:56 minutes to 1 hour and 3 minutes. This difference in time to complete the survey may be as a result of individuals completing the survey whilst engaged in other activities or at work, therefore individuals may have been interrupted or distracted, which risked biasing the results. However, no time requirement limit was determined for this research and an SPSS analysis of only the participants who completed the

survey particularly fast or slow (less than the recommended 5-10 minutes) indicated no significant differences between generations in the main facets of cognitive and affective empathy (Empathic Concern and Perspective Taking). Consequently, these participants were included in the current sample.

3.6.5. Research Design

The research study used quantitative methodology, specifically cross-sectional between-subjects survey design. Using a cross-sectional design involves taking a “cross-section” or “snap shot” of information from a defined population (Langridge & Hagger-Johnson, 2009) at one time. Here, three generations of therapists, Baby Boomers, Generation X’ers and Millennial’s, were compared to explore whether they differed in a single variable, empathy. In addition, exploration on their Internet based communication and social media use further supported and enhanced the study’s findings. The independent variable, also known as the variable of interest (Clark-Carter, 2010), was generation whilst the dependent variable was empathy.

3.6.6. Ethics

As the study formed part of the completion of the Professional Counselling Psychology Doctorate programme, it was fundamental that full ethical approval from the City University Research Ethics Committee be obtained before the beginning of the research project. Ethical agreement was granted in accordance with the principles of good research practice. The agreement included notions such as anonymity, confidentiality, and informed consent. Data from the survey was recorded and stored safely with password-protected files in a locked filing cabinet at the researcher’s home and subject to Data Protection requirements. Ethical approval was granted in November 2015.

In line with British Psychological Society’s Code of Ethics and Conduct guidelines, Ethics Guidelines for Internet-mediated Research and Code of Human Research Ethics several measures were put in place for the consideration and protection of the research study participants (BPS, 2009; 2010; 2013). This was carried out by providing participants with written information about the purpose of the study before gaining valid consent, which was contained in the participant information sheet (see Appendix 2). The information sheet detailed a full written explanation of the objectives and aims of the research, how the participants would be involved in the study, that their

participation was on a voluntary basis and they had a right to withdraw from the study at anytime without providing any reason or penalty. Due to therapist's tendency to overrate their empathy (Barrett-Lennard, 1962), the present research disguised the nature of the study to the participants as measuring "relating to others" rather than "empathy" and this will be considered further in the procedure section. In addition, participants were ensured that their responses would be anonymised, confidential and no identifiable information would be shared. Participant's responses were only identifiable by a unique numerical code. Therefore, maintaining respect for the participants, securing their wellbeing by maximizing possible benefits and minimizing possible risks, as well as ensuring that there is fairness and all research participants were treated equally (VanderStoep & Johnston, 2009).

3.7. Measures

3.7.1. Questionnaire

To measure whether there was a difference in empathy across generations of therapists, a 39-item self-completion questionnaire was administered to the participants. The questionnaire was divided into three sections to include measures of demographic information; questions on behaviour about Internet based communication and social networking usage and the empathy scale IRI (Davis, 1983a). The questionnaire was assembled using Qualtrics, an online survey software provided by City University. The entire questionnaire is available in Appendix 3.

The questionnaire was purposely arranged in this order. Some argue demographic questions, sensitive in nature, should be placed at the end of the questionnaire (Dillman et al., 2014). However, the principal investigator felt that demographic questions were easier for participants to answer first as they required little reflection. As the questions were not deemed sensitive in nature or problematic they were placed at the beginning of the questionnaire as they did not ask specific identifiable information, were less threatening and helped build rapport. Teclaw, Price and Osatuke, (2012) indeed found that placing demographic questions at the beginning of a questionnaire increased item-response rate without affecting the item response rate for non-demographic items.

Participants were given clear and simple instructions on how to complete the survey. Otherwise, participants risked completing the questionnaire incorrectly and this would make their data unusable

(Clark-Carter, 2010). The questions were presented clearly and participants could view their survey completion by viewing the progress bar at the bottom of the survey page, which ranged from 0 to 100%. The insertion of a progress bar served to decrease break off behaviour in surveys (Heerwegh, 2004) and helped participants gauge how far along they were in the survey.

Before starting the survey, participants were asked for their consent to participate in the study with the informed consent form (see Appendix 3). However, individuals tend to access websites without reading instructions or terms and conditions (BPS, 2013). As such, gaining consent for Internet mediated research can be more challenging compared to regular face-to-face research because it is harder to verify certain participant characteristics such as meeting age requirements. The questionnaire was structured in a way to ask participants in which generation group they were born which helped to satisfy the inclusion criteria but also ensure all participants were over 18. The BPS (2010) argues it can be a particularly challenging issue with anonymised questionnaires. However, they state that provided the information sheet describes the purpose of the study beforehand, valid consent can be assumed if the questionnaire is completed. To agree to the terms and ensure valid consent was gained, a tick box was also added with two options “agree” or “disagree”. By clicking “agree” participants implied consent. An information sheet was provided via a hyperlink to a PDF information sheet (Appendix 1) and this included information about the study, voluntary participation, right to withdrawal, ethical approval and researcher’s contact information.

The questionnaire, included 4 demographic questions, 7 questions on Internet based communication and social network behaviour and 28 questions for the IRI (Davis, 1983a). The principal investigator used sentences in the present tense and kept the questions simple, void of technical terms, ambiguity and double negatives which can be confusing for participants (Langridge & Hagger-Johnson, 2009). The final part of the questionnaire instead provided participants with a short paragraph debriefing them about the nature of the study and the opportunity to participate in a prize draw for a £50 Amazon Voucher by entering a valid email in the box provided. Here, participants were given the option to enter the prize draw if interested. The questionnaire was expected to take between 5-10 minutes to complete.

The online questionnaire was successfully pre-screened on a smartphone to ensure it was also accessible and readable on portable media. All participants answered to the measures in the same order, as described below.

Each of the components used in the final questionnaire are detailed below.

3.7.1.1. Demographic information

Demographic information was collected using 4 multiple-choice questions. Information was gathered on gender (male, female or other), professional role (psychologist, psychotherapist, counsellor, specialist therapist, other therapist or none of the above), generation group and therapeutic modality. The generation groups were the Silent Age (1928-1945), the Baby Boomer (1946-1964), Generation X (1965-1980) and Millennial respectively (1981-1996). Subsequently, participants were asked the type of therapy they practiced by providing four options, Cognitive Behavioural, Psychodynamic, Humanistic or the opportunity to specify another therapeutic modality. The first, second and fourth question used nominal scale of measurement, which meant placing data, like gender, into categories like male or female, whilst the third question on generation used ratio scale, which permits the comparison of differences of values such as age (Clark-Carter, 2010). By providing partially closed-ended questions such as offering participants the opportunity to specify their gender, professional role or therapeutic modality helped avoid essay responses (Langridge & Hagger-Johnson, 2009) and reduced the items respondents had to consider simultaneously whilst still collecting data for the items of interest. These questions helped assess and ensure participants passed the threshold and fulfilled the inclusion criteria. Demographic questions were included in the study so descriptive analyses could be made and further significant relationships between the study variables could be explored.

3.7.1.2. Internet Based Communication and Social Media

Participant's behaviour about Internet based communication and social networking usage was measured using 7 multiple-choice questions. The questions were adapted from Pew Internet Research questionnaire on Mobile Messaging and Social Media 2015 (Duggan, 2015) and Teens, Social Media & Technology Overview 2015 (Lenhart, 2015). The ONS (2015a) reports that 78% of adults in the UK access Internet, compared to 35% in 2006. Therefore, Internet access is quite widespread in the UK. The first three questions asked participants about their Internet based communication usage. This included asking them what kind of electronic forms of Internet based communication they used (e.g. Email, Text-based, Video-based or other), thus used a nominal scale of measurement as participant's answers were divided by categories. It also asked participants how

often they used this kind of communication and whether they accessed it from a mobile phone. The ONS also reports (2015b) that 74% adults use Internet via a mobile phone, of these, 96% are between 16-24 and 29% are aged 65 and over. For this reason, a question about using Internet based communication from a mobile phone was included. The answers were provided on an ordinal scale of measurement and responses ranged from “All the time” to “Never”.

The subsequent four multiple-choice questions asked participants about their social networking usage. According to the ONS reports (2015b), social networking is used by 61% of adults, and of those, 79% do so every day or almost every day. Therefore, more than half of adults use social networks regularly. Of these questions, the first asked participants what social networking sites they used and was measured using a nominal scale. Answer options ranged from “Facebook, Twitter, LinkedIn, Instagram, other” or “none of the above”. The next question asked participants how long they have been using social networking sites with answer options ranging from “1-6 months, 6-12 months, 1-2 years” to “2+ years”. Finally, the last two questions on social network use measured how often participants used social networking sites and whether they accessed these from a mobile phone with answer options ranging from “All the time” to “Never”. The latter three questions were measured on an ordinal scale

Questions about Internet based communication and social networking behaviour was also included in the study so descriptive analyses could be made and additional significant relationships between the study variables could be explored.

3.7.1.3. Empathy – Interpersonal Reactivity Index (IRI)

The 28-item IRI (Davis, 1983a) was used to measure empathy. As discussed in the literature review, empathy is an important component of social cognition and intelligence that comprises a cognitive and affective component. Davis (1980) sought for an integration of these two components and created a multidimensional construct comprising both states (Davis, 1980; 1983a). Whilst many instruments have been developed to assess empathy such as the Empathy Quotient (Baron-Cohen & Whellwright, 2004), The Questionnaire of Cognitive and Affective Empathy, (Reniers et al. 2011) Hogan Empathy Scale (Hogan, 1969), Emotional Empathic Tendency Scale (Mehrabian & Epstein, 1972), the most widely used instrument is the IRI (Davis, 1980) as some self-report questionnaires may not only fully capture all the components of empathy and assess only the

cognitive component (Hogan, 1969) or affective component of empathy (Mehrabian & Epstein, 1972).

Davis's (1980) four-factor model of the IRI (Davis, 1980, 1983a) assesses more than two facets of empathy as it measures different aspects of the same construct, each tapping into some aspect of the global concept of empathy capturing separately individual variations in cognitive as well as affective tendencies experienced (Davis, 1980; 1983a) so that the relationships between cognitive and affective dispositions are not so strong as to imply that the scales are measuring the same construct. Furthermore, it has proved to be better than the one-factor model supporting the multidimensional nature of empathy (Davis, 1980; 1983a, 1996). It is a reliable, well validated, easily administered and scored and widely used measure of dispositional empathy (Gilet, et al. 2013) and viewed as prototypic of cognitive and affective empathy (O'Brien et al., 2013). Several studies have supported the adequacy of this four-factor structure (Melchers et al., 2015; Hawk, Keusers, Branje, Van der Graaf, De Wife, & Meeus, 2013; Gilet et al., 2013). Davis (1980) argued that other measures of empathy although tapping into both cognitive and affective domains such as Hogan's (1969), combine responses from both items into a single empathy score.

IRI instead captures separately yet related constructs of individual variations between the different facets of empathy. The purpose being to understand empathy as a set of constructs, related in that they all concern responsivity to others but are clearly discriminable from each other (Davis, 1983a). Despite some previous research suggesting that there are some culture differences in empathy, IRI is based on a solid theoretical model and has adequate psychometric properties which have been analyzed in other populations (Gilet et al., 2013; Perez-Albeniz et al., 2003) reporting an equivalent structure to the original one (Davis, 1980, 1996).

The index is a 28-item self-report measure. Questions are asked on a 5 point Likert scale ranging from "Does not describe me well" to "Describes me very well". It has four different 7-item subscales, which tap into separate facets of global concept of empathy and interpersonal sensitivity. The original IRI used a 0 to 4 scale, however like in many previous studies (Konrath et al., 2011), data was transposed to a 1 to 5 scale by adding 1 to each of the means. The maximum score for each subscale is 35 however, as authors typically report the means and standard deviations for the subscales, the total score for each subscale was divided by 7, the number of items per IRI subscale. Higher means imply higher empathy. The four subscales are Empathic Concern, Perspective taking,

Personal Distress and Fantasy. Empathic Concern (EC), measures the tendency to experience feelings of sympathy and compassion for unfortunate others, e.g. "When someone gets hurt in my presence, I feel sad and want to help them". Perspective Taking (PT) is a more psychological and intellectual component and it measures people's ability to adopt the point of view of others e.g., "When I'm upset at someone, I usually try to 'put myself in his shoes' for a while". Personal Distress (PD) instead measures the tendency to experience distress during other's distressing adversity, e.g. "When I see someone who badly needs help in an emergency, I go to pieces". Whilst, Fantasy (FS) subscale measures people's tendency to imaginatively identify themselves into fictional situations like books or movie, e.g. "When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me". Therefore, IRI measures affective component (other-focused; Empathic Concern), cognitive component (other focused; Perspective Taking) and affective component empathy (self focused; Personal Distress) as well as Fantasy.

3.7.1.3.1. IRI Validity and Reliability

The IRI is an ideal measure of empathy to use for a cross-sectional analysis. One of its leading strengths is that it assesses both cognitive and affective components, which can both change at differing rates over time. The measurement carries substantial convergent and discriminant validity (Melchers et. al, 2015; Davis, 1994), all four scales have satisfactory internal and re-test reliabilities with internal reliabilities ranging from .71 to .77 and test retest reliabilities of each scale ranging from .62 to .71 (Davis, 1980, 1983a). Cronbach's Alpha was conducted to assess the internal consistency of the IRI in the present study and was found to range between .68 to .77 indicating good internal reliability (Nunnally & Bernstein, 1994).

3.8. Delimitations

As with other research methods, using online surveys carries some delimitations. One of these was the risk of potential sample bias, both in terms of response and selection bias. Unfortunately, online surveys usually have a lower response rate compared to telephone and postal surveys (Kraut, Olson, Banaji, Bruckman, Cohen, & Crouper, 2004; Skitvka & Sargis, 2005). This could be due to the relationship that is generated in using the other two modalities (contacting people and writing letters helps people develop a rapport).

There was also a risk of selection bias as this limits those participants of higher socio economic status who have Internet access. About 78% of adults in the UK have access to Internet (ONS, 2015b) therefore the risk of sampling error could be up to 22%. However, individuals might have access to the Internet via their workplace. To improve survey estimates, the researcher put recruitment adverts (see Appendix 5) in a bookshop that sold mainly therapy books and placed adverts in different locations such as professional bodies and at training events. Unfortunately, limited access to that 22% risked it difficult to achieve adequate representation. Though as almost all adults aged 16-24 (96%) access Internet “on the go” compared with only 9% of those aged 65 years and over (ONS, 2015a) an online survey was used to increase response rates.

It is also important to note, as the BPS (2010) also recognizes, that when recruiting participants, it is impossible to maintain absolute confidentiality of participants online, as the networks are not in control of the researcher. However, the Qualtrics software (2015) claims their servers are protected by high-end firewall systems and they use encryption software for the transmission of data. To add further reassurance of confidentiality and protection to participants, the study was accessible only on the link provided. As data was not deemed particularly sensitive or difficult to anonymise, it was foreseen that risks to confidentiality decreased.

Furthermore, to ensure validity both internal and external was as best maintained some concerns were considered and addressed. Internal validity is the degree to which a design successfully demonstrates that changes in the dependent variable are caused by changes in an independent variable (Clark-Carter, 2010) and thus offers sufficient evidence to support the claim. In this study, several aspects were considered. The first aspect was demand characteristics (Millsap & Maydeu-Olivares, 2009), where participants could make inferences about the purpose of the experiment and respond in accordance with the perceived purpose. Participants were told the survey explored how therapists relate to others as the study wanted to investigate therapist empathy in the context of how they relate to others. Participants otherwise, would have been influenced to complete the questionnaire with what they felt was expected of them. Participants were debriefed at the end of the survey to reassure them about the nature and purpose of the study. Secondly, participant predisposition effects (Millsap & Maydeu-Olivares, 2009) risked influencing how participants responded to the survey. Participants might have felt inclined to please the researcher, be uncooperative or even may try to sabotage the experiment (Rosenberg, 1965). Nonetheless,

although some participants were recruited via the researcher's personal contacts, they were reassured that the researcher was unable to view their answers, as the questionnaires were completed anonymously and identifiable only by a numerical code. Also maturation (Clark-Carter, 2010) such as processes within the respondents, operating as a function of the passage of time (for example growing older), mortality (Clark-Carter, 2010) where some participants may have lost licensure or no longer belong to professional body was also considered. As this explorative study aimed to observe whether there was a difference in empathy across generations, other factors like life experience and aging of individuals as well as membership to the professional body, were deemed currently not pertinent. Further research could investigate causation.

External validity instead, refers to generalizability of the research findings (Clark-Carter, 2010). There was the risk that how participants responded to the survey might not reflect their behaviour outside or in their practice (Millsap & Maydeu-Olivares, 2009). For this reason, the IRI was chosen, as it is the most widely used scale on empathy measuring different components of empathy.

Another delimitation that threatened external validity was the lack of control over the environment participants responded to the survey. Participants may complete the questionnaire in distracting environments without the researcher's knowledge and this risked also raising ethical issues regarding informed consent and protecting individuals from harm as a consequence of their participation (Shaughnessey et. al., 2006). Though, in this study there were no foreseen distressing questions, therefore it was not deemed to incur any risks or serious concerns. To improve external validity participants were selected randomly from the wider group they represent (Clark-Carter, 2010) to ensure a generalized sample less likely to be biased.

3.9. Procedure and Data Collection

3.9.1. Prior to Data Collection – Piloting the Study

Once ethical approval was gained, the questionnaire was prepared on Qualtrics and made available to be administered to volunteering participants.

Prior to data recruitment and collection, the questionnaire was reviewed between July and September 2015 by a group of 8 Counselling Psychologist who commented on presentation, length

and readability. Participant's offered useful feedback about specific questions regarding additional therapeutic modalities and a "Never" option for individuals who did not use social media. These suggestions were taken into consideration and amendments were made. The final questionnaire was discussed and reviewed by both the researcher and research supervisor before administering it to volunteering participants.

3.9.2. During Data Collection

Following ethics approval from City University, participants were recruited via flyers (See Appendix 5) as well as verbally and by email via the researcher's personal contacts to complete a brief anonymous and confidential online survey. This included contacting people through work, placements, and personal connections. In addition, national associations of therapists were contacted. Amongst these were BPS Division of Counselling Psychology, HCPC, UKCP, BACP and BABCP. To increase participant recruitment, the principal investigator contacted therapists from the Counselling Directory website (www.counselling-directory.org.uk), a well-known website offering a database of counsellors and psychotherapists in the UK. On this website counsellors and therapists advertise their expertise and therapeutic approach. For this research, it was deemed a valid resource for participants.

Participants were contacted randomly by email using the social exchange theory (Dillman et al., 2014) where reciprocity, trust and altruism are central to the theory. For most people, the decision to take part in a survey involves multiple considerations perceived as benefits, costs and trust because quick assessments are made in only a few words of the survey request. Participants were addressed by name and the researcher presented herself and explained how she found their contact because by making each contact appear important can help establish trust in the survey sponsor (Dillman et al., 2014). For this reason, the email invitation was sent from the City University email address and thus an authoritative and authentic source that has been legitimized by larger society to make such requests (Cialdini, 1984; Groves, Cialdini, & Couper, 1992; Groves, Presser, Tourangeau, West, Couper Singer, & Toppe, 2012). This also gave legitimacy to the survey and induced trust for the participants (Dillman et al., 2014). In addition, with the researcher identifying herself helped participants assess the authenticity of the survey request and provide them with the opportunity to ask questions about the survey and gave participants an indication that the survey request could be trusted (Dillman et al., 2014).

The email began asking participants to recall completing their academic requirements for professional qualification (reference to something they are familiar with). As therapists have been found to overrate their empathy in self-reports (Barrett-Lennard, 1962), the participants were informed that the aim of the study was to investigate how different generations of therapists “relate to others”. Since empathy is a basic interpersonal skill, particularly in therapy, of how individuals relate to others it was deemed necessary to disguise it to avoid participants responding in a socially desirable manner (Burkard & Knox, 2004). Additionally, directions to the survey link was provided. Participants were informed that the survey would take 5-10 minutes and by providing them directly with the link helped decrease their efforts to find the survey by making it as easy and convenient as possible for people to respond to the survey and increase response rates (Dillman et al., 2014). Finally, the participants were asked whether they would be willing to help the researcher. Homans (1961) and Blau (1964) noted that people often feel good and a sense of reward in helping others with assistance only they can provide. By also offering a token of appreciation, the opportunity to enter a prize draw to win a £50 Amazon voucher, studies have showed that offering a prize incentive is one of the most effective ways of improving survey response (Parsons & Manierre, 2014; Boucher, Grey, Leong, Sharples, & Horwath, 2015). To engender trust, participants were also informed about how the information they provided would be used, that their information would be used collectively rather than individually with no identifying information released and that the data would be analysed by the researcher alone to ensure confidentiality. The online questionnaire was designed in order to preserve anonymity and confidentiality and participants were informed about their right to withdraw from the study at any time. Furthermore, by informing the respondents that the survey would benefit the counselling psychology field gave participants the benefit of contributing to something that benefited others (Dillman et al., 2014).

During the course of recruitment, it came to the researcher’s attention that the three professional categories identified did not cover all therapists such as CBT therapists and psychoanalysts. Following review with the research supervisor, two further professional role categories were introduced in the questionnaire, “Specialist Therapists” and “Other”. An ethics amendments form for light touch review was completed and submitted to the ethics committee. This was approved on December 2015 and recruitment continued until its completion in April 2016.

3.9.3. After Data Collection

Following a seven-month participant recruitment between September 2015 and April 2016, all the data was collected and exported from Qualtrics into SPSS for statistical analysis.

3.10. Data Analysis

The key aim of the survey was to measure whether there is a difference in empathy between different generations and genders of therapists. In addition, the study also sought to explore possible relationships between different generations of empathy and Internet based communication as well as social media usage. The data was statistically analysed using descriptive statistics to provide an overview of the sample population. Inferential statistics were used instead to analyse the differences in empathy between generations and gender, whilst correlational analysis was used to explore possible relationships between generation empathy and Internet based communication and social media usage. The results and analysis will be explored further in the following chapter and the data will be presented with tables.

RESULTS

Chapter Four

4.1. Overview

The current study examined the difference in empathy between different generations of therapists, particularly and gender differences. Through an online survey, participants completed the IRI (Davis, 1980) to assess empathy. Descriptive and inferential statistics were conducted using SPSS to compare the IRI (Davis, 1980) empathy subscale scores (Empathic Concern, Perspective Taking, Personal Distress and Fantasy) of different generations and genders of therapists. In addition, correlations between empathy and Internet based communication as well as social media usage were investigated. Although a general participant demographic was reported in the methodology chapter, this chapter will provide detailed demographic information about the participants and their Internet based communication and social media usage. Overall, there was no significant difference across generations of therapists in the affective and cognitive components of empathy. However, a statistically significant difference was detected in the Personal Distress and Fantasy subscale. In other words, the Millennials reported higher Fantasy scores compared to Baby Boomer therapists. Furthermore, no significant difference was found between genders of therapists. An exploration of Internet based communication and social media usage revealed between generations a negative correlation with Internet based communication using a mobile phone and Empathic Concern and Fantasy as well as a negative correlation with social media use and Fantasy as well as from Empathic Concern and Fantasy using a mobile phone.

4.2. Participants Demographic Characteristics

Figures for generation, gender, professional role and therapeutic modality are presented in Table 4.1.

Table 4.1. Participant's Demographics: Generation, Gender, Professional Role and Therapeutic Approach

	Baby Boomers		Generation X		Millennials		Total	
	N	(%)	N	(%)	N	(%)	N	(%)
Gender								
Male	25	(32.5%)	21	(23.1)	12	(15.4%)	58	(23.6%)
Female	52	(67.5%)	70	(76.9%)	66	(84.6%)	188	(76.4%)
Professional Role								
Psychologist	25	(32.5%)	28	(30.8%)	28	(35.9%)	81	(32.9%)
Psychotherapist	43	(55.8)	35	(38.5%)	27	(34.6%)	105	(42.6%)
Counsellor	29	(37.7%)	41	(45.1%)	36	(46.2%)	106	(43%)
Specialist Therapist	7	(9.1%)	1	(1.1%)	3	(3.8%)	11	(4.5%)
Other Therapist	2	(2.6%)	1	(1.1%)	2	(2.6%)	5	(2%)
Therapeutic Approach								
CBT	13	(16.9%)	18	(19.8%)	22	(28.2%)	53	(21.5%)
Psychodynamic	22	(28.6%)	22	(24.2%)	20	(25.6%)	64	(26%)
Humanistic	24	(31.2%)	26	(28.6%)	10	(12.8%)	60	(24.3%)
Other	28	(36.4%)	34	(37.4%)	34	(43.6%)	96	(39%)
ACT	1	(1.2%)	1	(1%)	0	(0%)	2	(0.08%)
Attachment	0	(0%)	0	(0%)	1	(1.2%)	1	(0.04%)
Couples Counsellor	1	(1.2%)	0	(0%)	0	(0%)	1	(0.04%)
Existential	3	(3.8%)	0	(0%)	2	(2.5%)	5	(0.2%)
Experiential Dynamic	0	(0%)	1	(1%)	0	(0%)	1	(0.04%)
Gestalt	1	(1.2%)	0	(0%)	1	(1.2%)	2	(0.08%)
Integrative	16	(20.7%)	23	(25.2%)	25	(32%)	64	(26%)
Narrative Therapy	1	(1.2%)	0	(0%)	0	(0%)	1	(0.04%)
Phenomenological	1	(1.2%)	1	(1%)	0	(0%)	2	(0.08%)
Pluralistic	0	(0%)	1	(1%)	1	(1.2%)	2	(0.08%)
Psychoanalytic	2	(2.6%)	0	(0%)	0	(0%)	2	(0.08%)
Psychosynthesis	1	(1.2%)	1	(1%)	1	(1.2%)	3	(1.2%)
Relational	0	(0%)	1	(1%)	0	(0%)	1	(0.04%)
Schema Therapy	1	(1.2%)	1	(1%)	0	(0%)	2	(0.08%)
Solution Focused	1	(1.2%)	0	(0%)	0	(0%)	1	(0.04%)
Systemic	0	(0%)	1	(1%)	0	(0%)	1	(0.04%)
Transpersonal	0	(0%)	0	(0%)	1	(1.2%)	1	(0.04%)

4.3. Data Analysis

The main goal of the data analysis for this study was to explore whether there was a difference in empathy across different generation of therapists. Comparisons of how male and female therapists measured in empathy were also explored. In addition, Internet based communication and social media usage was also explored and its relationship to empathy. The results of the analyses are reported below.

4.3.1. Empathy

4.3.1.1. Generations

To assess empathy, Davis's (1980) Interpersonal Reactivity Index (IRI) was used and this produced four distinct subscales, Empathic Concern (EC), Perspective Taking (PT), Personal Distress (PD) and Fantasy (FS). These subscales measure different dimensions of empathy, including affective (other and self focused), cognitive empathy and fantasy. Descriptive statistics were run to explore the mean and standard deviations of the IRI subscales for each generation and gender and these are presented in Table 4.2. In order to check the stability and reliability of the samples, bootstrapping was also executed and it demonstrated the same mean difference, thus confirming the stability and reliability of the samples. Observing the mean averages for the IRI subscales, it appears Millennials have higher EC (4.12), PD (2.34) and FS (3.45) scores compared to the other generations, whilst the Baby Boomers report the highest PT score (4.02).

Table 4.2. Means and Standard Deviations for Generation and Gender in IRI subscales.

		N	EC <i>M (SD)</i>	PT <i>M (SD)</i>	PD <i>M (SD)</i>	FS <i>M (SD)</i>
Baby Boomers						
	Male	25	3.98 (.30)	4.09 (.43)	2.17 (.63)	2.98 (.88)
	Female	52	4.02 (.52)	3.99 (.55)	2.07 (.54)	3.16 (.69)
	Average Mean		4.01 (.46)	4.02 (.51)	2.10 (.57)	3.11 (.75)
Generation X						
	Male	21	4.01 (.50)	3.97 (.59)	2.31 (.48)	3.12 (.66)
	Female	70	3.78 (.52)	3.79 (.61)	2.26 (.66)	3.27 (.55)
	Average Mean		4.03 (.51)	3.83 (.61)	2.27 (.62)	3.23 (.58)
Millennials						
	Male	12	3.75 (.62)	3.68 (.58)	2.21 (.53)	3.31 (.80)
	Female	66	4.19 (.49)	4.02 (.56)	2.37 (.65)	3.47 (.76)
	Average Mean		4.12 (.53)	3.97 (.57)	2.34 (.63)	3.45 (.76)

Note: IRI = Interpersonal Reactivity Index (Davis, 1983a)

To assess differences in generational empathy, assumptions for parametric data were investigated to establish whether the data was likely from a normal distribution. Although the data passed most of the parametric assumptions including normal distribution and Levene's test for homogeneity of variance with EC ($F=1.239$, $p = 0.292$), PT ($F= 1.912$, $p = 0.150$), PD, ($F= .578$, $p = 0.562$) and FS

($F = 4.186$, $p = 0.016$), the Kolmogorov-Smirnov test indicated that the data significantly deviated from normality as the IRI subscales were below the 0.05 significance level, EC, $D(246) = 0.09$, $p < 0.05$, PT, $D(246) = 0.08$, $p < 0.05$, PD, $D(246) = 0.06$, $p < 0.05$ and FS, $D(246) = 0.07$, $p < 0.05$. The Shapiro-Wilk test however demonstrated that FS did not deviate from normality (0.097). To correct this violated assumption, data was transformed using reverse scoring transformation (Field, 2009) to normalize data distribution as EC (-0.420) and PT (-0.455) were negatively skewed. A new Kolmogorov-Smirnov test with the transformed data however, revealed the subscales still deviated from normality, EC, $D(246) = 0.130$, $p < 0.05$ and PT, $D(246) = 0.083$, $p < 0.05$. As the data violated the assumptions for parametric tests it was not possible to carry out independent t -tests or one-way ANOVAs, therefore non-parametric tests were used to analyze the data.

Ranking the data is a useful way around the distributional assumptions of parametric tests. Kruskal Wallis test is the non-parametric alternative test to the one-way ANOVA whilst the Mann-Whitney U is the non-parametric alternative test to the independent sample t -test. They are suitable tests to compare two or more independent samples and determine if there is a difference. Unlike other tests the Kruskal Wallis and Mann-Whitney U test are more versatile as they make fewer assumptions and can be applied to a range of different data tests without making assumptions about the distribution of the data, such as for example it being normally distributed (Field, 2009). In particular, the Mann Whitney U test is good with dealing with skewed data. However, nonparametric methods may lack power compared to more traditional approaches particularly as there are no parameters and thus make it more difficult to explain why there is a difference (Field, 2009). Also, the risk with non-parametric tests is that if there is a genuine effect in the data, a parametric test is more likely to detect it compared to a non-parametric test. In particular, the tests can state whether the difference is significant though do not explain the reason for the difference. Nonetheless, the Mann-Whitney U test is one of the most powerful non-parametric tests, where the statistical power corresponds to the probability of rejecting a false null hypothesis. In particular, this test has good probabilities of providing statistically significant results when the alternative hypothesis applies to the measured reality.

Consequently, a Kruskal-Wallis test was conducted to compare the difference in IRI empathy subscale scores across the three generations of therapists (Baby Boomers, Generation X'ers and Millennials). The test indicated a significant effect between generations in PD, $H(2) = 7.32$, $p = 0.02$

and the FS subscale, $H(2) = 8.81$, $p = 0.01$, as its true value is less than 0.05 it however does not state where the differences lie. The Monte Carlo estimate of significance is slightly lower in PD (0.023). The confidence interval for significance in PD is 0.019 to 0.027 and 0.009 to 0.015 in FS and the fact that the boundary does not cross 0.05 is important because it means that, assuming this confidence interval is one of the 99 out of 100 that contains the true value of the significance of the test statistic, the true value is less than 0.05 (Field, 2009). This gives a lot of confidence that the significant effect is genuine.

A Jonckheere-Tepstra Test, a test similar to the Kruskal-Wallis test, was conducted as it also incorporates information about the order of the groups (Field, 2009) to investigate whether the compared groups of generations produce a meaningful order of medians, thus whether the medians of the groups ascend or descend in the order specified by the coding variable generation. Looking at the results of the Jonckheere-Tepstra these were converted to a z-score (Field, 2009) taking the test statistic, subtracting the mean of the sampling distribution and then dividing the result by the standard deviation ($z = (11058 - 10055) / 604.16 = 1.66$). As the value is over 1.65 it is significant, indicating a trend of ascending medians.

In order to determine where the significant differences between generations was it was necessary to do some contrasts or post hoc tests. Following a Kruskal-Wallis test, Field (2009) suggests using Mann Whitney U tests. However, using many Mann-Whitney tests risks inflating the Type I error rate. In order to ensure the Type I errors do not build up to more than 0.05, a Bonferroni correction was used, thus instead of using 0.05 as the critical value for significance for each test this is divided by the number of tests conducted, in this case three (Baby Boomers versus Millennials, Baby Boomers versus Generation X and Generation X versus Millennials). This results in creating a critical value for significance that is small and very restrictive. Therefore, rather than using 0.05 as the critical value level of significance, this was divided by the three tests that were conducted, thus $0.05 / 3 = 0.0167$. As a result, the comparisons that produced significant values had to be below 0.0167.

Mann-Whitney U tests were conducted between the three generations (Baby Boomers versus Millennials, Baby Boomers versus Generation X and Generation X versus Millennials) to investigate where the differences in PD and FS subscale were. These are reported in Table 4.3. The

Mann-Whitney U tests between Baby Boomers and Generation X'ers found no significant difference in all subscales, EC ($Mdn = 4.00$ and $Mdn = 4.00$ respectively) $U = 3.358.5$, $z = -0.464$, $p = 0.643$, $r = -0.04$, PT ($Mdn = 4.00$ and $Mdn = 3.86$ respectively) $U = 2805.5$, $z = -2.229$, $p = 0.260$, $r = -0.17$, PD ($Mdn = 2.14$ and $Mdn = 2.28$ respectively) $U = 2919.5$, $z = -1.864$, $p = 0.062$, $r = -0.14$, FS ($Mdn = 3.14$ and $Mdn = 3.28$ respectively) $U = 3.218$, $z = -0.911$, $p = 0.362$, $r = -0.07$. Similarly, the Mann-Whitney U test between Generation X and Millennials also found no significant difference in all IRI subscales, EC ($Mdn = 4.00$ and $Mdn = 4.14$ respectively) $U = 3141$, $z = -1.292$, $p = 0.196$, $r = -0.10$, PT ($Mdn = 3.85$ and $Mdn = 4.14$ respectively) $U = 3058$, $z = -1.553$, $p = 0.120$, $r = -0.12$, PD ($Mdn = 2.28$ and $Mdn = 2.35$ respectively) $U = 3.334$, $z = -0.680$, $p = 0.496$, $r = -0.05$, FS ($Mdn = 3.28$ and $Mdn = 3.57$ respectively) $U = 2805$, $z = -2.352$, $p = 0.019$, $r = -0.18$.

However, although the Mann-Whitney U test comparing the IRI subscales between Baby Boomers ($Mdn = 4.00$) and Millennials ($Mdn = 4.14$) found no significant difference in EC, $U = 2553.5$, $z = -1.618$, $p = 0.10$, $r = 0.13$ and PT ($Mdn = 4.00$ and $Mdn = 4.14$ respectively) $U = 2900$, $z = -0.370$, $p = 0.71$, $r = 0.03$ a significant difference was found between generations in PD and FS. Particularly, Millennial therapists scored higher PD ($Mdn = 2.36$) and FS ($Mdn = 3.57$) than Baby Boomers ($Mdn = 2.14$ and $Mdn = 3.14$), respectively $U = 2282$, $z = -2.588$, $p = 0.01$, $r = 0.21$ and $U = 2240$, $z = -2.736$, $p = 0.00$, $r = 0.22$. These results are reported in Table 3. Therefore, following the Bonferroni correction, these results were significant as they were below the 0.0167 significance value, PD (0.010) and FS subscale (0.006). The effect sizes for this analysis (r) were determined using the algebraic formula $r = Z/\sqrt{N}$ (Field, 2009). As indexed by Cohen (1988, 1992), the effect size was small as the results varied around 0.10 and less than the medium effect of 0.30.

In analysing the data and the relationship between variables, other tests were considered. This included adopting a multivariate approach such as the one-way multivariate analysis of variance (MANOVA) and factor analysis. MANOVA was considered as it can be used when there are two or more dependent variables, in particular by taking the four IRI subscales separately and taking in account the relationship between outcome variables. Essentially, a MANOVA has the power to detect whether groups differ along a combination of dimensions. It is a useful approach to test whether the changes in the independent variable have significant effect on the dependent variables (Field, 2009). However, similar to assumptions for ANOVA, the data in this research violated the assumption of normality, namely multivariate normality. As this test cannot be directly tested in

SPSS, Field (2009) suggests checking the normality of each dependent variable for each of the groups of the independent variable. As mentioned above attempts were made to correct the data however as the data violated the assumption of multivariate normality significantly it was deemed that it would not be fruitful to include these results. Furthermore, the data also violated the assumption of a linear relationship between each pair of dependent variables for each group of the independent variable.

Factor analysis instead, a form of exploratory multivariate analysis to detect relationships among variables, has the aim of trying to identify factors which underlie the variables (Field, 2009). A preliminary factor analysis was conducted to explore whether there were some common factors underlying the various test scores but in addition to not fulfilling the assumptions of normal distribution, no correlations between variables were detected.

Furthermore, other tests such as regression and analysis of covariance (ANCOVA) were considered inappropriate tests as in addition to violating the assumptions of normality these tests also assumed a linear relationship with the variables. Regression for example assumes a linear relationship between the dependent and independent variable, which was not present as previous literature suggests a number of contradictory findings on the relationship between age and empathy and therefore no direct relationship between the variables. An ANCOVA instead assumes the covariate should be linearly related to the dependent variable and this was not the case.

Table 4.3. IRI Subscale Differences across Generations

	<u><i>U</i></u>	<u><i>z</i></u>	<u><i>p</i></u>	<u><i>r</i></u>
Baby Boomers and Generations X				
Empathic Concern	3358.5	-0.464	0.64	0.04
Perspective Taking	2805.5	-2.229	0.26	0.17
Personal Distress	2919.5	-1.864	0.06	0.14
Fantasy	3218	-0.911	0.36	0.07
Generations X and Millennials				
Empathic Concern	3141	-1.292	0.20	0.10
Perspective Taking	3058	-1.553	0.12	0.12
Personal Distress	3334	-0.680	0.49	0.05
Fantasy	2805	-2.352	0.19	0.18
Millennials and Baby Boomers				
Empathic Concern	2553.5	-1.618	0.10	0.13
Perspective Taking	2900	-0.370	0.71	0.03
Personal Distress	2282	-2.588	0.01	0.21
Fantasy	2240	-2.376	<0.01	0.22

4.3.1.2. Professional Role

Descriptive statistics on professional role was carried out and are presented in Table 4.1. Overall, the sample was largely composed of counsellors (43%), psychotherapists (42.6%), psychologists (32.9%), specialist therapist (4.5%) and other therapists (2%). To explore possible correlations between participant's professional role and IRI subscales, a Spearman correlation was conducted. Overall, no significant relationship between these variables was detected between all professional roles and the IRI subscales ($p > 0.05$). These are presented in Table 4.4.

Table 4.4. Spearman Correlational Analysis between Professional Role and IRI subscales

	<u>Psychologist</u>		<u>Psychotherapist</u>		<u>Counsellor</u>		<u>Specialist Therapist</u>		<u>Other</u>	
	<u><i>r_s</i></u>	<u><i>p</i></u>	<u><i>r_s</i></u>	<u><i>p</i></u>	<u><i>r_s</i></u>	<u><i>p</i></u>	<u><i>r_s</i></u>	<u><i>p</i></u>	<u><i>r_s</i></u>	<u><i>p</i></u>
Empathic Concern	0.088	0.16	0.051	0.43	-0.083	0.19	-0.013	0.83	-0.006	0.92
Perspective Taking	0.007	0.91	0.091	0.15	-0.055	0.38	-0.071	0.26	0.028	0.65
Personal Distress	-0.049	0.44	-0.170	0.80	0.159	0.21	-0.146	0.22	-0.108	0.09
Fantasy	0.006	0.92	-0.016	0.79	0.020	0.76	-0.202	0.10	0.059	0.36

4.3.1.3. Therapeutic Orientation

Descriptive statistics were run and are presented in Table 4.1. Overall, participants described their preferred therapeutic approach as CBT (21.5%), Psychodynamic (26%), Humanistic (24.3%) and other (39%). To investigate the relationship therapeutic orientation and IRI subscales a Spearman correlation was conducted however no significant relationship was found between all therapeutic orientations and IRI subscales ($p > 0.05$). All correlations results are reported in Table 4.5.

Table 4.5. Spearman Correlational Analysis between Therapeutic Orientation and IRI subscales

	CBT		Psychodynamic		Humanistic		Other	
	r_s	p	r_s	p	r_s	p	r_s	p
Empathic Concern	-0.099	0.12	0.046	0.47	-0.070	0.27	0.075	0.24
Perspective Taking	-0.068	0.28	0.126	0.51	-0.118	0.64	0.027	0.67
Personal Distress	-0.041	0.52	-0.036	0.57	0.053	0.40	-0.010	0.80
Fantasy	0.016	0.80	-0.064	0.31	-0.036	0.55	0.052	0.43

4.3.1.4. Gender Differences

Descriptive statistics presented in Table 2 display the means and standard deviations of IRI subscales for both genders in each generation. A Mann-Whitney test was conducted to compare gender differences on the four IRI subscales and results found that males did not differ significantly from females in all the IRI subscales, EC ($Mdn = 4.00$ and $Mdn = 4.14$), $U = 4537$, $z = -1.940$, $p = 0.052$, $r = 0.12$, PT ($Mdn = 3.92$ and $Mdn = 4.00$), $U = 5333.5$, $z = -0.251$, $p = 0.80$, $r = 0.01$, PD ($Mdn = 2.14$ and $Mdn = 2.28$), $U = 5370.5$, $z = -0.172$, $p = 0.86$, $r = 0.01$ and FS ($Mdn = 3.28$ and $Mdn = 3.28$), $U = 4804$, $z = -1.371$, $p = 0.17$, $r = 0.08$. These are presented in Table 4.6.

However, when examining differences in empathy between genders within each generation group, a significant difference was found with Millennial female scoring higher EC ($Mdn = 4.14$ and $Mdn = 3.71$), $U = 227.50$, $z = -2.345$, $p = 0.01$, $r = 0.26$ and PT than male therapists ($Mdn = 4.14$ and $Mdn = 3.71$), $U = 245.50$, $z = -2.092$, $p = 0.03$, $r = 0.24$. PD ($Mdn = 2.42$ and $Mdn = 2.21$) and FS ($Mdn = 3.57$ and $Mdn = 3.50$), though, indicated no gender difference, $U = 348$, $z = -0.667$, $p = 0.50$, $r = 0.07$ and $U = 361$, $z = -0.486$, $p = 0.627$, $r = 0.05$ respectively. The effect size however as indexed by Cohen (1988) was small. Baby Boomer and Generation X instead demonstrated no

gender difference within their generation ($p > 0.05$).

Table 4.6. IRI subscale Gender Differences across Generations

Baby Boomers				
	<u><i>U</i></u>	<u><i>z</i></u>	<u><i>p</i></u>	<u><i>r</i></u>
Empathic Concern	616	-0.373	0.71	0.04
Perspective Taking	591.5	-0.639	0.52	0.07
Personal Distress	596.5	-0.584	0.56	0.06
Fantasy	616.5	-0.365	0.71	0.04
Generations X				
Empathic Concern	699	-0.340	0.73	0.03
Perspective Taking	600	-1.275	0.20	0.13
Personal Distress	698.5	-0.345	0.73	0.03
Fantasy	645.5	-0.847	0.40	0.08
Millennials				
Empathic Concern	227.5	-2.345	0.01	0.26
Perspective Taking	245.5	-2.092	0.03	0.24
Personal Distress	348	-0.667	0.50	0.07
Fantasy	361	-0.486	0.06	0.05

4.3.2. Internet and Social Media Use

4.3.2.1. Internet Based Communication

Descriptive statistics were used to investigate the type of Internet based communications and social media use. Table 4.7 shows that nearly all participants use email (99.1%), followed by text based messaging (78.8%) and video based services (65%). The results suggest Internet based communication is widely used across all generations. In particular, Baby Boomers reported using text-based and video-based services equally (74%), whilst more Generation X'ers and Millennials reported using more text-based communication (80.2% versus 85.8%) over video-based one (62.6% versus 58.9%).

Table 4.7. Internet Based Communication Use Differences between Generations

		Email	Textbased (Whatsapp, SMS)	Videobased (Skype, Facetime)	Other	None
	<u>N</u>	<u>N (%)</u>	<u>N (%)</u>	<u>N (%)</u>	<u>N (%)</u>	<u>N (%)</u>
Baby Boomers	77	77 (100%)	54 (74%)	57 (74%)	6 (7.7%)	0 (0%)
Generation X	91	90 (98.9%)	73 (80.2%)	57 (62.6%)	5 (5.4%)	0 (0%)
Millennials	78	77 (98.7%)	67 (85.8%)	46 (58.9%)	0 (0%)	0 (0%)
Total	246	244 (99.1%)	194 (78.8%)	160 (65%)	11 (4.4%)	0 (0%)

Looking at the frequency of Internet based communication across generations (Table 4.8) it is possible to notice that across all three generations, Internet based communication is used mostly “Several times a day” (40.6%), particularly amongst Baby Boomers (48%). More Millennials and Generation X’ers report using this form of communication “All the time” (28.3% and 31.8% respectively) compared to Baby Boomers (18.1%) and “Several times an hour” (26.9% and 15.3% respectively) compared to Baby Boomer (14.2%).

Table 4.8. Frequency of Internet Based Communication Use between Generations

	Baby Boomers		Generation X		Millennials		Total	
	N	(%)	N	(%)	N	(%)	N	(%)
“All the time”	14	(18.1%)	29	(31.8%)	22	(28.2%)	65	(26.4%)
“Several times an hour”	11	(14.2%)	14	(15.3%)	21	(26.9%)	46	(18.6%)
“Once an hour”	6	(7.7%)	6	(6.5%)	5	(6.4%)	17	(6.9%)
“Several times a day”	37	(48%)	36	(39.5%)	27	(34.6%)	100	(40.6%)
“Once a day”	1	(1.2%)	1	(1%)	1	(1.2%)	3	(1.2%)
“Several times a week”	4	(5.1%)	5	(5.4%)	1	(1.2%)	10	(4%)
“Once a week”	2	(2.5%)	0	(0%)	0	(0%)	2	(1%)
“Several times a month”	2	(2.5%)	0	(0%)	1	(1.2%)	3	(1.2%)
“Once a month”	0	(0%)	0	(0%)	0	(0%)	0	(0%)
“Never”	0	(0%)	0	(0%)	0	(0%)	0	(0%)
Total	77		91		78		246	

To investigate the relationship between frequency of use of Internet Based Communication and empathy, a Spearman correlation coefficient was conducted. Overall, no significant relationship between these variables was detected ($p > 0.05$). All correlations results are reported in Table 4.10.

4.2.2.1.1. Mobile Phone Use

When looking at frequency of use of Internet based communication from mobile phones, all generations reported using it mostly “Several times a day” (Baby Boomer = 44.1%, Generation X’ers = 48.3% and Millennials = 30.7%), as well as “All the time” (Baby Boomer = 11.6%, Generation X’ers = 21.9% and Millennials = 33.3% and “Several times an hour” (Baby Boomer = 12.9%, Generation X’ers = 17.5% and Millennials = 20.5%) as evidenced in Table 4.9. However, Generation X’ers report most overall use with 48.3% peaking at “Several times a day”.

Table 4.9. Frequency Internet Based Communication Use from Mobile Phone between Generations

	Baby Boomers	Generation X	Millennials	Total
	<u>N (%)</u>	<u>N (%)</u>	<u>N (%)</u>	<u>N (%)</u>
“All the time”	9 (11.6%)	20 (21.9%)	26 (33.3%)	55 (22.3%)
“Several times an hour”	10 (12.9%)	16 (17.5%)	16 (20.5%)	42 (17%)
“Once an hour”	6 (7.7%)	3 (3.2%)	6 (7.6%)	15 (6%)
“Several times a day”	34 (44.1%)	44 (48.3%)	24 (30.7%)	102 (41.4%)
“Once a day”	1 (1.2%)	1 (1%)	2 (2.5%)	4 (1.6%)
“Several times a week”	7 (9%)	2 (2.1%)	2 (2.5%)	11 (4.4%)
“Once a week”	1 (1.2%)	1 (1%)	0 (0%)	2 (1%)
“Several times a month”	2 (2.5%)	0 (0%)	1 (1.2%)	3 (1.2%)
“Once a month”	1 (1.2%)	0 (0%)	0 (0%)	1 (0.4%)
“Never”	6 (7.7%)	4 (4.3%)	1 (1.2%)	11 (4.4%)
Total	77	91	78	246

A Spearman correlation was conducted to explore correlations between frequency of Internet Based Communication and empathy across all generations. A negative correlation was found with EC $r_s = -0.167, p < 0.05$ (see Table 4.10).

Table 4.10. Spearman Correlational Analysis between Generation's Empathy and Internet based Communication and Social Media

	IBC		IBC from mobile		SNS		SNS from mobile	
	r_s	p	r_s	p	r_s	p	r_s	p
Empathic Concern	-0.047	0.46	-0.167	<0.01	-0.153	0.01	-0.144	0.02
Perspective Taking	-0.036	0.58	-0.103	0.11	-0.050	0.44	-0.057	0.37
Personal Distress	0.023	0.71	0.052	0.42	-0.085	0.18	-0.031	0.63
Fantasy	0.075	0.24	-0.042	0.51	-0.208	<0.01	-0.187	<0.01

Note: IBC= Internet Based Communication and SNS = Social Networking Sites

4.3.2.2. Social Media

Social networks are an integral part of today's population to search for information and above all communicating with others. Descriptive statistics were conducted to explore type (Table 4.11) of social media and frequency of social media sites from mobile phone (Table 4.13). Across all generations, Facebook was the highest reported form of social media use (71.5%). LinkedIn was also reported as a frequently used form of used social media (58.5%). More Baby Boomers reported using LinkedIn (67.5%) compared to Facebook (58.4%), Generation X'ers reported using more Facebook (74.7%) followed by LinkedIn (48.7%) whilst more Millennials reported using Instagram (52.5%) and LinkedIn (48.7%) after Facebook (80.7%).

Table 4.11. Social Media Use Differences between Generations

		Facebook	Twitter	LinkedIn	Instagram	Other	None
	<u>N</u>	<u>N (%)</u>	<u>N (%)</u>	<u>N (%)</u>	<u>N (%)</u>	<u>N (%)</u>	<u>N (%)</u>
Baby Boomers	77	45 (58.4%)	20 (25.9%)	52 (67.5%)	11 (14.2%)	4 (5.1%)	17 (22%)
Generation X	91	68 (74.7%)	38 (41.7%)	54 (59.3%)	15 (16.4%)	5 (5.4%)	9 (9.8%)
Millennials	78	63 (80.7%)	30 (38.4%)	38 (48.7%)	41 (52.5%)	4 (5.1%)	5 (6.4%)
Total	246	176 (71.5%)	88 (35.7%)	144 (58.5%)	67 (27.2%)	13 (5.2%)	31(12.6%)

When looking at social networking frequency in a week, more therapists reported across generations overall using social networking sites "Everyday" (52%). For each generation this translated into 32.5% for Baby Boomers, 54.9% Generation X'ers and Millennials reporting the highest with 67.9%. Overall, participants also reported using social media "Rarely" (16.6%), though of these, Baby Boomers reported using it less than the other generations (27.3%, compared to

14.3% of Generation X'ers and 9% of Millennial therapists). Baby Boomers also reported more than double than other generations in "Never" using social networking sites (19.5%).

Table 4.12. Frequency Social Media Sites Use in a Week between Generations

	Everyday	More than half the days	Several Days	Rarely	Never
	<u>N</u> (%)	<u>N</u> (%)	<u>N</u> (%)	<u>N</u> (%)	<u>N</u> (%)
Baby Boomers	25 (32.5%)	9 (11.7%)	7 (9.1%)	21 (27.3%)	15 (19.5%)
Generation X	50 (54.9%)	7 (7.7%)	15 (16.5%)	13 (14.3%)	6 (6.6%)
Millennials	53 (67.9%)	9 (11.5%)	4 (5.1%)	7 (9%)	5 (6.4%)
Total	128 (52%)	25 (10.1%)	26 (10.5%)	41 (16.6%)	26 (10.5%)

A Spearman correlation was conducted to explore the relationship between empathy and frequency of social media use in all generations. A negative correlation was found with EC $r_s = -0.153$, $p = 0.01$ and FS subscale $r_s = -0.280$, $p = 0.01$ (see Table 4.10).

4.3.2.2.1. Mobile Phone Use

A cross tabulation was carried out to compare use of social media across generations via mobile phones. Most Baby Boomers and Millennials reported accessing both forms of communication, Internet Based and Social Media from their mobile phone. In Table 4.13 it is possible to observe that overall all generations report using social media from their mobile phone "Several times a day" (26%), particularly Millennial therapists (32%). This is followed by "Never" using social media from the mobile phone (18.6%), although this is largely due to Baby Boomers (38.9%). More Millennials report using social media from mobile phone "All the time" (24.3%) followed by Generation X'ers (16.4%), both in stark contrast to Baby Boomers (3.8%). Generation X'ers instead report using it "Several times a week", higher than Millennials (8.9%) and Baby Boomers (7.7%) To explore possible correlations between frequency of social networking use from mobile phones and empathy, a Spearman correlation was carried out. Overall, the results found that there was a negative correlation across the generations between EC and frequency of social media use from a mobile phone, $r_s = -0.144$, $p = 0.02$ as well as with FS, $r_s = -0.187$, $p < 0.01$ (see Table 4.10).

Table 4.13. Frequency Social Media Use from Mobile Phone between Generations

	Baby Boomers	Generation X	Millennials	Total
	N (%)	N (%)	N (%)	N (%)
“All the time”	3 (3.8%)	15 (16.4%)	19 (24.3%)	37 (15%)
“Several times an hour”	1 (1.2%)	7 (7.6%)	4 (5.1%)	12 (4.8%)
“Once an hour”	2 (2.5%)	4 (4.3%)	6 (7.6%)	12 (4.8%)
“Several times a day”	16 (20.7%)	23 (25.2%)	25 (32%)	64 (26%)
“Once a day”	7 (9%)	6 (6.5%)	2 (2.5%)	15 (6%)
“Several times a week”	6 (7.7%)	17 (18.6%)	7 (8.9%)	30 (12.1%)
“Once a week”	2 (2.5%)	5 (5.4%)	2 (2.5%)	9 (3.6%)
“Several times a month”	5 (6.4%)	2 (2.1%)	4 (5.1%)	11 (4.4%)
“Once a month”	5 (6.4%)	2 (2.1%)	3 (3.8%)	10 (4%)
“Never”	30 (38.9%)	10 (10.9%)	6 (7.6%)	46 (18.6%)
Total	77	91	78	246

4.3.2.3. Professional Role

Spearman correlation was conducted to explore correlations between professional role with Internet and social media use. However, across all items, no significant correlations were detected between professional role with Internet and social media use ($p > 0.05$). These are illustrated in Table 4.12.

Table 4.14. Spearman Correlational Analysis between Professional Role with Internet and Social Media use

	Psychologist		Psychotherapist		Counsellor		Specialist		Other	
	r_s	p	r_s	p	r_s	p	r_s	p	r_s	p
Email	0.063	0.32	0.078	0.22	-0.104	0.10	0.020	0.76	0.013	0.83
Text based	0.087	0.17	-0.137	0.51	-0.012	0.85	0.016	0.80	0.004	0.95
Video based	0.096	0.13	0.116	0.70	-0.206	0.10	0.076	0.23	0.045	0.48
Other IBC	0.030	0.63	0.012	0.85	-0.109	0.08	-0.047	0.46	0.108	0.90
No IBC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Frequency IBC	-0.148	0.20	0.143	0.25	0.069	0.28	0.011	0.85	-0.046	0.47
Mobile IBC	0.048	0.45	-0.011	0.86	-0.011	0.86	0.057	0.37	0.033	0.60
Facebook	0.097	0.13	-0.057	0.37	0.021	0.74	-0.038	0.55	0.027	0.67
Twitter	0.127	0.47	-0.078	0.22	-0.050	0.43	0.003	0.96	-0.047	0.45
LinkedIn	0.098	0.12	0.092	0.14	-0.084	0.18	-0.018	0.78	0.063	0.32
Instagram	-0.021	0.74	-0.048	0.45	0.095	0.13	0.000	0.99	0.041	0.51
Other SNS	-0.011	0.86	0.090	0.15	0.051	0.42	0.037	0.56	-0.034	0.59
No SNS	-0.084	0.19	0.019	0.76	0.065	0.30	0.036	0.57	-0.055	0.39
Length Use SNS	-0.043	0.50	-0.073	0.25	0.108	0.09	0.061	0.33	0.012	0.85
Frequency SNS	-0.106	0.09	0.106	0.09	-0.031	0.63	0.710	0.24	-0.003	0.96
Mobile SNS	-0.028	0.66	0.053	0.40	-0.080	0.21	-0.008	0.89	0.009	0.89

Note: IBC= Internet Based Communication and SNS = Social Networking Sites

4.3.2.4. Therapeutic Orientation

To explore correlations between therapeutic orientation and Internet and social media use a spearman correlation was carried out. Across all items no significant correlations were detected ($p > 0.05$). This is presented in Table 4.15.

Table 4.15. Spearman Correlational Analysis between Therapeutic Orientation with Internet and Social Media use

	CBT		Psychodynamic		Humanistic		Other	
	r_s	p	r_s	p	r_s	p	r_s	p
Email	0.047	0.45	-0.049	0.44	-0.054	0.39	0.072	0.25
Text based	-0.044	0.49	-0.011	0.86	-0.054	0.40	0.026	0.68
Video based	-0.051	0.42	-0.148	0.20	-0.060	0.34	0.097	0.12
Other IBC	0.030	0.63	-0.039	0.54	0.015	0.82	-0.052	0.41
No IBC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Frequency IBC	-0.041	0.52	-0.018	0.77	0.071	0.26	0.040	0.53
Mobile IBC	0.011	0.86	-0.137	0.30	0.069	0.28	0.093	0.14
Facebook	-0.064	0.31	-0.016	0.80	0.002	0.98	0.024	0.70
Twitter	0.063	0.32	-0.095	0.13	-0.095	0.13	0.064	0.32
LinkedIn	-0.141	0.27	0.029	0.65	0.017	0.79	0.115	0.07
Instagram	0.035	0.58	0.012	0.85	0.078	0.22	-0.078	0.22
Other SNS	0.053	0.40	-0.057	0.37	0.035	0.58	-0.003	0.96
No SNS	-0.501	0.43	-0.058	0.36	0.070	0.27	0.023	0.72
Length Use SNS	-0.025	0.69	0.000	0.99	0.090	0.15	-0.097	0.12
Frequency SNS	0.069	0.28	0.040	0.53	-0.007	0.90	-0.004	0.95
Mobile SNS	-0.068	0.28	-0.001	0.98	0.017	0.78	0.047	0.46

Note: CBT = Cognitive Behavioural Therapy, IBC= Internet Based Communication and SNS = Social Networking Sites

The main aim of this chapter was to investigate whether there was a difference in empathy scores across generations and genders of therapists by analysing the data collected from the participants. This chapter also sought to explore and compare the Internet and social media use and frequency of these two generations. In summary, the descriptive and inferential statistics demonstrated no statistically significant difference in EC and PT scores, the main components of affective and cognitive empathy, between Millennials and Baby Boomers therapists. However, PD and FS were found to be statistically significant with Millennials reporting higher scores than the other generations in both subscales.

Cross tabulations of Internet based communication and social media use, revealed interesting results.

Across generations, email was the most commonly used form of Internet based communication, whilst Facebook was the most used social networking site, followed by LinkedIn. More Millennials reported using their mobile phones for social media compared to Baby Boomers. Across generations, a negative relationship was found between Empathic Concern and frequency of Internet based communication use from mobile phone, as well as a negative correlation in Empathic Concern and Fantasy with social media use and social media use from mobile phone. Furthermore, no significant correlations were detected between professional role and therapeutic orientation with empathy as well as Internet and social media use. The following chapter provides a discussion of these findings, including limitations of the current research, implications as well as recommendations for future empathy research.

DISCUSSION

Chapter Five

5.1. Overview

The aim of this study was to investigate the differences in empathy across generations of therapists and between genders. Through a quantitative methodology, the research explored differences in empathy across generations of therapists using the Interpersonal Reactivity Index (Davis, 1980) as well as gathered information about therapists Internet based communication and social media use to explore relationships with empathy.

This is the first study to investigate generational differences in therapist empathy, contributing to the existing research on age-related empathy. Prior research on the topic lacked a representative sample of therapists; therefore, this study responds to a gap in age-related research literature providing insight into therapist's empathy across different generations whilst concurrently responding to the growing interest in empathy research, more recently emerging from the field of social neuroscience on mirror neurons.

The findings from the current study reveal that there was no significant difference across generations in the main empathy facets of affective or cognitive empathy (Empathic Concern and Perspective Taking). This is consistent with age related studies when education was controlled. However, a significant difference was found in the Personal Distress and Fantasy subscale between Baby Boomers and Millennials. Furthermore, negative relationships between both Internet and social media use with empathy were found, particularly with Empathic Concern and Fantasy subscale. The following section provides a brief review of the study aims and a discussion of the key findings in light of empathy literature. A critical reflection on the study's limitations and strengths will follow together with implications for counselling psychology field and recommendations for future research.

5.2. Aims of this study

The purpose of the current study was to compare the empathy of three generations of therapists,

namely Baby Boomers, Generation X'ers and Millennials and explore whether there was a difference. More specifically, the study investigated the difference across these generations in the main facets of empathy, cognitive and affective empathy as represented by the Empathic Concern and Perspective Taking subscales of the Interpersonal Reactivity Index (Davis, 1980). Empathy as well as being a fundamental and necessary ingredient for successful social interactions (Decety & Lamm, 2006), is particularly important for therapists in their professional practice to facilitate therapeutic alliance and promote psychotherapeutic change to encourage positive treatment outcomes. Overall, in light of the literature on age-related empathy, the general aim and purpose of this study was to elucidate generational differences in therapist empathy as well as gender differences whilst adding to the limited literature on age-related empathy differences. In addition, the study also sought to explore the differences in Internet and social media use across generations of therapists. Two hundred and forty-six respondents participated in the study; 188 of these were female and 58 were male therapists (psychologists, psychotherapists, counsellors, specialist or other therapists).

5.3. Key Findings

The findings from this study demonstrate a number of interesting results. As illustrated in the introduction as well as in the results chapters of this thesis, the two hypotheses were tested and an exploration of therapist Internet based communication and social media use was included in the research. In the following section, the study's results are discussed in detail and in light of existing literature.

5.3.1. Empathy

5.3.1.1. Empathic Concern and Perspective Taking

One of the primary key findings from the current study was that the first hypothesis, which states "*there is a difference in cognitive and affective empathy between generations of therapists*", was rejected. Contrary to expectation, the current study found no difference in Empathic Concern and Perspective Taking across generations of therapists. As a result, the current study failed to reject the null hypothesis and was unable to accept the alternative hypothesis.

This finding is consistent with some studies that found no observed differences in cognitive and affective empathy across ages. Eysenck et al. (1985) for example, studied 1,320 British adults between the ages of 16 and 89 years and found no association between empathy and age. To measure empathy, they used the Impulsiveness Questionnaire, a measure known to measure impulsivity and extraversion, but also recognised as being a predominant cognitive measure (Riding & Rayner, 2000). As a result, their study found no age-related differences in cognitive empathy. Phillips et al. (2002) instead measured affective empathy by using the Mehrabian and Epstein (1972) emotional empathy questionnaire on 60 young and older adults ranging in age from 20 to 80 years old. They initially found that older adults scored lower on the empathy scale however when intelligence and education were covaried, these age effects disappeared. Thus, no affective differences between young and older adults were found. Although these studies explored different facets of empathy they found no observed differences across age ranges.

This result represents a different trajectory from age-related studies, particularly with regards to declines in cognitive empathy both cross-sectionally (Khanjani et al., 2015; Isaacowitz & Stanley, 2011; Bailey et al., 2008; McKinnon & Moscovitch, 2007) and longitudinally (Helson et al., 2002). One explanation for this is the difference in sampling. Unlike previous studies, which examined age-related empathy differences in the general population, this research investigated a population of therapists and as such, differences may be a result of education. Phillips et al. (2002) found younger adults performed better in the empathy compared to older adults. However, when education and intelligence were covaried, the age effects on empathy were removed, thus suggesting that the difference in empathy scores depended on education as well as intelligence rather than an impairment in emotional processing. Moreover, Schieman and Van Gundy (2000) found that higher education moderated the negative age-empathy association. Both above studies measured education by the year's participants engaged in schooling. In the former study, young people averaged 14.5 years of schooling compared to 12.2 years and in the later study participants averaged 11.8 years of schooling. As a result, both studies seem to suggest that education may have an impact on age differences in empathy.

As of today, the BPS requirements to become a counselling psychologist include completing a society accredited degree or conversion course and a society accredited Doctorate in Counselling

Psychology (BPS, 2016a), for all other therapists, a minimum graduate degree and professional training is required (psychotherapists; UKCP, 2015). Instead to become a counsellor, although a degree may not be a requirement, most employers prefer if individuals are accredited with one of the professional bodies such as BACP or UKCP (National Career Service, 2016a). The British Association for Counselling and Psychotherapy (BACP), for example, recommends a training route, which can take three to four years depending on chosen course.

In England, the Education Act 1996 states that education is compulsory from the age of 5 to 16 (The National Archives, 2016) and until the age of 18, individuals must remain in full-time education (Gov UK, 2016). This amounts to a total of 13 years of education. As a counsellor a further 3 years of part-time training is required to obtain a Diploma in Counselling (BACP, 2016), psychotherapists can take up to 4 years to complete training depending on course (National Careers Service, 2016b) and psychologists, must complete an undergraduate degree (3 years) and doctoral level training (at least 3 years; BPS, 2016b) for an overall total of 3 to 6 years beyond government compulsory education (a total average of 16 to 19 years in education), thus making therapists a very educated population.

Individuals, who undertake the path to become therapists, engage in an education level that is equivalent or higher than a university undergraduate degree, which includes in addition to academic training, also professional training such as placements and personal therapy. Upon completion of the training qualification, therapists are moreover required to continue training through Continuing Professional Development (CPD) throughout their careers, in order to maintain their professional membership. In the BPS for example, this requirement entails a minimum attendance of between ½ to 1 day per month of CPD activity to ensure psychologists remain up to date with research and skill requirements to maintain and develop their professional competence in favour of the public (BPS, 2016c). Therefore, following years of education, therapists are required to continue on-going training and education throughout their professional careers.

Education is an important factor in empathy as it may cultivate cognitive skills as well as increase psychosocial resources required to understand others (Schieman & Van Gundy, 2000). Increased intellectual ability may furthermore have the potential to reverse age-related cognitive decline. Willis, Tennstedt, Marsiske, Ball, Ellas, Kepke, Morris, Rebok, Unverzagt, Stoddard, Wright, and

ACTIVE study group (2006) found that cognitive training resulted in improved cognitive abilities in older adults. Similarly, Mowszowski, Batchelor, and Naismith (2010) found that cognitive training can improve cognition and act as a therapeutic strategy to prevent cognitive decline in older adults. In particular, cognitive stimulating activities and lifestyles can enhance adults' cognition (Williams & Kemper, 2010). In the United States for example, "Brain Health" programmes are being encouraged by the Alzheimer's Association (2017) and the American Association of Retired Persons with the support of Age UK (Global Council on Brain Health, 2017) to encourage physical as well as cognitive activities for older adults. Furthermore, education is also very often associated with income and both resources together may offer individuals more resources and opportunities to relate to others (Schieman & Van Gundy, 2000). Therefore, people engaged in cognitively stimulating occupations such as therapists involving significant cognitive activity and on-going continuing professional development training, may maintain higher cognitive functioning (Williams & Kemper, 2010) and cognitive empathy with aging.

Another explanation for previous research finding empathy differences across ages may be as a result that the differences are a result of cohort rather than age-differences (Gruhn et al., 2008; O'Brien et al., 2013). Therefore, the effect reflects being born and raised in different social environments. In their cross-sectional study, Gruhn et al. (2008) found age differences with older adults scoring lower in empathy compared to younger adults. However, their longitudinal study, carried over a 12-year period, showed no observed differences in empathy across the adult lifespan. According to Gruhn et al. (2008) differences in both studies could be attributed to differences among cohorts rather than age differences. This is unlike Helson et al.'s (2002) longitudinal study, which found a small yet significant age-related decline over a 40-year period. Gruhn et al. (2008) suggest that this may be because their study may not have been long enough to witness a decline or that recent cohorts are part of a generation where talking about feelings is viewed as more acceptable. Hence, the decline in empathy may reflect changes in how people report their feelings (Sommerville & Decety, 2017). Similarly, O'Brien et al. (2013) also questioned whether the age patterns they found in their cross-sectional study were a result of age-related changes or due to cohort effects reflecting generational influences. Unfortunately, one of the difficulties with generational research is that most studies are cross-sectional; therefore, it is difficult to distinguish between age effects and generational cohort (Bolton et al., 2013).

The current study's findings of no observed differences in cognitive and affective empathy across generations may also be due to the design and methodology used in previous studies. Previous studies, which found age-related differences in empathy have used performance-based tasks and different self-report measures. The problem with performance based tasks though is that they lack external and ecological validity as they only focus on one aspect of empathy, for example, perceiving emotions from facial expressions (Isaacowitz, Lockenhoff, Lane, Wright, Sechrest, Riede,l & Costa, 2007). In Khanjani et al. (2015) for example, they used the self-report Emotion Quotient scale and the Revised Eyes Test and found older adults reported higher affective empathy but experienced deficits in cognitive empathy compared to younger adults. Although the Emotion Quotient scale measures both cognitive and affective empathy, Davis (1980) argues scales that result in a single score may obscure the separate influences that the different facets of empathy may have on behaviour.

Though even empathy measures like the IRI and how it is used may impact the results. For example, Konrath et al. (2011) used the IRI to measure empathy and found a significant decline in Empathic Concern and Perspective Taking in younger adults. However, their data was collected through meta-analysis, aggregating the results of many other surveys and at times using only one unaltered (7-item) IRI subscale. As Borenstein, Hedges, Higgins, and Rothstein (2009) argue, although meta-analysis might provide a robust summary of the studies included in the analysis, by aggregating and mixing the results of different studies using different procedures conducted at different times by different researchers, risks introducing bias over time. Essentially, there is a risk that if these studies are a biased sample of all available studies, the mean effect will reflect this bias. As a result, the meta-analysis might overestimate the true effect size, particularly since published studies are more likely to be included in a meta-analysis than other studies.

Similarly, O'Brien et al. (2013) also used the IRI to measure empathy though only examined the Empathic Concern and Perspective Taking subscales. As discussed in the literature review, empathy is a complex and multidimensional construct, composed of affective and cognitive mechanisms, and as such the other two subscales, Personal distress and Fantasy are important factors affecting the quality of empathy response (Davis, 1996). Furthermore, it is important to note that neither Konrath et al. (2011) nor O'Brien et al. (2013) took into consideration education, which as mentioned above, can affect age differences in empathy. It remains nonetheless clear that empathy is a complex

construct and there is limited research, or absence of in the case of therapists, on studies examining associations between age and empathy across adulthood.

Overall the present study findings reflect a contrast to the recent study of Konrath et al. (2011) who found empathy declining in recent college students. The results in this study indicate that empathy across generation of therapists might be alive and well, unlike Konrath et al.'s (2011) suppositions, by recent advances in technology. This is a welcomed finding, as clients would want therapists, regardless of age, to be equally empathic. It would be interesting to repeat the study using the IRI with the same sample of Millennial generation therapists to measure their empathy at different points over their adulthood. Empathic Concern and Perspective Taking are often quoted in the literature as being representative of the empathic response, however the next section will explore the other facets of empathy, Personal Distress and Fantasy, which according to Siu & Shek (2005) are antecedents and consequences of empathy.

5.3.1.2. Personal Distress

In examining the difference in Personal Distress across generations of therapists, although the Mann-Whitney U test revealed no significant difference between Baby Boomers and Generation X as well as between Generation X and Millennials it revealed a significant difference with more Millennials reporting higher distress compared to Baby Boomers. This finding is consistent with previous studies. Gilet et al. (2013) examined a sample of 322 adults ranging from 18 to 89 years of age to validate the French version of the Interpersonal Reactivity Index. They found a significant main effect for personal distress with younger adults scoring higher than older adults. This finding is also consistent when using other measures of empathy. Sze et al. (2012) assessed the emotional empathy and prosocial behaviour in a sample of 213 participants ranging from 20 to 80 years old. They measured empathy using the IRI and found significant age differences, with younger adults reporting higher levels of personal distress compared to the older adults. Therefore, the results seem to suggest that younger adults report higher levels of distress compared to the older generations and as a result may focus more on their own distress than that of others.

Individuals who experience high distress may have a difficult time in responding to others due to the difficulty in regulating emotions, particularly managing negative affective arousal (Gilet et al.,

2013). Indeed, the highest predictor of personal distress is high affective arousal and weak emotional regulation (Eisenberg & Eggum, 2009). Without adequate emotion regulation, an observer witnessing another's pain may become over-aroused and experience personal distress. As a result, they will try to distance themselves from the situation eliciting negative emotions. Good emotional regulation occurs when an individual has the capacity to elicit another-oriented motivational state for someone in distress, yet at the same time remain aware that those feelings are distinct from one's own. This in turn can lead to benefits in helping clients (Gleichgerrecht & Decety, 2013) because those better able at regulating their emotions may remain empathically engaged even if experiencing another individual's distress (Lopez-Perez & Ambrona, 2014).

With age, older adults may also be better at regulating emotions compared to younger adults. Lawton, Kleban, Rajagopal, and Dean (1992) examined a sample of 828 adults across three age groups using self-administered questionnaires and found older adults increased their self-regulatory capacity with age, particularly they reported higher emotional control, emotional maturity, mood stability and lower responsiveness compared to younger and middle-aged adults. Similarly, Gross, Cartensen, Pasupathi, Tsai, Skorpen, and Hsu (1997) found older adults reported greater emotional control as well as fewer negative emotional experiences compared to younger participants. This is the same in interpersonal experiences. Birditt, Fingerman, and Almeida (2005) examined self-reported reactivity to interpersonal tensions and found older adults tend to use constructive behaviours such as doing nothing or engaging in discussions, compared to younger adults who used destructive behaviours such as arguing and yelling. They suggested this could be due to older adults having a better empathic understanding compared to their younger counterparts and finding interpersonal tensions less stressful with age. Indeed, older adults may be better able to regulate their emotions within the therapeutic context as well. Anderson, Ogles, Patterson, Lambert, and Vermeersch (2009) found that the age of the therapist accounted for differences in therapy outcome with older therapists producing better outcomes, which they argued was due to older therapist having gained significant clinical experience needed to master the interpersonal qualities necessary in therapy.

Older adults might also be better at regulating emotions as they prefer to reduce their negative experiences and engage predominantly in positive emotions (Blanchard-Fields & Cooper, 2004; Gross et al., 1997) over negative ones. In Phillips et al. (2002), older participants were better at

identifying positive emotions such as happiness compared to younger participants but worse in identifying negative emotions such as sadness. Older adults might look for more positive emotions because they are at a different stage in their life and their motivational goals change. Older adults might experience difficulties they cannot change such as declining health and therefore become aware that their time in life is more limited and focus their energies more on social and meaningful goals (Sze et al., 2012; Carstensen, Fung, & Charles, 2003) using emotion focused coping strategies compared to younger generations who have self and future oriented goals and use problem focused coping strategies (Carstensen et al., 2003). Evolutionary theories suggest that as the younger generations consume more resources than they produce, the older adults' role is to mediate conflict as well as provide emotional support (Sze et al., 2012; Gurven & Kaplan, 2009). Furthermore, with aging, older adults may also be better at predicting emotional arousal compared to younger adults, thus experiencing less negative emotions (Nielsen, Knutson, & Carstensen, 2009). Therefore, experience in regulating emotions as well as selectivity in how to use one's energies and resources with aging may suggest why older adults might report less distress compared to younger generations.

The development of emotion regulation is identified as an important task of early childhood, which evolves throughout the lifespan (Cole, Dennis, Smith-Simon, & Cohen, 2009; Eisenberg & Spinrad, 2004) and may find stability later in life (Roberts & Mroczek, 2008) with life and work experiences (Roberts & Wood, 2006). To regulate emotions, Gross (2013) argues individuals employ different strategies, which can be categorized as antecedent and response-focused strategies (Yeung, Wong, & Lok, 2010). Antecedent focused strategy, such as attentional deployment and cognitive reappraisal, aim to change the situation before the emotion is elicited and actively help the person avoid experiencing negative behavioural expression of emotion (Yeung et al., 2010). Distraction, for example, is a form of attentional deployment, used to disengage and redirect attention at an early stage in an attempt to reduce or block the elaborative emotional processing of painful and negative eliciting material as well as influence on emotional response (Gross, 2015) before it gathers force (Sheppes, Scheibe, Suri, & Gross, 2011). Millennials, for example, may exhibit a tendency to use Internet surfing and social media as a distraction and coping mechanism when experiencing personal distress. Indeed, the Stress in America survey (APA, 2015) found 67% of Millennials, particularly those who are more stressed about money, engage in sedentary or unhealthy behaviours such as surfing the Internet. Information that passes the early filter can then be elaborated via a

second filtering mechanism, cognitive reappraisal, which allows cognitive processing of emotional information and semantic meaning. This mechanism involves engaging with the emotional information and reinterpreting the emotion-eliciting situation in a way that changes the meaning and affects the emotional impact (Gross & John, 2003).

Though strategies used in the early emotion-generative process can have a different effect than those enacted later on (Gross, 2013). Response focused emotion regulation strategies intend to modify the emotion after it has been elicited by trying to inhibit emotion-expressive behaviour. Individuals using suppression, for example, try to influence directly their emotional response, by inhibiting, hiding or reducing the outward signs of inner feelings through behavioural, physiological or experiential processes (Gross & John, 2003), for example, using breathing exercises to decrease negative emotional response. Younger adults who use suppression as an emotion regulation strategy experience higher levels of psychological distress compared to older adults. Brummer, Stopa, and Bucks (2014) compared the emotion regulation styles of 175 adults ranging from young, middle adult to older individuals and found that although both ages used suppression as an emotion regulation strategy, younger adults experienced higher levels of psychological distress. The authors speculated that suppression in older adults has a functional benefit as a result of the difficulties experienced with aging such as declining health and loss of social network. Individuals who use suppression experience less positive emotions and more negative ones, whilst those who engage in cognitive reappraisal experience more positive emotions and less negative ones. Therefore, cognitive reappraisal is more effective than suppression because of decreased negative emotion experience and behavioural expression (Gross, 2002).

Another possible explanation for different emotion regulation styles may relate to parenting styles. Pew Research Centre (2015c) examined parenting styles in America and found an increase in overprotective parenting styles in younger generations (68% in Millennial's, 60% Generation X and 54% in Baby Boomers). Over-protective and controlling parenting is also defined as helicopter parenting (Schiffrin et al., 2014) and refers to parents who hover over their children to protect them from making mistakes. According to Coburn (2006) as well as Howe and Strauss (2000), today's young adults have a closer relationship with their parents compared to earlier generations. As a result, the increase in over-controlling parenting can encourage dependence and difficulty in self-management, particularly for Millennials who were mostly raised by helicopter parents (Odenweller,

Booth-Butterfield & Weber 2014). In a study examining the helicopter parenting, autonomy of supportive parent, basic psychological needs and satisfaction of life of 297 college students, Schifffrin et al. (2014) found that students with helicopter parents reported higher levels of depression and less satisfaction with life as a result of student's perceived violation of basic psychological needs for autonomy and competence. Therefore, helicopter parenting may delay development of independence and impair emotion regulation (Pope-Edwards & Liu, 2002) with Millennials more likely to rely on their parents for emotional support (Frey & Tatum, 2016).

Millennials might also report higher Personal Distress compared to Baby Boomers because they belong to a more individualistic and narcissistic generation. Therefore, they are more involved with their own self-oriented feelings rather than other-oriented ones. In the recent generations there has been a 30% increase in narcissism (Twenge, Konrath, Foster, Campbell, & Bushman, 2008b). According to Twenge (2013), younger generations, particularly Millennials are more "Generation Me" than "Generation We". They are described as more entitled, have higher self-esteem compared to earlier generations most likely due to increase in praise and positive feedback from adults during childhood (Twenge & Campbell, 2001), have higher expectations, are more sensitive to criticism and have higher self-confidence and this can spillover in overconfidence and narcissism (Ng, Lyons, & Schweitzer, 2012). Above all, they are more self-focused, moving away from intrinsic values such as community feeling and towards extrinsic values such as money, fame and image (Twenge et al., 2012). Values, which in turn have been associated with more anxiety and depressive symptoms (Kasser & Ryan, 1996) and are on the rise over the generations (Twenge & Foster, 2010). The rise in narcissism has occurred alongside the increased social media usage. This simultaneous rise has triggered a concern that social media usage may enforce or even create narcissistic tendencies (Bergman, Fearington, Davenport, & Bergman, 2010). However, this has mainly found to be related with posting self-focused pictures on social media platforms and projecting a positive image on their social media profile (Bergman et al., 2010). In their study on generational differences in young adult's life goals, concern for others and civic orientation, Twenge et al. (2012), found Millennials expressed less concern for others compared to Generation X'ers and Baby Boomers at the same age. In addition, Lindfords et al. (2012) found a rise in self-focus with individuals focusing more on personal rather than global fears. Therefore, increased narcissism in Millennials could explain increased focused on self-oriented feelings of distress (Personal Distress) compared to older generations.

From a wider point of view, Millennials however may report higher Personal Distress due to the economic market. Millennials are entering the workplace in an unstable economic environment and arriving at critical points in their adult lives for making financial decisions (Deloitte, 2009). In developed countries, 54% of Millennials started or are planning to start their own business whilst 27% are already self-employed. Millennials although known to be the most educated generation (Patten & Fry, 2015), are nonetheless showing signs of financial distress. Since the financial crash in 2008, the volatility of economic markets has engendered a general distrust towards financial institutions, particularly from Millennials (Deloitte, 2015), which is also leading many to become entrepreneurs. Pricewaterhouse Coopers (2016) survey found that in the U.S., Millennials are more stressed about their financial situation than any other generation with 64% reporting they are stressed about their finances, 37% that personal finance issues are a distraction at work, 46% have a hard time meeting their household expenses each month and 42% have student loans. As a result of increased longevity and reduced pensions, Millennials will have to save more of their earnings compared to the older generations and over a longer period of time. Indeed, in the U.S. 36% report depending on their family for financial support (Taylor & Keeter, 2010). Although mortgages have gone down, housing prices are rising faster than incomes (Olick, 2016). Furthermore, in over 130 years, Millennials are slightly more likely to live in their parents home compared to living with a partner although a contributing reason could be because people are waiting to settle down romantically before the age of 35 (Fry, 2016). Therefore, the increased economic global crisis creates a significant stress to Millennials and even though as therapists they may be capable of showing empathy and containing client's distress, Millennials may have a harder time dealing with their own feelings of distress when confronted with the bigger picture and their role in the workforce.

Millennials may also feel overwhelmed by intense negative emotions in their therapeutic work, however this experience may actually be valuable by offering them an opportunity for emotional connection to their clients (Blume-Marcovici, Stolberg, Khademi & Giromini. 2015). Therapists can use the experience of intense emotions and emotional reactions to clients as an opportunity to reflect on what is occurring in the therapeutic relationship and help them become aware of transference and countertransference, which can in turn help guide interventions. Transference generally refers to the process in which a client projects onto the therapist feelings and issues from the past in the therapeutic relationship (Weiner, 2009) whilst countertransference refers to the range

of feelings, reactions and responses that can occur in a therapist towards a client when hearing their story, including feeling overwhelmed and angry based on the therapists' own personal background. It is important for therapists to become aware and understand the processes that occur in the therapeutic relationship including transference and countertransference issues and their own areas of emotional vulnerability and unresolved emotional issues. Indeed, therapist contributions are as important as those of the client and the therapeutic experience is something created by both client and the therapist.

This especially may be the case for Millennial therapists who have entered this workforce most recently. According to the life-span developmental model of counsellor development (e.g. Skovholt & Rønnestad, 1992; Rønnestad & Skovholt, 2003), the trainee counsellor particularly seems to struggle with the transition from being a lay helper to that of a professional helper. According to Todd and Storm (2002), in symbolic-experiential therapy therapists are encouraged to accept and use emotionality and conflict as a healthy aspect of relational engagement. Being emotionally available to clients allows therapists to serve as a role model for the clients letting them see a range of emotional response. Trainee therapists in their own anxiety may try to attenuate their key emotional experiences or attempt to avoid them altogether (Gurman, Lebow, & Snyder, 2015). They often demonstrate a high self-focus (Stoltenberg, McNeill, & Delworth, 1998), frequently seeming more concerned about their ability to connect with clients and their emotional reactions to clients (Hill, Sullivan, Knox, & Schlosser, 2007), sometimes at the cost of establishing an effective working alliance (Teyber, 2006). Supervision or peer support groups can provide a safe space to help therapists explore their view on their emotional experience. It is important for therapists to learn to stay focused and trust emotion, even when the client does not. Therefore, the experience of personal distress can be an opportunity for therapists to process their reactions to clients in order to enhance their learning about the therapeutic relationship.

In summary, the study findings indicate that Millennials report higher personal distress compared to Baby Boomer therapists. This result is consistent with earlier research and if Millennials report higher personal distress, this may suggest they are prone to intense over arousal of emotions and experience difficulty in regulating their emotions. Particularly for therapists, improved self-regulation of emotions helps manage and optimize intersubjective exchanges between the self and others. To experience empathy, it is important to be able to perceive another individual's state and

emotions as well as regulate and control it; otherwise, high levels of emotional arousal become personal distress (Decety & Jackson, 2004). If therapists experience high personal distress, this can be associated with higher compassion fatigue (Gleichgerrcht & Decety, 2013), also known as empathic distress fatigue (Klimecki & Singer, 2012), burnout (Thomas, 2013), as well as decreased quality of patient care to the point of inadequate treatment (Guy, Poelstra, & Stark, 1989). However, experiencing intense emotional arousal or personal distress may also present Millennials with an opportunity for emotional connection to their client whilst reflecting on the therapeutic relationship. Therefore, the more able an individual is able to regulate their emotions, the better they are able to engage with and help others. The effect size however for this finding was small (0.21) as indexed by Cohen (1988) therefore further research is necessary with a larger sample.

5.3.1.3. Fantasy

The final subscale in the IRI is Fantasy, the tendency to transpose oneself imaginatively into the feelings of fictional characters in books, movies and plays. Less attention has been devoted to this subscale in the literature and in some studies, it has been completely left out (Sze et al., 2012; O'Brien et al., 2013). In this study, results found significant differences in Fantasy scores between Baby Boomer and Millennial therapists suggesting that Millennials were more inclined to identify with fictional characters compared to Baby Boomers. This finding is consistent with earlier research (Gilet et al., 2013), where similar large effects were found in the Fantasy subscale with younger generations, which the authors argued the difference reflected cohort differences and social development experiences.

The differences between generations could be attributed to the technological advances in media as well as its availability and consumption. Baby Boomer, Generation X and Millennial children were born and raised around historically different times and environmental events with different experiences to media exposure. Nowadays, a significant portion of individual's leisure time is engaged with fictional narratives, including playing games, reading fiction novels, watching films and TV shows. When doing any of these activities, individuals immerse themselves in these worlds and are transported by the narratives (Mar, Oatley, & Peterson, 2009), where they experience a simulated reality and feel real emotions for the fictional characters.

Over the years, the use and availability of television has changed significantly. During World War II, television operated under limited scheduling showing no more than four hours per week (Abramson, 2003). Television sets were limited and very expensive, primarily broadcasting live events (news reporting, sports events, discussion programs) and occasionally some motion pictures. People predominantly listened to the radio and watched movies at the cinema three to four times a week (Abramson, 2003). As a result, children in the post war era used their time playing outside and with each other. Over the years, television became more widespread and available providing individuals access to hundreds of television channels offering movies and TV shows. By the 1980s home videocassette recorders became available and people gained the ability to record, replay, rent and watch programs and movies whenever they wanted (Stephens, 2000). Nowadays, that technology has evolved. Movies, TV shows and news are now accessible 24/7 on portable and smartphone devices. Today's generations, compared to older generations, have the choice and access to watch an unprecedented amount of fictional movies and TV shows. The advancement in technology also expands to literary fiction with the invention and widespread use of electronic reading devices such as Kindle and smartphones as well as the evolvement of the gaming industry. The increased range and availability of movies, shows, fictional stories and games has given Millennials more opportunities to relate to fictional characters.

Generational differences may also be tied to the incredible growth in the gaming industry (Newzoo Global Games Market Report, 2015). Millennials report on average more gaming (63%) compared to Generation X (43%) and Baby Boomers (13%), particularly from mobile phones (47%; 27% and 3% respectively; Ofcom, 2016a) with women as likely as men to play games (Ofcom, 2016a). In gaming, individuals can step in and out of other's point of view (real or fictional), especially since consumers nowadays are more interested to take an active role by participating in their media (Rivers, Wickramasekera, Pekala, & Rivers, 2016). Furthermore, as Davis (1983c) found Fantasy displayed a similar pattern to Empathic Concern in measures of emotionality, more Fantasy may imply individuals with higher Fantasy experience more emotionality towards others. In a study investigating individuals playing role-play games trait empathy, Rivers et al. (2016) found gamers significantly scored higher in Fantasy empathy and reported experiencing higher levels of empathic involvement with others. They speculated that education might explain the results and the higher scores found in the Millennials is consistent with literature arguing that they are the most educated generation (Patten & Fry, 2015).

Nonetheless, the tendency to be transported by fictional narratives can facilitate and foster the development of empathy. Mar, Oatley, Hirsh, dela Paz, and Peterson (2006) measured the empathy of 94 participants before and after reading fiction and non-fiction stories using a variety of empathy measures including the IRI, Revised Mind in the Eyes Test and Big Five Inventory. They found that individuals with a high tendency to engage in fictional narratives appeared to be positively associated with self-reported measures of empathy. Similarly, Djikic, Oatley, and Moldoveanu (2013) studied the potential of literature to increase empathy and found frequent-fiction readers had higher scores of self-reported cognitive empathy but not affective empathy as well as higher empathy in the Minds in the Eyes Test, a non-self report measure of empathy. Though Johnson (2012) found participants reading short fictional stories exhibited higher affective empathy and were also more likely to engage in prosocial behaviour.

As a result, higher Fantasy scores may be associated with higher empathy. This could be because engaging with fictional narratives mentally stimulates social-cognitive mechanisms and processes similar to those used and experienced in the real world and with frequent use can help maintain, improve and hone skills such as empathy (Mar et al., 2009) in other settings outside of reading. According to Zwaan (2004), words can evoke neural events similar to those involved in actually perceiving the actual experience of the word. Therefore, individuals who can generate higher levels of imagery (Johnson, Cushman, Borden, & McCune, 2013) are more emotionally transported in the story and experience higher empathy (Bal & Veltkamp, 2013). As a result, future research could assign a group of therapists a regimen of reading fiction and another group a regimen of non-fiction for a period of time and measure fantasy and empathy scores before and after the regimen across different generations.

Another explanation for this discrepancy could be that with age and maturity older adults have a more integrated sense of self and identity. As a result, they experience less self-centred thoughts and are less concerned with social approval (Schieman & Van Gundy, 2000). Unlike earlier generations whose feelings of self-worth are dependent of social approval and group acceptance, older adults become more self-accepting and rely less on external validation, moving from an outer to an inner defined self (Labouvie-Vief & Devoe, 1991). According to Steinberg, Bornstein, Lowe Vandell, and Rock (2011) this is because older adult's view of self is not only more accepting and

modest but also their expectations about themselves and their future are less idealized at this stage of their life. Therefore, there exists a smaller gap between ideal and actual self at this age.

In summary, the results from the present study suggest that Millennials report significantly higher Fantasy scores compared to Baby Boomers. This finding is consistent with earlier research and it could be argued that Millennials higher Fantasy scores are a result of technology advances and the fact that imagining how a fictional character can think or feel uses the same cognitive mechanisms that nurture real world empathy. Furthermore, frequent with media interactions frequently idealized and as a result empathy is felt more easily (Happ, 2013). Davis himself acknowledged difficulties with the Fantasy subscale as putting oneself in another's shoes should be Perspective Taking though as it involved fictional characters, it was more difficult to interpret (Davis, 1994). Furthermore, he also argued that it would be expected that individuals with high fantasy scores devoted more time to non-social activities such as mass media including books, movies and TV (Davis, 1980), as is the case with Millennials. Nevertheless, the effect size as indexed by Cohen (1988) was small (0.22) therefore further research is necessary to ensure the strength of this finding. Moreover, further research could be carried out on gaming and empathy for fictional characters, for example, monitoring Millennial therapists fantasy scores longitudinally and comparing the results to the general population as well as a generation of therapists who do not do much gaming.

5.3.1.4. Gender Differences

The second hypothesis, "*females will self-report more empathy than males.*" was rejected as no significant difference in gender across the IRI subscales was found. Although Gruhn et al.'s (2008) longitudinal study found no gender related differences in empathy across ages on the whole, the results of the present study are in contrast to research on gender differences on empathy. Prior work has consistently found that females report higher empathy compared to men in the general population (Davis, 1983a; Konrath et al., 2011; O'Brien et al., 2013) as well as in therapist samples (Hatcher et al., 2005; Saarnio, 2010). One reason for this might be that most studies that have found a gender differences in empathy rely on general population data. Unlike the general population, male and female therapists undergo extensive professional training, which includes the development of empathy skills, introspection and helping clients in the expression of their emotions. As a result, this may significantly reduce the gender gap in empathy (Eisenberg-Berg & Mussen, 1978).

Although two studies measuring therapist empathy found women reported higher empathy compared to male therapists, the way empathy was measured might have impacted gender differences. In Saarnio (2010), the gender difference in personality traits and interpersonal functioning among 162 Finnish substance abuse therapists was investigated and participants were asked to respond to five vignettes and how they would act in the situation in question. Empathy was measured using the CPI. However, the CPI was designed to predict and assess everyday themes in interpersonal behaviour of ordinary people (Megargee, 2009; Gough, 1990) rather than measure dispositional empathy per se and did not follow the multidimensional concept of empathy as IRI.

In Hatcher et al. (2005) instead, the empathic process of 93 therapists was measured using videotaped vignettes based on actual cases detailing a written description of a clinical scenario. Participants were then asked to complete in small groups the IRI questionnaire as well as other scales. As such, participant's self-report empathy may be due to practitioner's motivation to give the "correct" answer to justify their clinical decision (Taylor, 2006) and present themselves as a competent professional (Evans, Roberts, Keeley, Blossom, Amaro, Garcia, Stough, Canter, Robles, & Reed, 2015) rather than reflect their dispositional empathy such as that measured in the IRI. Vignette studies in fact have been criticized because the weight of the study is measured on the validity of the vignettes. Both studies on gender differences in therapist empathy therefore used different measures to the IRI, one using the CPI and the other using vignettes, neither of which aimed at measuring dispositional empathy per se. As previously discussed, empathy is a multidimensional construct and other measures might not have taken into account its complexity.

However, when observing gender differences within each generation female Millennial therapists reported higher Empathic Concern and Perspective Taking than males. This finding is consistent with Schieman and Van Gundy (2000) who found women in the youngest age group reported higher empathy compared to older women and that with age, the gender gap reduced significantly. Similarly, Tobari (2003) found higher empathy scores in girls during childhood and that gender differences decreased with age. One reason for the gender gap reducing with age might be convergence (Schieman & Van Gundy, 2000) that is, with age women relax the affective roles learned growing up and instead become more similar in emotionality.

Gender differences in the expression of empathy may also be influenced by the socialization process and culturally sanctioned gender role expectations (Schieman & Van Gundy, 2000). From a young age, women are socialized differently from men with regards to emotion (Brody, 2000). Women are taught to develop skills towards warmth in interpersonal relationships, being nurturing and caring of others as well as understanding of others feelings (Garaigordobil, 2009; Lennon & Eisenberg, 1987). As a result, empathy becomes a defining aspect of being a female (Gilligan & Wiggins, 1988; Karniol, Gabay, Ochion, & Harari, 1998). In the stereotypical masculine role instead, emotional expression is manifested in less overt expressions of empathy as it may represent weakness in men (Gilligan, 1982). Consequently, low empathy in men is acceptable but in women it may be seen as an emotional problem. As a result, there may also be a stereotype-confirming bias in self-reports, where women might want to demonstrate that they are empathic. Therefore, differences in empathy may be related to differences in motivation and how this is expressed rather than the potentialities (Bohart & Stipek, 2001) and ability to experience empathy (Zahn-Waxler et al., 1991).

Gender differences may also be more pronounced for affective empathy. According to Rueckert, Branch, and Doan (2011), this is potentially due to emotional reactivity and the person being emphasized with. This is consistent with earlier research findings that have found gender differences tend to be greater for Empathic Concern (Derntl et al., 2010; Rueckert et al., 2011), a subscale known as measuring affective empathy. The reason is in addition to emotional roles men and women are taught from an early age. Furthermore, men and women also rely on divergent processing strategies when solving emotional tasks with females using more emotion and self-regulated regions and males more cognitive related areas (Derntl et al., 2010).

In addition, as empathy was presented to the participants as “relating to others” this may have had an impact on the results. As discussed in the literature review and above, females generally tend to self-report greater empathy than men and therapists also may tend to overrate their empathy (Barrett-Lennard, 1962; Decker et al., 2014) in self-rating scales. Moons, Cheen, and Mackie (2015) argue that individuals associate certain groups with particular emotions. As a result, female therapists may have associated themselves as more empathic if they were aware that the study was measuring empathy. Therefore, empathic forecasts may be influenced by the impact of stereotypical beliefs and motivational differences rather than empathic abilities (Gruhn et al., 2008; Clarke et al., 2015).

Overall, the findings in the present study demonstrate that on the whole there were no significant gender differences in empathy across generations, which may be due to using a sample of therapists for this study who have achieved training in understanding and managing emotions, how empathy was measured and motivational differences. This is a positive finding as this suggests that males and female therapists self-report similar empathy. However, a difference between genders was encountered amongst female Millennial therapists reporting higher affective and cognitive empathy compared to their male counterparts, though this difference may be due to socialization processes of gender roles growing up and may reduce with age.

5.3.2. Internet and Social Media Use

In addition to the differences in empathy between generation and gender of therapists, the present study also explored relationships between Internet based communication and social media use with empathy. The subsequent section will explore the descriptive and inferential statistics. It is important to note however that validity could be criticized as this is not a well-developed paradigm and association between empathy and Internet and social media use is not as of yet clearly demonstrated. Nevertheless, interesting statistical relationships are presented in this section, which would be worth exploring in future studies.

5.3.2.1. Internet Based Communication

The current study's descriptive statistics reported that the most commonly used Internet based communication across generations was email and text-based communication. Nearly all participants reported using email, which is consistent with Ofcom (2016a) and Jones and Fox (2009) that emailing remains one of the most common methods of Internet based communication. The results also showed that more Millennials as well as Generation X'ers reported, after email, using text-based messaging more compared to other mediums. Indeed, there has been an increase in recent years in text-based communication such as instant messaging provided by services such as Whatsapp and Facebook Messenger. In fact, this form of communication has become very popular, surpassing traditional SMS messaging (Ryan, 2014) and increasing in use from 75% to 78%% in 2015 whilst SMS use has been declining (Ofcom, 2015).

On one hand, it can be argued that this is largely due to the increase in use of smartphones, and accessibility of a wide range of free Internet based communications services, such as Whatsapp, Viber, WeChat, Facebook Messenger, Weibo amongst others. Internet based communication allows individuals to share ideas in real time, engage in multiple tasks and conversations simultaneously. In addition, sending text-based messages over Internet is free (depending on mobile phone Internet plan). Since the global financial crisis in 2008, many people experience financial difficulties and text based Internet based communication such as instant messaging allows individuals to communicate easily with others without excessive financial constraints or worries. According to Ofcom (2016b), people send an average of 46 to 150 messages per month. Whatsapp alone reports over 700 million monthly active users sending over 30 billion messages (Butterly, 2015). This means, people send on average 43 messages per day with their service. In the long run, the cost of frequent texting can quickly add up.

This increase in text-based communication reflects the younger generations in particular, who are generally more likely than other age group to undertake most of the communication and are burdened by financial difficulties. Though Olson, O'Brien, Rogers and Charness (2011) argue that it is often a misconception that older adults are averse to new technologies. Indeed, highly educated seniors use the Internet similarly if not more than the general population, with 71% going online everyday (Smith, 2014) and the ONS (2016b) reports a 169% increase in older adults Internet use since 2011. Therefore, instant messaging use may have increased due to its accessibility and low costs for all ages of the population.

5.3.2.1.1. Internet Based Communication Frequency and Use from Mobile Phone

Across generations, more therapists reported predominantly using Internet based communications "Several times a day". In particular, 48% of Baby Boomers reported using it "Several times a day", Generation X was mainly divided by those who used it "Several times a day" (39.5%) and "All the time" (31.8%), whilst Millennials reported overall more frequent use ranging from "Several times a day" (34.6%), "Several times an hour" (26.9%) and "All the time" (28.2%). On the whole, more Millennials reported using Internet based communications compared to the other age groups. This result is consistent with national statistics, where 83% of adults in the UK report using the internet

every day, more than double the daily internet use made in 2006 (35%; ONS, 2015b) with Millennials as the most active users (Ofcom, 2016a).

In examining the relationship between frequency of Internet based communication and empathy across generations, no correlation was found. This is consistent with Carrier et al.'s (2015) findings. They surveyed 1,390 participants and found no general effect of going online upon real-world empathy. However, if the online activities were for example, email or instant messaging they found this actually improved their real-world empathy. Their study though only investigated the impact on Millennials from the general population. The results of the current study are also in contrast to speculations from other research such as that of Konrath et al. (2011) as well as Small and Vorgan (2008) who suggested that spending time online reduced individual's ability for empathy. Their claims however, remain speculations and moreover addressed the general population, rather than a sample of therapists.

In examining use of Internet based communication from mobile phone, results indicated that all generations report using it "Several times a day". The present study descriptive results are consistent with reports on media use and trends. Around 96% of mobile phone users use their phone for email, and text based messages and of these 59% of these for instant messaging, compared to 55% in 2014 (Ofcom, 2016a). Smartphones are the most recent step in the evolution of portable information as well as communication technology (Oulasvirta, Rattenbury, Ma, & Raita, 2011). The increase in smartphone use has been 394% whilst for tablets 1,721% (Lella & Lipsman, 2015). In 2015, the smartphone was considered for the first time as the most important device for accessing Internet among all adults (Ofcom, 2016b) with 71% of UK adults reporting owning one. Although these devices were initially conceived to supplement computer use smartphones it is starting to replace it altogether with computer use declining by 10% since 2014 (Ofcom, 2016b). Of these, 21% of Millennials no longer use a computer to go online and 55 years old and older adults, normally known as late adopters of the digital world, are instead the most fastest growing group of mobile users, from 60% to 74% in 2015 alone, particularly using instant messaging (from 28% in 2014 to 43% in 2016; Ofcom, 2016b).

Across generations, frequency of use of Internet based communication from mobile phone was negatively correlated with Empathic Concern. This suggests that the more therapists use Internet

based communications from their mobile phone the less affective empathy they reported. One explanation for this could be multitasking. According to Reinecke, Aufenanger, Beutel, Dreier, Quiring, Stark, Wolfing, and Muller (2016), Internet multitasking causes information and communication technology stress. This involves a combination of using Internet with other media and non-media activities. In the UK a fifth of all media and communications time is spent doing more than one activity at the same time (Ofcom, 2016b). This is particularly the case for Millennials who use a greater variety of tools to communicate with friends and the world (Carrier, Cheever, Rosen, Benitez, & Chang, 2009). However, media multitasking is not a phenomenon reserved only for the young but also for adults aged between 50 and 65 years old adults (Voorveld & van der Goot, 2013). Different age groups however vary in the way they choose to multitask which Voorveld and van der Goot (2013) argue might be due to generational and lifespan differences in media use.

According to bottleneck theories, human's ability to process information is limited and can only make room for one stimulus at a time (Meyer, Kieras, Lauber, Schumacher, Glass, Zurbriggen, & Apfelblat, 1995). It is possible to have different processes occurring in parallel as the combined use of cognitive resources do not exceed human performance limitations, for example listening to music or eating with other tasks. Though when there is a resource conflict, which is when cognitive resources of different tasks are needed at the same time by two or more tasks, that resource will act as a bottleneck and delay the implementation of the combined processes (Borst, Taatgen, & van Rijn, 2010) consequently placing cognitive resources under considerable strain. In their study on multitasking across generations, Carrier et al. (2009) found that Millennials multitasked more than other generations and overall found it easier. They argued that one reason could be that Millennials may have a larger source of cognitive resources for multitasking compared to the other generations.

Frequent Internet based communication however requires reading, understanding and formulating a response, which might engage different cognitive resources. Ophir, Nass, and Waggner (2009) found that heavy media multitaskers performed worse on task switching than light media multitaskers and were more susceptible to interference from irrelevant environmental stimuli and irrelevant representations in memory. Most likely because they were unable to filter out irrelevant stimuli and treated all information equally with the same attention rather than focusing attention on one task at a time.

As people are constantly connected there is also an increased social pressure to acknowledge and respond to others communication in a socially acceptable timeframe; otherwise there is the risk of being negatively evaluated by the communicating partner (Kalman & Rafaeli, 2011). It therefore becomes hard to disengage from other activities, including work (Mazmanian, Yates, & Orlikowski, 2006). This is particularly true for mobile phone users who find that accessibility demands cause more stress (Thomeè, Harenstam, & Hagber, 2011). As a result, frequent Internet based communication may cause excessive demands on cognitive resources and result in reduced affective response. In particular with over stimulation it becomes hard to be empathic with people physically close (Milivojevic & Ercegovac, 2015). Indeed, some literature suggests that when media causes an excessive demand on conflicting cognitive resources it is not surprising that multitasking has been linked to depression and social anxiety (Becker, Alzahabi, & Hopwood, 2013) and that overall Internet use has a small negative impact of psychological well-being (Huang, 2010). Nonetheless, the effect for this relationship was small and further research into relationship of media use with empathy should be further explored.

5.3.2.2. Social Media

Konrath et al. (2011) speculated that the decline in empathy in recent American college students occurred mainly between the year 2000 and 2009, a time of exponential growth in social media use. The descriptive statistics in this study indicated that Facebook in all generations was the most used form of social media. In the UK 84% of adults consider Facebook as their main social online profile (Ofcom, 2016a). As of September 2016, Facebook counts 1.18 billion daily active users and 1.09 billion mobile daily active users (Facebook, 2016) worldwide. This translates into 6.23% of the whole world is using Facebook daily and 6.74% is using it from their mobile (United States Census Bureau, 2016). These figures however do not include other social media platforms such as Twitter, LinkedIn and Instagram. The results of the study also showed Baby Boomers and Generation X report using LinkedIn as their second preferred social media site, whilst Millennials indicated preference for using Instagram. This is consistent with Ofcom (2016a) reports, which found LinkedIn, after Facebook, to be particularly popular amongst Generation X and Baby Boomers and Instagram amongst Millennials.

5.3.2.2.1. Social Media Frequency and Use from Mobile Phone

Findings from the present study indicate that more Millennials reported using social media “Everyday”, more Generation X reported “Everyday” whilst the Baby Boomers were divided between those who used social media “Everyday” and those who “Rarely” to “Never” do. Ofcom (2016a) reports that on average 82% of adults with a social media profile visit social media sites at least once a day and 23% visit them more than ten times a day. Of these, 89% are Millennials, 75% Generation X and 69% Baby Boomers. These results are higher than those reported by this study’s participants (67.9% Millennials, 54.9% Generation X and 32.5% Baby Boomers). One reason may be because participants thought they were answering in their capacity as a professional therapist and may have therefore downplayed their actual use to present a more favourable image of themselves on the survey, also known as social desirability (Bryman, 2012). Future research could benefit from ensuring participants are informed that reporting social media use does not reflect a judgment on their professional role but instead aims to look at their general social media use unrelated to their professional role.

With regards to social media use from a mobile phone, more individuals nowadays tend to be connected via the smartphone (Ofcom, 2016a). Of these, 70% of Millennials prefer using an app for social media (43%) whilst older generations such as Baby Boomers prefer using a browser (36%; Ofcom, 2016a). Around 59% use their mobile phone to look at social media sites (Ofcom, 2016a) and most likely among Millennials (73%) and Generation X (42%) compared to Baby Boomers (20%). Indeed, Baby Boomers are more likely to use their laptop for social media (33%) compared to Millennials for example (11%). This is consistent with the findings in the current study, where more Millennial therapists reported accessing their social media via their mobile phone compared to Baby Boomer therapists. One reason for this may be due the fact that mobile devices grant users with easy access at the touch of their fingertips which can be habit forming. Particularly, frequently checking accessible dynamic content on the device becomes a habit enforced by “informational rewards” (Oulasvirta et al., 2011). Another reason may be that older adults have limited experience with new technologies (Olson et al., 2011). Their experience is based on use of more common devices, such as desktop computers and keyboards. As a result, they are more selective in the technologies they use and may be slower than other generations in adopting new technologies. Millennials instead have grown up with computers and being technologically savvy have mastered

its use, particularly for communication (Bolton et al., 2013) and interacting with others (Palfrey & Gasser, 2008).

When examining the frequency of social media use and frequency of social media use from mobile phone, a strong correlation was found with empathy in both, particularly a negative correlation with Empathic Concern and Fantasy across all generations. LaRose, Connolly, Lee, Li, and Hales (2014) define “social media as communication channels used to create or maintain social relationships” (p. 60) through the creation and exchange of user generated content. Social media was essentially developed to connect and facilitate communication between people. Indeed some studies have found that social media use is related to an increase in cognitive and affective empathy over time (Vossen & Valkenburg, 2016). However, LaRose et al. (2014) argue that although having friends may increase wellbeing, when individuals reach a certain limit of friends, additional friends result in decreased wellbeing due to connection demands. Connecting with many people thus may result in connection overload (LaRose et al., 2014), which occurs when requirements for human information processing exceed coping capacity (Eppler & Mengis, 2004), particularly where there are many solicitations for attention, which can come from the online and offline world. For example, demands include receiving messages (positive and negative), responding to them and maintaining online relationships. As a result, excessive demands can lead to psychological stress (LaRose et al., 2014).

In addition to connection overload, individual’s empathic capacity, just as the cognitive resources, is not unlimited. Individuals may experience “Information Fatigue Syndrome”, feeling of loss of control due to overload and rapidity of information that can lead to amongst other things, burnout. Essentially, social media allows individuals to be more informed about other peoples lives yet at the same care less about them (Hulsey, 2011). An individual ends up dissociating from emotions by recognizing others emotions (cognitive), avoiding identifying with it (affective) as well as acting upon it (behavioural) (Milivojevic & Ercegovac, 2015). In social media, therapists in addition to their therapeutic work, act as containers for clients, and through social media they also become recipients of others mental states, positive and negative. As Milivojevic and Ercegovac (2015) argue, the pervasiveness of media constantly reaching our devices invites its users to feel empathy for everyone. This can be a very tiring experience, particularly for therapists who use empathy in their therapeutic work. In particular, LaRose et al. (2014) found that individuals who have a hard

time controlling their connection habits, thus checking frequently their social media, were related to negative impacts on affect, stress and activities. Furthermore, over 10 hours of daily smartphone interaction can decrease empathy means (Burch, 2013). Therefore, connection overload and frequent use due to checking habits may impact negatively on Empathic Concern and risk leading to Information Fatigue Syndrome and overall desensitization.

To empathize with another over social media requires the ability to imagine what another person is feeling, whether known to the user or not. Indeed, the ability to immerse oneself into the psychological states of another individual according to Lee, Guajardo, Short, and King (2010) is an indicator of an individual's ability to understand the mental states of others. Empathizing can occur by imagining how another person would think and feel in a similar situation (Adams, 2011). In view of this study's results, this means individuals who have a tendency to relate to fictional characters or imagine themselves in situations might be better able to simulate thoughts and emotions of others and thus might have a better understanding about other's mental states. Indeed, the Fantasy subscale has been found to be associated with individual's experience of being transported into mediated narratives (Hall & Bracken, 2011) and Lee et al. (2010) argue that the practice of imagining the inner world of others might help one develop their empathic accuracy. Therefore, just by imagining a person can evoke in people an affective response (Hall & Bracken, 2011). In Davis (1983c) participants instructed to take the point of view of the observational target reported greater Empathic Concern and emotional reactions compared to those who did not receive instructions. Therefore, imagining how another person may feel can elicit an affective response. Frequent social media use can elicit frequent opportunities for users to imagine how another person feels evoking in turn frequent affective responses. This experience however can be exhausting due to information and connection overload and frequent social media use may achieve the opposite effect, decreasing Fantasy and in turn Empathic Concern. On the whole, this study's findings indicate that frequent social media use as well as from a mobile phone can decrease Empathic Concern and Fantasy. Nonetheless, the effect size for Empathic Concern and Fantasy were small and necessitate further investigation.

Overall, the results indicate a regular and frequent use of Internet based communication and social media for all generations. Smartphones, not only allow individuals to check their email, make phone calls and send instant messaging, but have become the "go-to" for a wide range of digital services individuals daily rely on. Rather than being a device to consume content it has become a

platform enabling individuals to maximise their time and accomplish more each and every day. Individual's cognitive and empathic resources are limited and people may become overwhelmed from connection overload and multitasking. Nonetheless, the effect sizes found for the negative correlations are small therefore, further research should investigate the relationship of Internet and social media use and empathy in more depth using the IRI to measure empathy.

5.3.3. Professional Role and Therapeutic Orientation

Overall, analyses of the relationship between professional role and therapeutic orientation with empathy and Internet and social media use revealed no significant relationships. For this reason, as well as the absence of literature on a relationship between professional role and therapeutic orientation with empathy and Internet and social media use, these variables were not included as control variables. Carlozzi, Bull, Stein, Ray and Barnes (2002) however argue further research is warranted in this area to better understand the importance that therapists assign to empathy, how they define and use this therapeutic tool and how all this may relate to their identification with theories of psychology and psychotherapy.

In summary, the findings of this current study indicate that Empathic Concern and Perspective Taking show no observable differences across generations, consistent with some studies. The results also found a significant difference in the other two IRI subscales between generations. In particular, Millennials reported higher Personal Distress and Fantasy compared to Baby Boomers. Furthermore, no significant difference was found between genders suggesting that empathy seems to show no differences across both sexes of therapists. Further exploration on Internet and social media use found a small yet negative correlation with frequency of Internet use from a mobile phone with Empathic Concern, as well as a negative correlation with frequency of social media use and use from a mobile phone together with Empathic Concern and Fantasy. Some speculations were made regarding these relationships, such as individuals being overwhelmed by media use through multitasking and connection overload. The following section will look at the study limitations and implications of these results.

5.4. Limitations

This study contributes to age-related differences in empathy, particularly by using a sample of three generation of therapists and exploring their Internet based communication and social media use. Although this study demonstrated no observed differences in affective and cognitive empathy across Millennial, Generation X and Baby Boomer therapists, this research was conducted as a fundamental component to the completion of the doctorate in counselling psychology and there are some limitations pertaining to sampling, design and measures, which had the potential to limit the scope of this research.

The first limitation concerns sampling. Although the study yielded a good number of participants, there were more female than male therapists in every generation group. This is understandable and expected given that the vast majority of individuals who provide psychological help in England are women (between 70 – 85%; Morison, Trigeorgies & John, 2014). Fewer male therapists in the study may have affected the homogeneity of the generation groups sampling; therefore, the generalizability of these results to men is limited due to the considerable number of female participants. A larger sample of men would create a more robust sample size and it would also improve the overall reliability, validity as well as the generalizability of the results (Bryman, 2012) whilst decreasing sampling error. Furthermore, despite initial efforts to recruit from a wide range of sources, as a result of time-pressures in completing this study for the doctoral training, some convenience and snowball sampling was used to recruit participants, which may limit the generalizability and the results. Bryman (2012) argues that although this method of sampling may not be optimal or allow definitive findings to be reached, it can nevertheless, as in this research study, be a catalyst for future research offering insight into an unexplored field of age-related empathy research. Therefore, a larger sample of men using random sampling would create a more robust sample size and it would also improve the overall reliability, validity as well as the generalizability of the results (Bryman, 2012) whilst decreasing sampling error.

The second limitation reflects the measures adopted for this study to investigate the research question and carry out the data analysis. Although the measures used in this study have proven internal consistency and reliability, the experiences of empathy of each therapist participant remains subjective. In therapy, the empathy experienced by therapist and client may be inherently different

and therefore it may be more difficult to measure to empathy solely using a self-report questionnaire (Lamb & Freund, 2010) and may take into consideration the therapist's ability to rate their empathy (Fernandez, 2002). Empathy however was not qualitatively examined in this study and it may have left out important information that otherwise may have provided insight about the professionals in the field. It is difficult and arguably difficult to use one instrument to characterize the personality of a generation (Twenge, 2006). Other evidence such as behavioural and attitudinal could be explored to supplement the results of this study in order to make a generalization about generations of therapist empathy. In particular, Hojat (2016) argues measures such as the IRI were developed to be administered for the general population therefore, as it is not framed in the context of therapist-client relationship the validity may be questionable. It is therefore also clear, that therapist empathy is related to outcome so future studies will benefit from gaining insight from observer and client ratings to ensure the empathy therapist believe they have is consistent with what is being experienced by the client.

Self-report measures have repeatedly been shown to be reliable and a valid source of collecting data on participant's experience however they may also generate inaccurate responses, in particular, they may be susceptible to social desirability (Krumpal, 2011) and self-perception bias. Generally, being empathic is perceived as a socially desirable trait (Winter, Spengler, Bermpohl, Singer, & Kansek, 2017) that is directly related to other positive outcomes as well as forms of social behaviour. As a result, self-report measures of empathy can be prone to presentation bias, particularly on measures that rely solely on self-perceptions of empathic tendencies such as Empathic Concern and Perspective Taking (Konrath, 2013). Being empathic is particularly regarded as a socially desirable trait in certain occupational groups such as health care workers and particularly in therapists. Although precautions were taken to disguise the nature of the study, when questioned about their ability to relate to others, therapists might have tended to answer in a socially desirable manner and appear more empathic (Burkard & Knox, 2004).

Similarly, this was possibly also the case when questioning therapists Internet and social media use. Nowadays, users of digital media leave a trace online however access to this tracking data is not only limited to data privacy concerns but also by costs and technical challenges in retrieving and processing the data. Consequently, online behaviour poses a particular challenge for the accuracy of self-reports (Araujo, Woneberger, Neijens, & de Vreese, 2017). Theoretically, online surveys

should reduce social desirability distortions in self-report questionnaires because of an increased sense of privacy among participants. However, some studies using tracking data indicate that respondents are not completely accurate when providing estimates for their online use (Scharkow, 2016). This can be particularly the case for specific types of media exposure where inaccurate reporting behaviour has been attributed to the perceived social desirability of the behaviour (Holbrook, Green, & Krosnick, 2003). Therefore, respondents such as therapists might tend to under-report behaviour that is perceived to be negative by their social group whilst over-reporting behaviour or empathic tendencies that would be perceived positive by their social group. Furthermore, light Internet users might have a tendency to over-report while heavy users might have a tendency to under-report their use of Internet and social media (Araujo et al., 2017). Millennials for example, who are avid Internet and social media users might, as therapists, under-report their usage as they may feel that this behaviour may be perceived negatively by other therapists. Indeed, social desirability is positively related to age and to desirable self-report characteristics. (Soubelet, & Salthoue, 2011). Knauper, Carriere, Chamandy, Xu, Schwarz, and Rosen (2016) have shown that age-related changes in cognitive and communicative functioning can lead to age-related differences in self-reports that are erroneously interpreted as real age differences in attitudes and behaviour. In particular, younger adults are more accurate in reporting factual information and this tendency is predisposed to decline as respondent age increases (Herzog & Dielman, 1985). Consequently, if the participants thought their Internet based communication and social media use was being evaluated in light of their professional role, a significant and frequent use of these media may have been underreported as this behaviour may have been viewed as socially undesirable or unprofessional. As a result, this may have precluded valuable data about their personal and private use.

Furthermore, a time requirement in which to complete the survey was not issued in this study and this may have affected bias of the results. Future research might benefit from creating a time limitation, such as a time out if participants, for example, take more than 15 minutes to complete the survey. This would enable the researcher to record and analyse behaviour to examine if length a participant takes to respond the questionnaire affects the data. Further to this, it might have been helpful to provide a definition of Internet based communication and social media, particularly for the older generation who may view the term as interchangeable. Indeed, some respondents answered that they used “other Internet based communication” though included Facebook and

Instagram as their responses. Indeed, according to Sapsford (2007), how the question is worded can influence the exact meaning of the question.

A third limitation is associated with the study's design. The current study used a cross-sectional design. The research question developed for this study investigated the difference in empathy across three generations, Baby Boomers, Generation X'ers and Millennials. Cross-sectional studies provide a "snapshot" of, in this case, self-reported empathy and Internet and social media use, however these study designs are unable to provide evidence about causality and limits any inferences regarding causal relations since it is unable to establish whether Internet based communication and social media use may affect empathy or whether empathy may affect Internet and social media use. Therefore, the results are vulnerable to cohort effect (Gruhn et al., 2008). In order to establish causality or the direction of the effects found in the data, a longitudinal study would be a better fit as it may disentangle cohort from developmental effects (Hermans et al., 2013). In particular, future research could compare people at different points of time to remove age out of the equation and compare the generations when they are the same age whilst also taking into account period effects such as meaningful cultural events which may influence all generations equally. Further study with general population would serve to create a further comparison with the hope to create a unified model of behaviour across the general population span, as therapists may be behaving in a socially desirable manner due to their professional identity.

5.5. Research Contribution and Implications for Counselling Psychology Practice

Despite these limitations, the intention of this research was to contribute meaningfully to the counselling psychology field by exploring a gap in existing age-related empathy research. The research's contributions and strengths as well as implications for counselling psychology practice will be discussed in the following section.

A key strength of the present research is that it investigated generational differences in therapist empathy whilst also exploring therapists Internet and social media use. Smartphone, tablet (Lella & Lipsman, 2015) as well as social media use is increasing (Ofcom, 2016b), particularly amongst Millennials. Increasingly more research is being conducted investigating the impact of online technology on interpersonal skills (Nie, 2001; Kraut et al., 1998) and relationships (Clayton,

Nagurney, & Smith, 2013), including empathy (Alloway et al., 2014; Rosen, 2012; Wright, 2002) of the general population. Most age-related empathy research has also focused mainly on samples of general population (Konrath et al., 2011; Gruhn et al., 2008; O'Brien et al., 2013). However, empathy plays an essential role in therapy in that it helps build and develop the therapeutic relationship (Wright et al., 2006), facilitate the client's progress, promote psychotherapeutic change and healing process (Rogers, 1957; 1975). Furthermore, it is predictive of positive treatment outcomes (Horvath & Symonds, 1991; Black et al., 2005; Elliott et al., 2011). Therefore, not only did this study contribute to empathy research but above all it addressed an important gap in the literature.

Most counselling psychology research in the past years has mainly been lead by qualitative research. Most likely this is because qualitative methods are congruent with the nature of Counselling Psychology clinical practice (Silverstein, Auerbach, & Levant, 2006) and research (Ponterotto, 2005; Morrow, 2007; Rafalin, 2010). In particular, researchers such as Ponterotto (2005) have advocated for the need to expand research methodology for the scientific advancement of the field. However, this has resulted in more qualitative research and neglect in the field on the value of quantitative research (Cucchi, 2017). For example, from the whole doctoral training cohort of 43 individuals, only 2 used quantitative methodology. Quantitative research is nevertheless necessary for exploring and quantifying a phenomenon as well as evidence to guide future research and practice.

Another key strength is that no observed differences were found in Empathic Concern and Perspective Taking, the main facets of cognitive and affective empathy, across different generations of therapists. This is a positive and encouraging finding, which suggests that the foundations of empathy are built and hardwired early in life through the self-other distinction already functioning from birth rather than developing with age (Decety & Meyer, 2008). Knafo, Zayn-Waxler, Davidov, Van Hulle, Robinson, and Rhee (2009) argue empathy is an enduring disposition that remains stable over time across both cognitive and affective aspects of empathy. Furthermore, this finding also suggests that clients are receiving the same levels of cognitive and affective empathy regardless of therapist's generation. Even though Konrath et al. (2011) found a decline in cognitive and affective empathy in recent college students, decreased levels of empathy in therapists is unwanted. With a 35% increase in reported mental health problems since 1993 (NHS Digital, 2016) and more people

engaging in psychological therapies, more therapists are needed to meet mental health service needs. If therapists are unempathic this might affect client engagement, positive treatment outcome, waste limited mental health resources (Barrett, Chua, Crits-Christoph, Gibbons, Casiano, & Thomsom, 2008) and above all clients would not find the sought for symptomatic relief thus creating a revolving door scenario, by being referred again for the same mental health issue.

Contrary to literature this study particularly shows that cognitive empathy in therapists remains intact with age. Although the foundation of empathy is learned at an early age it can also be strengthened through practice (Cozolino, 2010) and on-going education and training (e.g. CPD workshops). This is consistent with research demonstrating that intellectually engaging in activities serves to buffer individual's cognitive decline in later life (Hultsch, Hertzog, Small, & Dixon, 1999). Specific cognitive interventions help older adults perform better on measures of the specific cognitive ability for which they were trained (Ball, Berch, Helmers, Marsiske, Morris, Rebok, Smith, Tennstedt, Unverzagt, & Willis, 2002) as well as improve performance on untrained cognitive tasks (Hindin & Zelinski, 2011). Therefore, by pursuing on-going professional training older therapists keep training their cognitive abilities, such as cognitive empathy.

Results also indicate that Millennial therapists, the most recent cohort of therapists, reported high Personal Distress, thus suggesting they experience higher levels of distress compared to older generations. This finding is important as it brings attention to the present generation of therapists in the workforce. Individuals who struggle to regulate their negative arousal risk developing anxious disorders (Contardi, Farina, Fabbriatore, Tamburello, Scapellato, Penzo, Tamburello, & Innamorati, 2013), which can bring about exhaustion and detachment (Gleichgerrecht & Decety, 2013). Indeed, higher personal distress has been associated with higher compassion fatigue (Klimecki & Singer, 2012), burnout (Thomas, 2013) and poor quality therapy. For example, Williams, Judge, Hill and Hoffman (1997) found that the reactions trainee therapists experience during sessions, such as anxiety, might interfere with their ability to provide maximum effective counselling. Therefore, it is important to support new therapists with their distress, as emotional stability can predict emotional exhaustion (Bakker, Van Der Zee, Lewig, & Dollard, 2006).

New generations of therapists could for example be supported early in their career through emotional regulating, self-care training and support systems, developed to help therapists manage

their aversive emotions. Cushway (1992), for example, found clinical psychology trainees, who were also new therapists entering the workforce, preferred coping mechanism was talking to peers and trainees also reported that more support from the course organizers and supervisors would make the experience less stressful. Another option would be offering mindfulness practice. Meditation training based on mindfulness can help reduce perceived stress in healthcare professionals (Klimecki & Singer, 2012). Although most training courses require personal therapy throughout professional training, creating peer support systems and teaching mindfulness could help provide the necessary support to future therapists in managing distressing feelings. In practice, if future younger generation of therapists are not adequately supported, they will focus more on their self-oriented feelings than the client's experience, which may lead to higher client dropout rates and overall negative therapeutic outcomes.

This study's findings also indicate that gender roles may play an important part in individual's self-reported empathy. According to Harvey and Hansen (1999), male therapists endorse an androgynous gender role in the professional setting, characterized by more empathic qualities deemed acceptable compared to strict masculine gender roles that perceive the expression of emotions as weakness. Even though male therapists might have reached the psychology field already androgynous in style (Harvey & Hansen, 1999) they should experience less gender role conflict compared to the general population as a result of their training on gender issues, as well as tolerance for individual differences and experience managing client emotions (Wisch & Mahalik, 1999). Therefore, males might be empathic as females but suppress this as a result of their gender roles and as male therapists may not feel limited by gender roles they become more adaptable across different situations.

As the findings of the relationships between Internet use as well as social media use and empathy were small, other implications regarding this research within the field of counselling psychology are on the whole conceptual. Social media is increasingly permeating every area of individual's lives including the personal, social and professional sphere. It undoubtedly has many advantages, including bridging distances and breaking down barriers. However, how does this use apply for individuals in the helping profession, such as psychologists? The BPS has issued some guidance for psychologists on how to use social media such as *e-Professionalism* (BPS, 2012a) *Supplementary Guidance on the Use of Social Media* (BPS, 2012b) and *Ethics Guidelines for Internet-mediated*

research (BPS, 2013). The HCPC briefly mentions social media use in their *Standards of conduct, performance and ethics* (HCPC, 2016) and how it should be used appropriately and responsibly (p.6) whilst on their webpage they state that registrant's use of social networking sites should be consistent with the standards they set (HCPC, 2017). One reason for this discrepancy may be that HCPC is a professional council regulating many health and care professionals and takes action only if a registrant's use raises concerns about their fitness to practice. The BPS instead, is aimed at psychologists and is sensitive about the increased use of social media and the difficult, changing as well as unclear situations that its members may be part of. It provides its members with clear indications of what they should or should not do as well, including consideration of service user's confidentiality. The HCPC could benefit from offering its registrant's more detailed guidance with suggestions on using social media including client's confidentiality (a legal requirement), transmitting personal material on social media as well as interactions with services users and colleagues. At the present moment, the HCPC is lacking in this area and more guidance is needed.

In summary, the findings of this current study imply that the foundations of empathy are built in at an early age and an on-going cognitive training can limit cognitive decline. The higher Personal Distress reported in Millennials, might also imply that it is a phenomenon occurring in new therapists and better support systems might help them regulate their emotions to prevent compassion fatigue and burnout. Finally, differences in empathy between genders may be due to gender roles. Overall, it is possible that generational differences are actually cultural differences (Twenge et al., 2012) and birth cohorts are shaped by sociocultural environments; therefore, further research in age-related empathy is warranted.

5.6. Future Recommendations

Given these limitations, future research, which I intend to address provided the opportunity, could focus on improving research into therapist generational empathy. In the first place, future research would benefit from using a larger and more heterogeneous. This would include recruiting a larger sample of participants with a more balanced male to female ratio that would generate a more representative sample of the therapist population and whose findings could be generalizable. Future research could also gather additional demographic information such as participant's exact age, years of practicing experience and education level. This will help explore whether there is an age when

individual's empathy peaks, if years of practicing therapy is associated with empathy, as well as whether specific levels of education (or professional training) could be associated with greater empathy. Furthermore, additional information could be gathered on Internet and social media use, for example, distinguishing therapist professional from their personal use and asking them how they use social media (e.g. to post pictures, communicate, get updates, promote their practice etc).

This study found Millennials reported higher Personal Distress compared to Baby Boomers and future research could investigate this further. A mixed method study could be administered, using the Emotion Regulation Questionnaire (Gross & John, 2003) to assess individual's tendency to regulate their emotions through cognitive reappraisal and expressive suppression together with a Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) to monitor bias followed by a qualitative component using semi-structured interviews to ask participants open-ended questions on their experiences of distress in therapeutic encounters and their coping mechanisms. By investigating this further, it could help guide professional training and provide support for future generations of therapists.

The expression of therapist empathy is a complex process involving cognitive, affective, and attitudinal components. Although this study used a multidimensional self-report empathy measure, future studies may want to explore therapist empathy using a multimethodological assessment. This would mean triangulating different empathy measurements including observer ratings (Truax & Carkhuff, 1967; Decker et al., 2014), client ratings (Barrett-Lennard Relationship Inventory, 1962) empathy as well as neuroimaging studies (Bastiaansen, Thioux, & Keysers, 2009; Iacoboni & Lenzi, 2002) given recent advances in social neuroscience research. Furthermore, a longitudinal study of therapist empathy and Internet and social media use from the beginning of training into adulthood would help separate age effects from cohort effects (Gruhn et al., 2008) whilst monitoring technology use and its relationship with empathy.

5.7. Conclusions

It is widely acknowledged that empathy is an integral part of social interactions, particularly within therapy as well as in other disciplines. Nevertheless, the relationship between individual disposition and the complexity of the multidimensional nature of empathy is not simple. This research has found several interesting and provocative findings. Empathic Concern and Perspective Taking were

found to exhibit no observable differences across generations; a reassuring result particularly for therapists and the counselling psychology field overall. Personal Distress and Fantasy however were reported to be higher in Millennials compared to other generations, though further research is necessary to elucidate the cause for these differences.

Empathy is fundamental in therapy in order to build and develop the therapeutic relationship, facilitate the client's process and ultimately gain positive treatment outcomes. An unempathic therapist is unwanted and would risk increasing client drop out rates and negative treatment outcomes. Even though attempts to measure empathy using self-reports as well as other measures have been made, it nonetheless remains a very difficult concept to define let alone capture the entire range of facets (Gleichgerrecht & Decety, 2013). Only by understanding the association of different facets of empathy will it be possible to design evidence based training programmes for therapists to ensure they elicit empathic responses to support their clients but also down-regulate other aspects of empathy, such as personal distress, to avoid compassion fatigue (Gleichgerrecht & Decety, 2013).

Age-related empathy remains a limited area of research. For this reason, more research should be invested in this area, particularly given its essential role in people's rapport with others, professionally, socially and therapeutically. It is a way for individuals to relate to one another in a way that promotes cooperation rather than isolation. Further research should investigate differences in therapist empathy across the lifespan using a longitudinal study, which would offer the opportunity to examine and monitor therapist empathy over time at the same pace of societal trends and technological advances. In addition, future research could help tailor educational and professional training programmes in the development of empathy, the management of personal distress and relationship with technology. Thus, further research is needed to clarify the question of age-related effects of empathy in therapist adulthood.

References

- Abramson, A. (2003). *The History of Television 1942-2000*. Jefferson, North Carolina: McFarland & Company, Inc.
- Adams, F. (2001). Empathy, neural imaging, and the theory versus simulation debate. *Mind and Language*, 14 (4), 368–392.
- Adams, P. (1993). *Gesundheit!* Vermont: Healing Art Press.
- Addis, M.E. (2008). Gender and Depression. *Clinical Psychology: Science and Practice*, 15(3), 153-168.
- Alford, C.F. (2014). Mirror Neurons, psychoanalysis, and the age of empathy. *International Journal of Applied Psychoanalytic Studies*, 13 (1), 7-23.
- Alloway, T., Runac, R., Qureshi, M., & Kemp, G. (2014). Is Facebook linked to selfishness? Investigating the relationships among social media use, empathy and narcissism. *Social Networking*, 3, 150-158.
- Alzheimer's Association (2017). *Brain Health*. Retrieved 28 March, 2017 from https://www.alz.org/brain-health/brain_health_overview.asp
- American Psychiatric Association (2013) *Diagnostic and Statistical Manual of Mental Disorders*. Washington, DC: American Psychiatric Association.
- American Psychological Association (2015). *Stress in America: Paying with our Health*. Retrieved 12 December, 2016 from <http://www.apa.org/news/press/releases/stress/2014/stress-report.pdf>
- Anderson, P. & Konrath, S.H. (2011). *Commentary: Why Should We Care?—What To Do About Declining Student Empathy*. Retrieved 21 March 2017 from <http://chronicle.com/article/Why-Should-We-Care-What/128420/>

Anderson, T., Ogles, B.M., Patterson, C.L., Lambert, M.J., & Vermeersch, D.A. (2009). Therapist effects: Facilitative interpersonal skills as a predictor of therapist success. *Journal of Clinical Psychology*, 65 (7), 755-768.

Angus, L.E. & Kagan, F. (2009). Therapist Empathy and Client Anxiety Reduction in Motivational Interviewing: “She carries with me, the experience”. *Journal of Clinical Psychology: In Session*, 65 (11), 1156-1167.

Araujo, T., Wonneberger, A., Neijens, P. & de Vreese, C. (2017). How much time do you spend online? Understanding and improving the accuracy of self-reported measures of Internet use. *Communication Methods and Measures*, 11 (3), 173-190.

Armfield, N.R., Gray, L.C., & Smith, A.C. (2012). Clinical use of Skype: a review of the evidence base. *Journal of Telemedicine and Telecare*, 18 (2), 125-127.

Arnold, A.P., & Gorski, R.A. (1984). Gonadal steroid induction of structural sex differences in the central nervous system. *Annual Review of Neuroscience*, 7, 413-442.

Asay, P. & Lai, A. (2014). Who’s Googled whom? Trainees’ Internet and online social networking experiences, behaviors, and attitudes with clients and supervisors. *Training and Education in Professional Psychology*, 8(2), 105-111.

Asay, T. P., & Lambert, M. J. (1999). The empirical case for the common factors in therapy: Quantitative findings. In M. A. Hubble, B.L. Duncan & S.D. Miller (Eds.), *The heart and soul of change: What works in therapy* (23-55) Washington, DC, US: American Psychological Association.

Athreya, B.H. & Mouza, C. (2017). *Thinking Skill for the Digital Generation*. Switzerland: Springer International Publishing.

Attar, H.S., & Chandramani, S. (2012). Impact of physician empathy on migraine disability and migraineur compliance. *Annals of Indian Academy of Neurology*, 15 (Suppl 1), S89-S94.

Auyeung, B., Baron-Cohen, S., Ashwin, E., Knickmeyer, R., Taylor, K., & Hackett, (2009). Fetal testosterone and autistic traits. *British Journal of Psychology*, 100, 1-22.

Back M. D., Schmukle S. C., & Egloff B. (2010). Why are narcissists so charming at first sight? Decoding the narcissism-popularity link at zero acquaintance. *Journal of Personality and Social Psychology*, 98, 132–145.

Bailey, P.E., & Henry, J.D. (2009). Subconscious facial expression mimicry is preserved in older adulthood. *Psychology and Aging*, 24(4), 995-1000.

Bailey, P. E., Henry, J.D. & Von Hippel, W. (2008). Empathy and social functioning in late adulthood. *Aging Mental Health*, 12 (4), 499-503.

Baldwin, S.A., Wampold, B.E., & Imel, Z. (2007). Untangling the alliance-outcome correlation: Exploring the relative importance of therapist and patient variability in the alliance. *Journal of Consulting and Clinical Psychology*, 75, 842-852.

Baltes, P. B. (1987). Theoretical propositions of life-span developmental psychology: On the dynamics between growth and decline. *Developmental Psychology*, 23(5), 611-626.

Bakker, A.B., Van Der Zee, K.I., Lewig, K.A., & Dollard, M. F. (2006). The relationship between the big five personality factors and burnout: a study among volunteer counselors. *The Journal of Social Psychology*, 146 (1), 31-50.

Bal, P.M. & Veltkamp, M. (2013). How does fiction reading influence empathy? An experimental investigation on the role of emotional transportation. *PLoS ONE* 8(1): e55341.

Ball, K., Berch, D.B., Helmres, K. F., Jobe, J.J., Leveck, M.D., Marsiske, M., Morris, J.N., Rebok, G.W., Smith, D.M., Tennstedt, S.L., Unverzagt, F.W., Willis, S.L. (2002). Effects of cognitive training interventions with older adults: a randomized controlled trial. *JAMA*, 288 (18), 2271-2281.

Bannon, I., & Correia, M.C. (2006). *The Other Half of Gender. Men's Issues in Development*. Washington, D.C., The International Bank for Reconstruction and Development/ The World Bank.

Barchia, K., and Bussye, K. (2011). Predictors of student defenders of peer aggression victims: Empathy and social cognitive factors. *International Journal of Behavioural Development*, 35 (4), pp. 289-297.

Bargh, J.A. & McKenna, K.Y. (2004). The Internet and social life. *Annual Review of Psychology*, 55, 573-590.

Barlett, C. P. (2015). Anonymously hurting others online: The effect of anonymity on cyberbullying frequency. *Psychology of Popular Media Culture*, 4(2), 70-79.

Baron-Cohen, S. (2003). *The essential difference: Men, women and the extreme male brain*. London: Penguin.

Baron-Cohen, S. (2008). *Autism and Asperger Syndrome*. Great Clarendon Street, Oxford: Oxford University Press.

Baron-Cohen, S., Golan, O. & Ashwin, E. (200). Can emotion recognition be taught to children with autism spectrum conditions? *Philosophical Transactions of the Royal Society B*, 364 (1535), 3567-3574.

Baron-Cohen, S., Lutchmaya, S., & Knickmeyer, R.C., (2004). *Prenatal Testosterone in Mind: Amniotic Fluid Studies*. Cambridge, MA: MIT Press.

Baron-Cohen, S., & Wheelwright, S. (2004). The empathy quotient: an investigation of adults with Asperger Syndrome or high functioning autism and normal sex differences. *Journal of Autism and Developmental Disorders*, 34: 163-175.

Barrera, M. Jr, Glasgow, R.E., McKay, H, G., Boles, S.M., & Feil, E.G (2002). Do Internet-based support interventions changes perceptions of social support?: An experimental trial of approaches

for supporting diabetes self-management. *American Journal of Community Psychology*, 30 (5), 637-654.

Barrett, M.S., Chua, W., Crits-Christoph, P., Gibbons, M.B., Casiano, D., & Thompson, D. (2009). Early withdrawal from mental health treatment: Implications for psychotherapy practice. *Psychotherapy*, 45 (2), 247-267.

Barrett-Lennard, G. T. (1962). Dimensions of therapist response as causal factors in therapeutic change. *Psychological Monographs: General and Applied*, 76(43), 1-36.

Barrett-Lennard, C.T. (1997). The recovery of empathy--toward others and self. In A. C. Bohart and L. S. Greenberg (Eds.), *Empathy reconsidered: New directions in psychotherapy*. Washington, DC: APA Books.

Baskin-Sommers, A., Krusemark, E., & Ronningstam, E. (2014). Empathy in narcissistic personality disorder: from clinical and empirical perspectives. *Personality Disorders*, 5 (3), 323-333.

Bastiaansen, J. A. C. J., Thioux, M., & Keysers, C. (2009). Evidence for mirror systems in emotions. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 364 (1528), 2391–2404.

Batson, C.D. (1991). *The altruism question: toward a social-psychological answer*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Batson C. D., Duncan B. D., Ackerman P., Buckley T., Birch K. (1981). *Is empathic emotion a source of altruistic motivation?* *Journal of Personality and Social Psychology*, 40 (2), 290–302.

BBC News (2017). Amanda Todd case: Accused Dutch man jailed for Cyberbullying. Retrieved 37 March 2017 from <http://www.bbc.co.uk/news/world-us-canada-39295474>

Beadle, J.N., Sheehan, A.H., Dahlben, B., Gutchess, A.H., (2013). Aging, empathy, and prosociality. *Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 70 (2), 215-224.

Beck, A. T., Rush, J. A., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy for depression*. New York: Guilford Press.

Becker, M. W., Alzahabi, R., & Hopwood, C. J. (2013). Media multitasking is associated with symptoms of depression and social anxiety. *CyberPsychology, Behavior, and Social Networking*, 16 (2), 132– 135.

Bellini, L.M. & Shea, J.A. (2005). Mood change and empathy decline persist during three years of internal medicine training. *Academic Medicine*, 80 (2), 164-167.

Bennett, S., Maton, K., & Kervin, L. (2008). The ‘digital natives’ debate: a critical review of the evidence. *British Journal of Educational Technology*, 39 (5), 775-786.

Bergman, S.M., Fearrington, M.E., Davenport, S.W., Bergman, J.Z. (2010). Millennials, narcissism, and social networking: What narcissists do on social networking sites and why. *Personality and Individual Differences*, 50 (5), 706-711.

Birbaumer, N., Veit, R., Lotze, M., Erb, M., Hermann, C., Grodd, W., & Flor, H. (2005). Deficient fear conditioning in psychopathy: A functional magnetic resonance imaging study. *Archives of General Psychiatry*, 62, 799 – 805.

Birditt, K. S., & Fingerman, K. L. (2005). Do we get better at picking our battles? Age differences in descriptions of behavioral reactions to interpersonal tensions. *Journals of Gerontology, Psychological Sciences and Social Sciences*, 60 (B), P121–128.

Birditt, K. S., Fingerman, K. L. & Almeida, D.M. (2005). Age differences in exposure and reactions to interpersonal tensions: a daily diary study. *Psychology and Aging*, 20 (2), 330-240.

Black, S., Hardy, G., Turpin, G., & Parry, G. (2005). Self-reported attachment styles and therapeutic orientation of therapists and their relationship with reported general alliance quality and problems in therapy. *Psychology & Psychotherapy: theory, Research & Practice*, 78, 363-377.

Blair, R.J., 2003. Facial expressions, their communicatory functions and neuro-cognitive substrates. *Philosophical Transactions of the Royal Society of London, Series B: Biological Sciences* 358, 561–572.

Blair, R.J. (2005). Responding to the emotions of others: dissociating forms of empathy through the study of typical and psychiatric populations, *Consciousness and Cognition*, 14 (4), 698-718.

Blanchard-Fields, F., & Cooper, C. (2004). Social cognition and social relationships. In F. R. Lang & K. L. Fingerman (Eds.), *Growing together: Personal relationships across the lifespan* (pp. 268–289). Cambridge, England: Cambridge University Press.

Blau, P. (1964). *Exchange And Power in Social Life*. New York: John Wiley & Sons.

Blume-Marcovici, A.C., Stolberg, R.A., Khademi, M. & Giromini, L. (2015). When therapists cry: implications for supervision and training. *The Clinical Supervisor*, 34 (2), 164-183.

Bohart, A.C., Elliott, R., Greenberg, L.S. & Watson, J.C. (2002). Empathy. In J. Norcross (ed.), *Psychotherapy relationships that work* (pp. 89-108). New York: Oxford University Press.

Bohart, A. C., & Greenberg, L. S. (1997). Empathy: Where are we and where do we go from here? In in A. C. Bohart & L. S. Greenberg (Eds.), *Empathy reconsidered: New directions in psychotherapy* (pp. 419 - 450). Washington, DC: American Psychological Association.

Bohart, A.C., & Stipek, D. (2001). *Constructive & destructive behavior: Implications for family, school, & society*. Washington, DC, US: American Psychological Society.

Bolin, G. (2017). *Media Generations: Experience, identity, and mediatized social change*. New York: Routledge.

Bolton, R.N., Parasuraman, A., Hoefnagels, A., Migchels, N., Kabadayi, S., Gruber, T., Loureiro, Y.K., & Solnet, D. (2013). Understanding Generation Y and their use of social media: a review and research agenda. *Journal of Service Management*, 24 (3), 245-267.

Borenstein, M., Hedges, L.V., Higgins, J.P.T., & Rothstein, H.R. (2009). *Introduction to Meta-Analysis*. John Wiley & Sons, Ltd.

Borst, J.P., Taatgen, N.A., & van Rijn, H. (2010). The problem state: a cognitive bottleneck in multitasking. *Journal of Experimental Psychology: Learning, Memory and Cognition*, 36 (2), 363-382.

Boucher, S., Grey, A. Leong, S.L., Sharples, H. & Horwath, C. (2015) Token monetary incentives improve mail survey response rates and participant retention: results from a large randomised prospective study of mid-age New Zealand women. *New Zealand Medical Journal*, 128 (1413), 20-30.

Brenner, J. & Smith, A. (2013). *72% of Online adults are social networking site users*. Pew Research Internet. Retrieved 26 March, 2017 from http://www.pewinternet.org/files/old-media/Files/Reports/2013/PIP_Social_networking_sites_update_PDF.pdf

British Association for Behavioural and Cognitive Psychotherapies BABCP (2015). *About*. Retrieved 11 December, 2015 from <http://www.babcp.com/About/About.aspx>

British Association for Counselling & Psychotherapy (BACP). (2015). *Introduction*. Retrieved 11 December, 2015 from http://www.bacp.co.uk/join_bacp/

British Association for Counselling and Psychotherapy, BACP (2016). *Training*. Retrieved on 23 November, 2016 from <http://www.bacp.co.uk/student/training.php>

British Association for Counselling and Psychotherapy, BACP (2017). *Theoretical Approaches*. Retrieved on 26 March, 2017 from <http://www.bacp.co.uk/student/modalities.php>

British Psychoanalytic Council. (2015). *About Us*. Retrieved 11 December, 2015 from <http://www.bpc.org.uk/about-us>

British Psychological Society, BPS (2008). *Generic Professional Practice Guidelines*. Retrieved on 24 January, 2017 from

http://www.bps.org.uk/sites/default/files/documents/generic_professional_practice_guidelines.pdf

British Psychological Society, BPS (2009). *Code of Ethics and Conduct*. Retrieved on 5 December, 2016 from

<http://beta.bps.org.uk/sites/beta.bps.org.uk/files/Policy%20%20Files/Code%20of%20Ethics%20and%20Conduct%20%282009%29.pdf>

British Psychological Society (2010) *Code of Human Research Ethics*. Leicester: British Psychological Society. Retrieved 30 June, 2016, from

http://www.bps.org.uk/sites/default/files/documents/code_of_human_research_ethics.pdf

British Psychological Society, BPS (2012a). *E-Professionalism. Guidance on the use of social media by clinical psychologists*. Retrieved on 24 January, 2017 from

<http://www.bps.org.uk/system/files/Public%20files/DCP/cat-1096.pdf>

British Psychological Society, BPS (2012b). *Supplementary Guidance on the use of social media*. Retrieved on 24 January, 2017 from

http://www.bps.org.uk/system/files/images/2012_ethics_committee_social_media.pdf

British Psychological Society (2013) *Ethics Guidelines for Internet-mediated Research. INF206/1.2013*. Leicester: British Psychological Society. Retrieved 30 June 2016, from

<http://www.bps.org.uk/system/files/Public%20files/inf206-guidelines-for-internet-mediated-research.pdf>

British Psychological Society, BPS (2016a). *How do I become one?* Retrieved on 22 November, 2016 from <http://careers.bps.org.uk/area/counselling/how-do-i-become-one>

British Psychological Society, BPS (2016c). *CPD resources: Frequently asked questions*. Retrieved on November 23, 2016 from <http://www.bps.org.uk/careers-education-training/learning-centre-and-cpd/cpd-resources/frequently-asked-questions/frequently-asked-questions>

British Psychological Society, BPS (2016c). *Chartered member (CPsychol)*. Retrieved on November 23, 2016 from

<http://www.bps.org.uk/what-we-do/membership/chartered-member-cpsychol/chartered-member-cpsychol>

Brock, D., Cassell, W. A., Tyrone, C., Maureen, C., Dubey, B. L., Halia, J., Leigh, R. & Laurel, S. (2015). SIS Symbols of PTSD and the Need for Empathy in Therapy. *SIS Journal of Projective Psychology and Mental Health*, 22 (1), 3-8.

Brody, L. R. (2000). The socialization of gender differences in emotional expression: Display rules, infant temperament, and differentiation. In A. H. Fischer (Ed.), *Gender and emotion: Social psychological perspectives* (pp. 24–47). Cambridge, England: Cambridge University Press.

Brooks, D. (2011). *The limits of empathy*. New York Times. Retrieved 26 March 2017 from <http://www.nytimes.com/2011/09/30/opinion/brooks-the-limits-of-empathy.html>

Brummer, L., Stopa, L., and Bucks, R. (2013). The influence of age on emotion regulation strategies and psychological distress. *Behavioural and Cognitive Psychotherapy*, 42 (6), 668-681.

Bryant, B.K. (1982). An index of empathy for children and adolescents. *Child Development*, 53 (2), 413–425.

Bryman, A. (2012). *Social Research Methods. 4th Edition*. Oxford: Oxford University Press.

Buchanan, T. (2000). Potential of the Internet for Personality Research. In Birnbaum, M.H. (Eds.). *Psychological experiments on the Internet* (pp 121-139). Fullerton, California: Academic Press.

Burch, T. (2013). *Smartphones, multitasking and empathy: a polymedia theory perspective*. Oklahoma State University.

Burkard, A.W., & Knox, S. (2004). Effect of therapist color-blindness on empathy and attributions

in cross-cultural counselling, *Journal of Counselling Psychology*, 51 (4), 387-397.

Burns, D. D. & Nolen-Hoeksema, S. (1992). Therapeutic empathy and recovery from depression in cognitive-behavioral therapy: A structural equation model. *Journal of Consulting and Clinical Psychology*, 60(3), 441-449.

Bushman, B.J., & Anderson, C.A. (2009). Comfortably Numb: Desensitizing effects of violent media on helping others. *Psychological Science*, 20 (3), 273-277.

Butterly, A. (2015). *Whatsapp: Record number of messages sent each day*. Bbc Newsbeat. Retrieved on 30 November, 2016 from <http://www.bbc.co.uk/newsbeat/article/30706412/whatsapp-record-number-of-messages-sent-each-day>

Cameron, A.C. & Trivedi, P. K. (2005). *Microeconometrics: Methods and Applications*. New York: Cambridge University Press.

Campbell, W.K. (1999). Narcissism and Romantic Attraction. *Journal of Personality and Social Psychology*, 77 (8), 1254-1270.

Caplan, S. E., & Turner, J. S. (2007). Bringing theory to research on computer-mediated comforting communication. *Computers in Human Behavior*, 23 (2), 985–998.

Carlozzi, A.F., Bull, K.S. Stein, L.B., Ray, K. & Barnes, L. (2002) Empathy Theory and Practice: A Survey of Psychologists and Counselors, *The Journal of Psychology*, 136(2), 161-170.

Carr, G.D. (2011). Psychotherapy research: Implications for practice. *Psychiatric Times*, 28 (8), 31-34.

Carling, P.J. (1995). *Return to Community: Building Support Systems for People with Psychiatric Disabilities*. New York: The Guilford Press.

Carmeli, A. (2003). The relationship between emotional intelligence and work attitudes, behavior

and outcomes: An examination among senior managers. *Journal of Managerial Psychology*, 18(8), 788-813.

Carrier, L. M., Cheever, N. A., Rosen, L. D., Benitez, S., & Chang, J. (2009). Multitasking across generations: Multitasking choices and difficulty ratings in three generations of Americans. *Computers in Human Behavior*, 25, 483– 489.

Carrier, M., Spradlin, A., Bunce, J.P., & Rosen, L. (2015). Virtual empathy: positive and negative aspects of going online upon empathy in young adults. *Computers in Human Behaviour*, 52, 39-48.

Carstensen, L. L., Fung, H. H., & Charles, S. T. (2003). Socioemotional selectivity theory and the regulation of emotion in the second half of life. *Motivation and Emotion*, 27 (2), 103–123.

Charlop-Christy, M.H. & Daneshvar, S. (2003). Using modeling to teach perspective taking to children with autism. *Journal of Positive Behavior Interventions*, 5 (1), 12-21.

Cheng, Y., Hung, A.Y., & Decety, J. (2012). Dissociation between affective sharing and emotion understanding in juvenile psychopaths. *Development and Psychopathology*, 24(2), 623-636.

Christopherson, K. (2007). The positive and negative implications of anonymity in Internet social interactions: on the Internet, nobody knows you're a dog. *Computers in Human Behaviour*, 23 (6), 3038-3056.

Cialdini, R. (1984). *Influence: The Psychology of Persuasion*, New York: Quill.

Clark, A. J. (2010) Empathy and Sympathy: Therapeutic Distinctions in Counselling. *Journal of Mental Health Counselling*, 32(2), 95-101.

Clark-Carter, D. (2010). *Quantitative Psychological research: The complete student's companion (3rd edition)*. Hove: Psychology Press.

Clarke, M.J., Marks, A.D.G., & Lykins, A.D. (2015). Bridging the gap: the effect of gender

normativity on differences in empathy and emotional intelligence. *Journal of Gender Studies*, 25 (2), 522-539.

Clayton, R. B., Nagurney, A., & Smith, J.R. (2013). Cheating, Breakup, and Divorce: Is Facebook Use to Blame? *CyberPsychology, Behavior and Social Networking*, 16, 10, 717-720.

Cleckley, H. (1982). *The mask of sanity*. St. Louis, MO: Mosby.

Coburn, K. L. (2006). Organizing a ground crew for today's helicopter parents. *About Campus*. 11 (3), 9-16.

Cohen, D.J. & Cicchetti, D. (2006). *Developmental psychopathology, theory and method. Second Edition*. Hoboken, New Jersey: John Wiley & Sons.

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences, 2nd Edition*. Hillsdale: Lawrence Erlbaum.

Cohen-Bendahan, C.C., Buitelaar, J.K., van Goozen, S.H., Orlebeke, J.F., & Cohen-Kettenis, P.T. (2005). Is there an effect of prenatal testosterone on aggression and other behavioural traits? A study comparing same-sex and opposite-sex twin girls. *Hormones and Behavior*, 47 (2), 230-237.

Colby, S.L. & Ortman, J.M. (2014). The Baby Boom cohort in the United States: 2012 to 2060. U.S. Department of Commerce, Economics and Statistics Administration. United States Census Bureau. Retrieved 27 March, 2017 from <https://www.census.gov/prod/2014pubs/p25-1141.pdf>

Cole, P.M., Dennis, T.A., Smith-Simon, K.E. & L.H. Cohen. 2009. Preschoolers' emotion regulation strategy understanding: Relations with emotion socialization and child self-regulation. *Social Development*, 18 (2), 324-352.

Collins, F.M. (2014). *The relationship between social media and empathy*. Georgia Southern University. Retrieved on 26 March, 2017 from <http://digitalcommons.georgiasouthern.edu/cgi/viewcontent.cgi?article=2189&context=etd>

Connaway, L. S., Radford, M. L., Dickey, T. J., Williams, J. D. A. & Confer, P. (2008). Sense Making and Synchronicity: Information-Sekking Behaviours of Millenials and Baby Boomers. *Libri*, 58 (2), 123-135.

Contardi, A., Farina, B., Fabbriatore, M., Tamburello, S., Scapellato, P., Penzo, I., Tamburello, A., and Innamorati, M. (2013). Difficulties in emotion regulation and personal distress in young adults with social anxiety. *Rivista di Psichiatria*, 48 (2), 155-161.

Coolican, H. (2009). *Research Methods and Statistics in Psychology*. London: Hodder and Stoughton Ltd.

Cozolino, L. (2010). *The neuroscience of psychotherapy: Building and rebuilding the human brain (2nd Edition.)*. New York, NY: Norton.

Crandall, S. J., & Marion, G. S. (2009). Commentary: identifying attitudes towards empathy: an essential feature of professionalism. *Academic Medicine*, 84 (9), 1174-1176.

Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24 (4) 349-354.

Cucchi, A. (2017). Why Quantitative? BPS Division of Counselling Psychology. Retrieved 26 February, 2016 from <http://www.bps.org.uk/networks-and-communities/member-microsite/division-counselling-psychology/why-quantitative>

Cummings, J., Butler, B., Kraut, B., (2000). The quality of online social relationships. *Communications of the ACM*, 45, 103-108.

Cushway, D. (1992). Stress in clinical psychology trainees. *British Journal of Clinical Psychology*, 31 (2), 169-179.

Damon, W., & Eisenberg, N. (1998). *Handbook of child psychology: Social, emotional, and*

personality development (5th ed.). New York, NY: Wiley. In O'Brien, E., Konrath, S. H., Gruhn, D. & Hagen, L. (2012). Empathic Concern and Perspective Taking: Linear and Quadratic Effects of Age Across the Adult Life Span. *The Journal of Gerontology, Series B: Psychological Sciences and Social Sciences*, 68 (2), 168-175.

Dapretto, M., Davies, M.S., Pfeifer, J. H., Scott, A.A., Sigman, M., Bookheimer, S.Y. & Iacoboni, M. (2005). Understanding emotions in others: mirror neuron dysfunction in children with autism spectrum disorders. *Nature Neuroscience*, 9 (1), 28-30.

Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *Catalog of Selected Documents in Psychology*, 10, 85.

Davis, M.H. (1983a). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44, 113– 126.

Davis, M.H. (1983b). Empathic Concern and the Muscular Dystrophy Telethon: Empathy as a Multidimensional Construct. *Personality and Social Psychology Bulletin*, 9 (2), 223-229.

Davis, M.H. (1983c). Empathic concern and the muscular dystrophy telethon: Empathy as a multidimensional construct. *Personality and Social Psychology Bulletin*, 9, 223–229.

Davis, M.H. (1994). *Empathy: A Social Psychological approach*. Madison, WI: Brown & Benchmark.

Davis, M.H. (1996). *Empathy: A Social Psychological approach*. Boulder: Westview Press.

Davis, M. H., & Franzoi, S. L. (1991). Stability and change in adolescent self-consciousness and empathy. *Journal of Research in Personality*, 25, 70–87.

Davis, M., Luce, C., & Kraus, S.J. (1994). The heritability of characteristics associated with dispositional empathy. *Journal of Personality*, 62 (3), 369–391.

Decety, J., & Jackson, P.L. (2004). The functional architecture of human empathy. *Behavioural Cognitive Neuroscience Review*, 3 (2), 71-100.

Decety, J., & Lamm, C. (2006). Human empathy through the lens of social neuroscience. *The Scientific World Journal*, 6, 1146-1163.

Decety, J. (2015). The neural pathways, development and functions of empathy. *Current Opinion in Behavioural Sciences*, 3, 1-6.

Decety, J., & Meyer, M. (2008). From emotion resonance to empathic understanding: a social developmental neuroscience account. *Development and Psychopathology*, 20 (4), 1053-1080.

Decety, J. & Moriguchi, Y. (2007). The empathic brain and its dysfunction in psychiatric populations: implications for intervention across different clinical conditions. *BioPsychoSocial Medicine*, 1-22.

Decety, J., Yang, C.Y., & Cheng, Y. (2010). Physicians down-regulate their pain empathy response: an event-related brain potential study. *Neuroimage*, 50 (4), 1676-1682.

Decker, S.E., Nich, C., Carroll, K.M., & Martino, S. (2014). Development of the Therapist Empathy Scale. *Behavioural and Cognitive Psychotherapy*, 42, 339-354.

De Corte, K., Buysse, A., Verhofstadt, L.L., Roeyers, H., Ponnet, K., and Davis, M.H. (2007). Measuring empathic tendencies: reliability and validity of the Dutch version of the Interpersonal Reactivity Index. *Journal of the Belgian Association for Psychological Science*, 47 (4), 235-260.

Dehning, S., Gasperi, S., Krause, D., Meyer, S., Reiß, Burger, M., Jacobs, F., Buchheim, A., Muller, N., & Siebeck, M. (2013). Emotional and cognitive empathy in first-year medical students. *ISRN Psychiatry*, vol. 2013, Article ID 801530, 1-6.

Deloitte. (2009). Generation Y: Powerhouse of the Global Economy. Retrieved 27 March, 2017

from

http://www.deloitte.com/assets/DcomUnitedStates/Local%20Assets/Documents/us_consulting_hc_GenerationY_Snapshot_041509.pdf

Deloitte (2015). *Millennials and wealth management: Trends and challenges of the new clientee*. Retrieved on 6 December, 2016 from

<https://www2.deloitte.com/content/dam/Deloitte/lu/Documents/financial-services/lu-millennials-wealth-management-trends-challenges-new-clientele-0106205.pdf>

Derks, D., Fischer, A.H., & Bos, A.E.R. (2008). The role of emotion in computer-mediated communication: a review. *Computers in Human Behavior*, 24 (3), 766-785.

Derntl, B., Finkelmeyer, A., Eickhoff, S., Kellermann, T., Falkenberg, D.I., Schneider, F., & Habel, U. (2010) Multidimensional assessment of empathic abilities: neural correlates and gender differences. *Psychoneuroendocrinology*, 35, 67–82.

Deutsch, F., & Madle, R. (1975). Empathy: Historic and current conceptualizations, measurement, and a cognitive theoretical perspective. *Human Development*, 18 (4), 267-287.

De Vaus, D. (2014). *Surveys in Social Research 6th Edition*. New York, NY: Routledge.

De Waal, F.B.M. (2008). Putting the altruism back into altruism: the evolution of empathy. *Annual Review of Psychology*, 59, 279-300.

Diehl, M., Coyle, N., & Labouvie-Vief, G. (1996). Age and sex differences in strategies of coping and defense across the lifespan. *Psychology and Aging*, 11 (1), 127-139.

DiLillo, D., & Gale, E.B. (2011). To google or not to google: graduate students' use of the Internet to access personal information about clients. *Training and Education in Professional Psychology*, 5 (3), 160-166.

Dillman, D.A., Smyth, J.D. & Christian, L.M. (2014). *Internet, Phone, Mail and Mixed-Mode*

Surveys. (4th ed.). Hoboken, New Jersey: John Wiley & Sons.

Djikic, M., Oatley, K., & Moldoveanu, M.C. (2013). Reading other minds. Effects of literature on empathy. *Scientific Study of Literature*, 3 (1), 28-47.

Donati, M. (2016). Becoming a Reflective Practitioner. In B., Douglas, R., Woolfe, R., S., Strawbridge, E., Kasket, & V., Gailbraith, (Eds) *The Handbook of Counselling Psychology*. London: Sage Publications.

Dong, Y. & Peng, C. J. (2013). Principled missing data methods for researchers. *Springerplus*, 2, 222.

Doo, M. Y. (2006). A problem in online interpersonal skills training: Do learners practice skills? *Open Learning*, 21(3), 263-272.

Douglas, B., Woolfe, R., Strawbridge, S. Kasket, E. & Gailbraith, V. (2016) *The Handbook of Counselling Psychology*. London: Sage Publications.

Dryden, W., & Ellis, A. (1988). Rational-emotive therapy. In: Dobson, K.S. Handbook of Cognitive Behavioural Therapies. The Guildford Press, New York, p. 214-272. In Vyskocilova, J., Prask, J., and Slepecky, M. (2011) Empathy in cognitive behavioural therapy and supervision. *Activitas Nervosa Superior Rediviva*, 53 (2), 72-83.

Duan, C. & Hill, C.E (1996) The current state of empathy research. *Journal of Counseling Psychology*, 43 (3), 261-274.

Duggan, M. (2015). *Mobile Messaging and Social Media*. Pew Research Centre. Retrieved 26 March 2017 from <http://www.pewinternet.org/2015/08/19/mobile-messaging-and-social-media-2015/>

Dziobek, I., Preissler, S., Grozdanovic, Z., Heuser, I., Heekeren, H.R. & Roepke, S. (2011).

Neuronal correlates of altered empathy and social cognition in borderline personality disorder. *Neuroimage*, 57 (2), 539-548.

Eagly, A. H. (1987). *Sex differences in social behavior: A social-role interpretation*. Hillsdale, NJ: Erlbaum.

Edmunds, J. & Turner, B.S. (2002). *Generations, culture and society*. Philadelphia: Open University Press.

Eisenberg, N. (1982). The development of reasoning about prosocial behavior. In N. Eisenberg (Ed) *The development of prosocial behaviour* (pp. 219-249). New York: Academic Press.

Eisenberg, N. (2000). Emotion, regulation, and moral development. *Annual Review of Psychology*, 51, 665-697.

Eisenberg, N. (2006). Empathy-related responding and prosocial behavior. Empathy and Fairness. *Novartis Foundation Symposium* 278. Chichester: Wiley.

Eisenberg, N., & Eggum, N.D. (2009). Empathic Responding: Sympathy and Personal Distress. In J. Decety and W. Ickes (Eds). *The Social Neuroscience of Empathy*. MIT Press: Cambridge, Massachusetts.

Eisenberg, N. & Fabes, R.A. (1990). Empathy: Conceptualization, measurement, and relation to prosocial behaviour. *Motivation and Emotion*, 14 (2), 131-149.

Eisenberg, N., & Lennon, R. (1983). Sex differences in empathy and related capacities. *Psychological Bulletin*, 94, 100–131.

Eisenberg, N. & Spinrad, T.L. (2004). Emotion-related regulation: sharpening the definition. *Child Development*, 75 (2), 334-339.

Eisenberg-Berg, N., & Mussen, P. (1978). Empathy and moral development in adolescence.

Developmental Psychology, 14 (2), 185-186.

Elliott, R., Bohart, A.C., Watson, J.C., & Greenberg, L.S. (2011). Empathy. In J. Norcross (ed.), *Psychotherapy relationships that work (2nd ed.)* (pp. 132-152). New York: Oxford University Press.

Elliott, R., Watson, J., Goldman, R., & Greenberg, L. (2004). *Learning Emotion-focused therapy: The Process-Experiential approach to change*. Washington, DC, US: American Psychological Association.

Ellison, N., Heino, R., & Gibbs, J. (2006). Managing impressions online: self-presentation processes in the online dating environment. *Journal of computer-mediated communication*, 11 (2), 415-441.

Enders, C.K. (2010). *Applied Missing Data Analysis*. New York: The Guildford Press.

Eppler, M.J. & Mengis, J. (2004). The concept of information overload – a review of literature from organization science, accounting, marketing, MIS, and related disciplines. *The Information Society: An International Journal*, 20 (5), 1-20.

Erikson, E. H. (1963). *Childhood and society* (2nd ed.), New York: Norton.

Esri UK (2015). *Over a third of Brits feel stressed everyday due to data overload*. Retrieved on 1 October 2016 from <http://www.esriuk.com/news/press-releases/24-stress-map>

Evans, S.C., Roberts, M.C., Keeley, J.W., Blosson, J.B., Amaro, C.M., Garcia, A.M., Stough, C.O., Canter, K.S., Robles, R., & Reed, G.M. (2015). Vignette methodologies for studying clinicians decision-making: validity, utility, and application in ICD-11 field studies. *Journal of Clinical and Health Psychology*, 15 (2), 160-170.

Evans, A.N., Rooney, B.J. (2014). *Methods in Psychological Research, 3rd Edition*. United States of America: Sage Publications Inc.

Eysenck, S. B., Pearson, P.R., Easting, G., & Allsopp, J. (1985). Age norms for impulsiveness, venturesomeness and empathy in adults. *Personality and Individual Differences*, 6 (5), 613-619.

Facebook (2016). *Newsroom. Company Info*. Retrieved on 4 December, 2016 from <https://newsroom.fb.com/company-info/>

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149-1160.

Fauth, J., Gates, S., Vinca, M., Boles, S., & Hayes, J. (2007). Big ideas for psychotherapy training. *Psychotherapy: Theory, Research, Practice, Training*, 44 (4), 384-391.

Feller, CP. & Cottone, R.R. (2003). The Importance of Empathy in the Therapeutic Alliance, *Journal of Humanistic Counselling, Education and Development*, 42, 53-61.

Fernandez, Y. (2002). *In their shoes*. Oklahoma City, Oklahoma: Wood ‘N’ Barnes Publishing & Distribution.

Fernandez, A.M., Dufey, M., & Kramp, U. (2011). Testing the psychometric properties of the Interpersonal Reactivity Index (IRI) in Chile: Empathy in a different cultural context. *European Journal of Psychological Assessment*, 27 (3), 179-185.

Fernandez-Olano, C., Montoyra-Fernandez, J., & Salinas-Sanchez, A.S. (2008). Impact of clinical interview training on the empathy level of medical students and medical residents. *Medical Teacher*, 30 (3), 322-324.

Feshbach, N. D. (1997). Empathy: The formative years—implications for clinical practice. In A. Bohart & L. Greenberg (Eds.), *Empathy reconsidered: New directions in psychotherapy* (pp. 33–59). Washington, DC: American Psychological Association.

Field, A. P. (2009). *Discovering statistics using SPSS*. London, England: SAGE.

Finlay, L. (2003). The Reflexive Journey: Mapping Multiple Routes. In L. Finlay and B. Gough (Eds). *Reflexivity: a Practical Guide for Researchers in Health and Social Sciences*. Oxford: Blackwell Science Ltd.

Finlay, L. and Gough, B. (2003). *Reflexivity: A Practical Guide For Researchers In Health and Social Sciences*. UK: Blackwell.

Fischer, J., Paveza, G.J., Kickertz, N.S., Hubbard, L.J., & Grayston, S.B. (2002). The Relationship between theoretical orientation and therapists' empathy, warmth and genuineness. *Journal of Counseling Psychology*, 22 (5), 399-403.

Francis, R. (2013) Report of the Mid Staffordshire NHS Foundation Trust Public: Executive summary. HC 947. London: The Stationery Office. Retrieved 30 March 2017 from <http://webarchive.nationalarchives.gov.uk/20150407084003/http://www.midstaffspublicinquiry.com/sites/default/files/report/Executive%20summary.pdf>

Frey, T.K., & Tatum, N.T. (2016). Forum: Instructional Communication and Millennial students: hoverboards and “hovermoms”: helicopter parents and their influence on Millennials student's rapport with instructors. *Communication Education*, 65 (3), 359-361.

Fry, C. L. (1985). Culture, behavior and aging in the comparative perspective. In J. E. Birren & K. W. Schaie (Eds.), *Handbook of the psychology of aging* (pp. 216-244). New York: Van Nostrand Reinhold Company.

Fry, R. (2016). *For the first time in modern era, living with parents edges out other living arrangements for 18 to 34 year olds*. Retrieved on 6 December, 2016 from <http://www.pewsocialtrends.org/2016/05/24/for-first-time-in-modern-era-living-with-parents-edges-out-other-living-arrangements-for-18-to-34-year-olds/>

Gale, E. B. (2012). *Psychotherapy Clients' Online Behavior and Opinions Regarding Internet*

Searches Conducted by Therapists. Dissertation.

Garaigordobil, M. (2009). A comparative analysis of empathy in childhood and adolescence: gender differences and associated socio-emotional variables. *International Journal of Psychology and Psychological Therapy*, 9, (2), 217-235.

Gentile, B., Twenge, J. M. & Campbell, W. K. (2010). Birth cohort differences in self-esteem, 1988–2008: A cross-temporal meta-analysis. *Review of General Psychology*, 14 (3), 261-268.

George, B., Sims, P., McLean, A. N., & Mayer, D. (2007). Discovering your authentic leadership. *Harvard Business Review*, 85, 129-138.

Gergen K. J. & Gergen M. M. (1991) *Toward reflexive methodologies*. In: Steier F. (ed.) *Research and reflexivity* (pp. 76-95). Sage Publications, London.

Gerrish K. & Lacey A. (2006). *The Research Process in Nursing. 5th edition*. Oxford: Blackwell Publishing.

Geschwind, N., & Galaburda, A. M. (1985). Cerebral lateralization: Biological mechanisms, associations, and pathology. *Archives of Neurology*, 42 (5), 428–654.

Gibbons, S.B. (2011). Understanding Empathy as a Complex Construct: A Review of the Literature. *Clinical Social Work Journal*, 39 (3), 243-252.

Gilet, A.L., Mella, N., Studer, J., Gruhn, D. & Labouvie-Vief, G. (2013). Assessing Dispositional Empathy in Adults: A French Validation of the Interpersonal Reactivity Index (IRI). *Canadian Journal of Behavioural Science*. 45(1), 42-48.

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.

Gilligan, C., & Wiggins, G. (1988). The origins of morality in early childhood relationships. In C.

Gilligan, J.V. Ward, & J.M. Taylor (Eds.), *Mapping the moral domain*. Cambridge, MA: Harvard University Press.

Gleichgerricht, E. & Decety, J. (2014). The relationship between difference facets of empathy, pain perception and compassion fatigue among physicians. *Frontiers of Behavioural Science*, 11 (8), 243.

Global Council on Brain Health (2017). *The Brain and Social Connectedness: GCBH Recommendations on Social Engagement and Brain Health*. Retrieved 28 March 2017 from http://www.aarp.org/content/dam/aarp/health/brain_health/2017/02/gcbh-social-engagement-report.pdf

Goleman, D. (1995). *Emotional intelligence*. New York: Bantam Books.

Gov UK (2016). *School leaving age*. Retrieved on 23 November, 2016 from <https://www.gov.uk/know-when-you-can-leave-school>

Gough, B. (2003). Deconstructing Reflexivity. In L. Finlay and B. Gough (Eds). *Reflexivity: a Practical Guide for Researchers in Health and Social Sciences*. Oxford: Blackwell Science Ltd.

Gough, H.G. (1990). The California Psychological Inventory. In C.E. Jr. Watkins and V.L. Campbell (Eds.). *Testing in counselling practice*. Hillsdale, NJ, US: Lawrence Erlbaum Associates Inc.

Gough, H. G., & Bradley, P. (1996). *CPI manual 3rd Edition*. Mountain View, CA: CPP Inc.

Gould, O.N. & Gautreau, S. M. (2014). Empathy and Conversational Enjoyment in Younger and Older Adults. *Experimental Aging Research*, 40, 60-80.

Greenberg, L.S., & Elliott, R. (1997). Varieties of empathic responding. In A. C. Bohart & L. S. Greenberg (Eds.), *Empathy reconsidered: New directions in psychotherapy* (pp. 167-186). Washington, DC: American Psychological Association.

Grieve, R., Indian, M., Witteveen, K., Anne Tolan, G. & Marrington, J. (2013). Face-to-face or Facebook: can social connectedness be derived online? *Journal Computers in Human Behavior*, 29 (3), 604-609.

Gross, J.J. (2002). Emotion regulation: affective, cognitive, and social consequences. *Psychophysiology*, 39 (3), 281-291.

Gross, J.J. (2013). *Handbook of emotion regulation: Second edition*. New York, NY: The Guildford Press.

Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry*, 26 (1), 1–26.

Gross, J.J., Cartensen, L.L., Pasupathi, M. Tsai, J. Skorpen, C.G., & Hsu, A.Y.C. (1997). Emotion and Aging: Experience, Expression and Control. *Psychology and Aging*, 12 (4), 590-599.

Gross, J.J., & John, O.P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85 (2), 348-362.

Groves, R.M., Cialdini. R.B., & Couper, M.P. (1992). Understanding the decision to participate in a survey. *Public Opinion Quarterly*, 56, 475-495.

Grühn, D., Rebucal, K., Diehl, M., Lumley, M., & Labouvie-Vief, G. (2008). Empathy across the adult lifespan: Longitudinal and experience-sampling findings. *Emotion*, 8, 753-765.

Gumpert, G. & Cathcart, R. (1985). Media Grammars, Generations and Media Gaps', *Critical Studies in Mass Communication*, 2, 23-35.

Gunther, M., Evans, G., Mefford, L., & Coe, T.R. (2007). The relationships between leadership styles and empathy among student nurses. *Nursing Outlook*, 55 (4), 196-201.

Gurman, Lebow & Snyder (2015). *Clinical handbook of couple therapy*. Fifth Edition. New York, NY: The Guildford Press.

Gurven, M., & Kaplan, H. S. (2009). Beyond the grandmother hypothesis: Evolutionary models of human longevity. In J. Sokolovsky (Ed.), *The cultural context of aging: Worldwide perspectives* (3rd ed., pp. 53–66). Santa Barbara, CA: Greenwood Press.

Gutnick, A. L., Robb, M., Takeuchi, L., & Kotler, J. (2010). *Always connected: The new digital media habits of young children*. New York: The Joan Ganz Cooney Centre at Sesame Workshop. Retrieved on 26 March, 2017 from http://www.joanganzcooneycenter.org/wp-content/uploads/2011/03/jgcc_alwaysconnected.pdf

Guy, J.D., Poelstra, P.L., & Stark, M.J. (1989). Personal Distress and Therapeutic Effectiveness: National Survey of Psychologists Practising Psychotherapy. *Professional Psychology: Research and Practice*, 20 (1), 48-50.

Hall, A.E., & Bracken C.C. (2011). “I really liked that movie”. Testing the relationship between trait empathy, transportation, perceived realism, and movie enjoyment. *Journal of Media Psychology*, 23(2), 90–99.

Halpern, J. (2003). What is clinical empathy? *Journal of General Internal Medicine*, 18 (8), 670–674.

Happ, C. (2013). *Empathy in Video Games and Other Media*. Philipps-Universität Marburg 2013 Psychologie.

Hare, R. D. (1991). *The Hare Psychopathy Checklist — Revised*. Toronto, Ontario: Multi-Health Systems.

Hare, R.D. (1993) *Without conscience: The disturbing world of the psychopaths among us*. New York: Simon and Schuster

Harvey, J.A. & Hansen, C. E. (1999). Gender role of male therapists in both professional and personal life. *Sex Roles*, 41, 105 – 113.

Hartman, J. L., & McCambridge, J. (2011). Optimizing millennials' communication styles. *Business Communication Quarterly*, 74(1), 22-44.

Hatcher, S.L., Favorite, T.K., Hardy, E.A., Goode, R.L., Deshetler, L.A., & Thomas, R.M. (2005). An analogue study of therapist empathic process: working with difference. *Psychotherapy: Theory, Research, Practice, Training*, 42 (2), 198-210.

Hawk, S.T., Keusers, L., Branje, S.J.T., Van Deri Graaf, J., De Wied, M. & Meeus, W. (2013). Examining the Interpersonal Reactivity Index (IRI) Among Early and Late Adolescents and Their Mothers. *Journal of Personality Assessment*, 95(1), 96-106.

Hayes, A.F., Slater, M.D., & Snyder, L.B. (2008). *The SAGE Sourcebook of Advanced Data Analysis Methods for Communication Research*. Thousand Oaks, California: SAGE Publications Inc.

Health and Care Professions Council. (2015a). *Professions*. Retrieved 11 December 2015 from <http://www.hcpc-uk.co.uk/aboutregistration/professions/index.asp?id=14>

Health and Care Professions Council. (2015b). *Protected Titles*. Retrieved 11 December 2015 from <http://www.hcpc-uk.org/aboutregistration/protectedtitles/>

Health and Care Professions Council (2016). *Standards of conduct, performance and ethics*. Retrieved on 24 January, 2017 from <http://www.hpc-uk.org/assets/documents/10004EDFStandardsofconduct,performanceandethics.pdf>

Health and Care Professions Council – HCPC. (2017). *Use of social networking sites*. Retrieved on 24 January, 2017 from <http://www.hpc-uk.org/registrants/standards/socialnetworking/>

Health and Care Professions Council – HCPC. (2008). *Confidentiality – guidance for registrants*.

Retrieved on 24 January, 2017 from

<http://www.hcpc-uk.org/assets/documents/100023F1GuidanceonconfidentialityFINAL.pdf>

Heerwegh, D. (2004). *Using progress indicators in web surveys*. Paper prepared for the 59th AAPOR conference, Phoenix, Arizona, May 13 - 16, 2004. Retrieved 11 December 2015 from <https://perswww.kuleuven.be/~u0034437/public/Files/Heerwegh%20Using%20Progress%20Indicators.pdf>

Helson, R., Jones, C., & Kwan, V.S.Y. (2002). Personality change over 40 years of adulthood: Hierarchical linear modeling analyses of two longitudinal samples. *Journal of Personality and Social Psychology*, 83 (3), 752–766.

Hepper, E.G., Hart, C.M., & Sedikides, C. (2014). Moving Narcissus: Can Narcissists be empathic? *Personality and Social Psychology Bulletin*, 40 (9), 1079-1091.

Hermans, D., Rimè, B., & Mesquita, B. (2013). *Changing emotions*. UK: Taylor & Francis Ltd.

Hersoug, A.G., Hoglend, P., Monsen, J.T., Havik, O.E. (2001). Quality of working alliance in psychotherapy: therapist variables and patient/therapist similarity as predictors. *Journal of Psychotherapeutic Practice and Research*, 10 (4), 205-216.

Herzog, A.R. & Dielman, L. (1985). Age differences in response accuracy for factual survey questions. *Journal of Gerontology*, 40 (3), 350-357.

Hess, T. M. (2014). Selective engagement of cognitive resources: Motivational influences on older adults' cognitive functioning. *Perspectives on Psychological Science*, 9, 388 – 407.

Hilbert, M. & Lopez, P. (2011). The world's technological capacity to store, communicate, and compute information. *Science*, 332 (6025), 60-65.

Hill, C.E., Sullivan, C., Knox, S., Schlosser, L.Z. (2007). Becoming psychotherapists: experiences of novice trainees in a beginning graduate class. *Psychotherapy*, 44(4), 434-449.

Hindin, S.B. and Zelinski, E.M. (2011). Extended practice and aerobic exercises interventions benefit untrained cognitive outcomes in older adults: a meta analysis. *American Geriatrics Society*, 60 (1), 136-141.

Hoare, C. (2006). *Handbook of Adult Development and Learning*. Oxford: Oxford University Press.

Hoffman, M. L. (1984). Interaction of affect and cognition on empathy. In C. E. Izard, J. Kagan, & R. B. Zajonc (Eds.), *Emotions, cognition, and behavior* (pp. 103-131). New York, NY: Cambridge University Press.

Hoffman, M.L. (2008). Empathy and Prosocial Behavior. In M. Lewis, J.M., Haviland-Jones, & L., Feldman Barrett, L. (Eds). *Handbook of Emotions. Third Edition*. New York: The Guildford Press.

Hogan, R. (1969). Development of an empathy scale. *Journal of Consulting and Clinical Psychology*, 33, 307-316.

Hojat, M. (2016). *Empathy in Health Professions Education and Patient Care*. New York: Springer International Publishing.

Hojat, M., Louis, D.Z., Markham, F.W., Wender, R. Rabinowitz, C., & Gonnella, S. (2011). Physicians' empathy and clinical outcomes for diabetic patients. *Academic Medicine*, 86 (3), 359-364.

Hojat, M., Michalec, B., Veloski, J.J., & Tykocinski, M. (2015). Can empathy, other personalità attributes, and level of positive social influence in medical school identify potential leaders in medicine. *Academic Medicine*, 90 (4), 505-510.

Holbrook, A. L., Green, M. C., & Krosnick, J. A. (2003). Telephone vs. face-to-face interviewing of national probability samples with long questionnaires: comparisons of respondent satisficing and social desirability response bias. *Public Opinion Quarterly*, 67, 79-125.

Holt, S. & Marques, J. (2012). Empathy in leadership: Appropriate or misplaced? An empirical study on a topic that is asking for attention. *Journal of Business Ethics*, 105(1), 95-105.

Homans, G. (1961). *Social Behavior*. New York: Harcourt, Brace & World.

Horvath, A.O. & Symonds, B.D. (1991). Relation between working alliance and outcome in psychotherapy: a meta-analysis. *Journal of Counseling Psychology*, 38 (2), 139-149.

Howe, N. & Strauss, W. (2000). *Millennials Rising: the next great generation*. New York: Vintage Books.

Huang, C. (2010). Internet use and psychological well being: A meta-analysis. *Cyberpsychology, Behavior, and Social Networking*, 13 (3), 241–249.

Huang, X., Li, W., Sun, B., Chen, H., & Davis, M.H. (2012). The validation of the Interpersonal Reactivity Index for Chinese teachers from primary and middle schools. *Journal of Psychoeducational Assessment*, 30 (2), 194-204.

Hughes, T.F., Andel, R., Small, B.J., Borenstein, A.R., & Mortimer, J.A. (2008). The association between social resources and cognitive change in older adults: evidence from the Charlotte County healthy aging study. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 63 (4), P241-P244.

Hultsch, D.F., Hertzog, C., Small, B.J., & Dixon, R.A. (1999). Use it or lose it: Engaged lifestyle as a buffer of cognitive decline in aging? *Psychology and Aging*, 14 (2), 245-263.

Husley, T.L. (2011). Empathy 2.0. Virtual Intimacy. *Phi Kappa Phi Forum*, 91 (1), 23-23.

Iacoboni, M., & Lenzi, G.L. (2002). Mirror neurons, the insula, and empathy (commentary). *Behavioral and Brain Sciences*, 25 (1), 39-40.

Iacoboni, M., Molnar-Szakacs, I., Gallese, V., Buccino, G., Mazziotta, J.C., & Rizzolatti, G. (2005).

Predicting the Future: Mirror Neurons Reflect the Intentions of Others. *PLoS Biology*, 3(3), 1.

Ickes, W. (1993). Empathic accuracy. *Journal of Personality*, 61 (4), 587–610.

Isaacowitz, D.M., Lockenhoff, C.E., Lane, R.D., Wright, R., Sechrest, L., Riedel, R., & Costa, P.T. (2007). Age differences in recognition of emotion in lexical stimuli and facial expressions. *Psychology and Aging*, 22 (1), 147-159.

Isaacowitz, D.M. & Stanley, J.T. (2011). Bringing an ecological perspective to the study of aging and recognition of emotional facial expression: past, current and future methods. *Journal of Nonverbal behaviour*, 35(4), 261-278.

Ishak, N.M., Abidin, M.H.Z., Yazid, A. & Bakar, A.Y. A. (2014). Dimensions of social skills and their relationship with empathy among gifted and talented students in Malaysia. *Procedia – Social and Behavioural Sciences*, 116, 750-753.

Jahoda, G. (2005). Theodor Lipps and the shift from “sympathy” to “empathy”. *Journal of The History of the Behavioral Sciences*, 41(2), 151-163.

Jin, Y. (2010). Emotional Leadership as a Key Dimension of Public Relations Leadership: A National Survey of Public Relations Leaders. *Journal of Public Relations Research*, 22(2), 159-181.

Johnson, D.R. (2012). Transportation into a story increases empathy, prosocial behavior, and perceptual bias toward fearful expression. *Personality and Individual Differences*, 52 (2), 150-155.

Johnson, D.R., Cushman, G.K., Borden, L.A., & McCune, M.S. (2013). Potentiating empathic growth: Generating imagery while reading fiction increases empathy and prosocial behavior. *Psychology of Aesthetics, Creativity and the Arts*, 7 (3), 306-312.

Johnson, J.A. (1990). Empathy as a personality disposition. In R.C. Mackay, J.R. Hughes, & E.J. Carver (Eds). *Empathy in the Helping Relationship*. New York: Springer Publishing Company.

Jolliffe, D., & Farrington, D. P. (2004). Empathy and offending: A systematic review and meta-analysis. *Aggression and Violent Behavior*, 9, 441-476.

Jones, S. & Fox, S. (2009). Generations Online in 2009. Pew Research Centre. Retrieved 28 March, 2017 from <http://www.pewinternet.org/2009/01/28/generations-online-in-2009/>

Jones-Smith, E. (2014). *Strengths-based therapy: Connecting theory, practice and skills*. USA: SAGE Publications.

Kalman, Y. M., & Rafaeli, S. (2011). Online pauses and silence: Chronemic expectancy violations in written computer-mediated communication. *Communication Research* , 38 (1) , 54– 69.

Karniol, R., Gabay, R., Ochion, Y., & Harari, Y. (1998). Is gender or gender-role orientation a better predictor of empathy in adolescence? *Sex Roles*, 39, 1(2), 45-59.

Kasket, E. (2012). The counselling psychologist researcher. *Counselling Psychology Review*, 27(2), 64 73.

Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, 22, 280–287.

Keen, S. (2007). *Empathy and the Novel*. New York, NY: Oxford University Press.

Keightley, M. L., Winocur, G., Burianova, H., Hongwanishkul, D., and Grady, C. L. (2006). Age effects on social cognition: faces tell a different story. *Psychology and Aging* 21, 558–572

Kellett, J. B., Humphrey, R. H. & Sleeth, R. G. (2002.) Empathy and Complex Task Performance: Two Routes to Leadership. *The Leadership Quarterly*, 13, 523–544.

Kellett, J. B., Humphrey, R. H. & Sleeth, R. G. (2006). Empathy and the Emergence of Task and Relations Leaders. *The Leadership Quarterly*, 17, 146 –162.

Kern, Koegel, L., Ashbaugh, K., Navab, A., & Koegel, R.L. (2015). Improving Empathic Communication Skills in Adults with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 46 (3), 921-933.

Keyes, K.M., Utz, R.L., Robinson, W. & Li, G. (2010). What is cohort effect? Comparison of three statistical methods for modelling cohort effects in obesity prevalence in the United States, 1971-2006. *Social Science and Medicine Journal*, 70 (7), 1100-1108.

Khanjani, Z. Jeddi, E.M. Hekmati, I., Khalilzade, S., Nia, M.E., Andalib, M. & Ashrafi, P. (2015). Comparison of Cognitive Empathy, Emotional Empathy, and social functioning in different age groups. *Australian Psychologist*, 50 (1), 80-85.

Kiehl, K. A., Smith, A. M., Hare, R. D., Mendrek, A., Forster, B. B., Brink, J., & Liddle, P. F. (2001). Limbic abnormalities in affective processing by criminal psychopaths as revealed by functional magnetic resonance imaging. *Biological Psychiatry*, 50, 677– 684.

Kim S.S., Kaplowitz, S., & Johnston, M.V. (2004). The effects of physician empathy on patient satisfaction and compliance. *Evaluations and the Health Professions*, 27 (3), 237-251.

Kinnick, K. N., Krugman, D.M., & Cameron, G.T. (1996). Compassion fatigue: communication burnout toward social problems. *Journalism & Mass Communication Quarterly*, 73 (3), 687-707.

Klein, K.J.K., & Hodges, S. D. (2001). Gender differences, motivation, and empathic accuracy: when it pays to understand. *Personality and Social Psychology*, 27 (6), 720-730.

Klimecki, O. & Singer, T. (2012). Empathic Distress Fatigue rather than Compassion Fatigue? – Integrating finding from empathy research in psychology and social neuroscience. In B. Oakley, A. Knafo, G. Madhavan and D. Wilson (Eds.) *Pathological Altruism*. Oxford: Oxford University Press.

Knafo, A., Zayn-Waxler, C., Davidov, M., Van Hulle, C., Robison, J.L. Rheem S.H. (2009). Empathy in early childhood. Genetic, environmental and affective contributions. *Annals of the New York Academy of Sciences*. 1167, 103-114.

Knauper, B., Carriere, K., Chamandy, M., Xu, Z., Schwarz, N. & Rosen, N.O. (2016). How aging affects self-reports. *European Journal of Ageing*, 13 (2), 185-193.

Kohler, W. (1929). *Gestalt psychology*. Oxford: Liveright.

Kohut, H. (1959). Introspection, empathy, and psychoanalysis: An examination of the relationship between mode of observation and theory. In P. H. Ornstein (Ed.), *The search for the self* (Vol. 1. pp. 205-232). New York: International University Press.

Konrath, S. (2012). The Empathy Paradox: Increasing disconnection in the age of increasing connection. In Luppigini, R. (Eds). *Handbook of Research of Technoself: Identity in a Technological Society* (pp204 – 228). Hershey, PA.: IGI Global.

Konrath, S. (2013). A critical analysis of the Interpersonal Reactivity Index. MedEdPORTAL Directory and Repository of Educational Assessment Measures (DREAM).

Konrath, S., Falk, E., Fuhrel-Forbis, A., Liu, M., Swain, H., Tolman, R., Cunningham, R. & Walton, M. (2015). Can text messages increase empathy and Prosocial behaviour? The development and initial validation of text to connect. *PLoS ONE*, 10 (9), 1-27.

Konrath, S., & Grynberg, D. (2013). The Positive (and Negative) Psychology of Empathy. In Watt, D. & Panskepp, J. (Eds). *The Neurobiology and Psychology of Empathy*, Nova Science Publishers, Inc. Retrieved 23 October 2016 from

https://www.ipearlab.org/media/publications/Konrath_Grynberg_2013.pdf

Konrath, S., O'Brien, E., Hsing, C. (2011). Changes in dispositional empathy in American college students over time: a meta-analysis. *Personality and Social Psychology Review*, 15 (2), 180-198.

Kraut, R., Olson, J., Banaji, M., Bruckman, A., Cohen, J. & Couper, M. (2004). Psychology Research Online. *American Psychologist*, 59(2), 105-117.

Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukophadhyay, T. & Scherlis, W. (1998). Internet paradox: a social technology that reduces social involvement and psychological wellbeing? *American Psychologist*, 53 (9), 1017-1031.

Krumpal, I. (2011). Determinants of social desirability bias in sensitive surveys: a literature review. *Quality and Quantity*, 47 (4), 2025-2047.

Labouvie-Vief, G. (2009). Cognition and equilibrium regulation in development and aging. *Restorative Neurology and Neuroscience*, 27, 551–565. In O'Brien, E., Konrath, S. H., Gruhn, D. & Hagen, L. (2012). Empathic Concern and Perspective Taking: Linear and Quadratic Effects of Age Across the Adult Life Span. *The Journal of Gerontology, Series B: Psychological Sciences and Social Sciences*, 68 (2), 168-175.

Labouvie-Vief, G., & DeVoe, M. (1991). Emotion regulation in adulthood and later life: A developmental view. *Annual Review of Gerontology and Geriatrics, Vol. 2*. New York: Springer.

Labouvie-Vief, G., Grünh, D., & Studer, J. (2010). Dynamic integration of emotion and cognition: Equilibrium regulation in development and aging. In R. M. Lerner, M. E. Lamb, & A. M. Freund (Eds.), *The handbook of life-span development* (2nd ed., pp. 79–115). Hoboken, NJ: Wiley.

Laing, R.D. (1965). *The divided- self*. United Kingdom: Penguin Books.

Lamb, M., & Freund, A. (2010). *The Handbook of Life-span Development: Social and Emotional Development. Vol.2*. New Jersey: John Wiley & Sons Inc.

Lambert, M.J., & Barley, D.E. (2001). Research summary on the therapeutic relationship and psychotherapy outcome. *Psychotherapy: Theory, Research, Practice Training*, 38 (4), 357-361.

Lancaster, L. C. & Stillman, D. (2002). *When Generations Collide. Who They Are. Why They Clash. How to Solve the Generational Puzzle at Work*. New York: Collins Business.

Langdridge, D. (2007). *Phenomenological Psychology. Theory, Research and Method*. Essex:

Pearson Education Limited.

Landridge, D., & Hagger-Johnson, G. (2000). *Introduction to Research Methods and Data Analysis in Psychology*, 2nd Edition, Harlow: Pearson Education.

Lapidot-Lefler, M. & Barak, A. (2012). Effects of anonymity, invisibility, and lack of eye contact on toxic online disinhibition. *Computers in Human Behaviour*, 28 (2), 434-443.

LaRose, R., Connolly, R., Lee, H., Li, K., & Hales, K.D. (2014). Connection overload? A Cross cultural study of the consequences of social media connection. *Information Systems Management*, 31 (1), 59-73.

Lavrakas, P.J. (2008). *Encyclopedia of Survey Research Methods*. Volume 2. Thousand Oaks, California. SAGE Publications Inc.

Lawton, M.P., Kleban, M.H., Rajagopal, D., & Dean, J. (1992). Dimensions of affective experience in three age groups. *Psychology and Aging*, 7 (2), 171-184.

Lee, S.A., Guajardo, N.R., Short, S.D., & King, W. (2010). Individual differences in ocular level empathic accuracy ability: the predictive power of fantasy empathy. *Personality and Individual Differences*, 49 (1), 68-71.

Lee, Y., & Change, C. (2008). Intrinsic or Extrinsic? Determinants affecting donations behaviors. *International Journal of Educational Advancement*, 8 (1), 13-24.

Lei, Y. & Duan, C. (2014). Relationship between therapist empathy and client-perceived working alliance in China: A multilevel modelling analysis. *Counselling Psychology Quarterly*, 27 (2), 200-215.

Lella, A., & Lipsman, A. (2015). *2015 U.S. digital future in Focus. comScoe Whitepaper*. Retrieved on 30 November 2016 from <https://www.comscore.com/Insights/Presentations-and-Whitepapers/2015/2015-US-Digital-Future-in-Focus>

Lenhart, A. (2015). *Teens, social media and technology overview*. Pew Research Centre. Retrieved 27 March 2017 from <http://www.pewinternet.org/2015/04/09/teens-social-media-technology-2015/>

Lennon, R., & Eisenberg, N. (1987). Gender and age differences in empathy and sympathy. In N. Eisenberg & J. Strayer (Eds.), *Empathy and its development*. Cambridge: Cambridge University Press.

Lin, N. & M. Kristen, P. (1999). Social Networks and Mental Health in A. V. Horwitz & T. L. Scheid (Eds.). *A Handbook for the Study of Mental Health: Social Contexts, Theories, and Systems*. (pp. 241-258) Cambridge: Cambridge University Press.

Lindfors, P., T. Solantaus, and A. Rimpela (2012). Fears for the Future among Finnish Adolescents in 1983–2007: From Global Concerns to Ill Health and Loneliness. *Journal of Adolescence*, 35, 991–99.

Lindsey, L.L. (2016). *Gender Roles: A Sociological Perspective*. Abingdon, Oxon: Routledge.

Little, R.J.A. & Rubin, D.B. (2002). *Statistical Analysis with Missing Data. Second Edition*. Hoboken, New Jersey: John Wiley & Sons Inc.

Lockwood, P.L., Seara-Cardoso, A., & Viding, E. (2014). Emotion regulation moderates the association between empathy and prosocial behaviour. *PLoS ONE* 9(5): e96555.

Lopez-Perez, B. & Ambrona, T. (2014). The role of cognitive emotion regulation on the vicarious emotional response. *Motivation and Emotion*, 39, 299-308.

Lower, J. (2008). Embrace Yourself. Here comes generation Y. *Critical Care Nurse*, 28 (5), 80-85.

Luborsky, L., Rosenthal, R., Diguier, L., Andrusyna, T.P., Berman, J.S., Levitt, J.T., Seligman, D.A., & Krause, E.D. (2002). The Dodo bird verdict is alive and well – mostly. *Clinical Psychology and Science and Practice*, 9 (1), 2-12.

Madden, M. (2010). Older adults and social media. Pew Research Centre. Retrieved 23 October 2016 from <http://www.pewinternet.org/2010/08/27/older-adults-and-social-media/>

Maguire, E.A., Gadian, D.G., Johnsrude, I.S., Good, C.D., Ashburner, J., Frackowiak, R.S., & Frith C.D. (2000). Navigation-related structural change in the hippocampi of taxi drivers. *Proceedings of the National Academy of Sciences of the United States of America*, 97 (8), 4398 – 4403.

Mahsud, R., Yukl, G., & Prussia, G. (2010). Leader empathy, ethical leadership, and relations-oriented behaviours as antecedents of leader-member exchange quality. *Journal of Managerial Psychology*, 25 (6), 561-577.

Mannheim, Karl (1952). The Problem of Generations. In Kecskemeti, Paul. *Essays on the Sociology of Knowledge: Collected Works, Volume 5*. New York: Routledge.

Mar, R. A., Oatley, K., Hirsh, J., dela Paz, J., & Peterson, J. B. (2006). Bookworms versus nerds: Exposure to fiction versus non-fiction, divergent associations with social ability, and the simulation of fictional social worlds. *Journal of Research in Personality*, 40, 694-712

Mar, R.A., Oatley, K., & Peterson, J.B. (2009). Exploring the link between reading fiction and empathy: Ruling out individual differences and examining outcomes. *Communications*, 34, 407-428.

Marci, C.D., Ham, J., Moran, E. & Orr, S.P. (2007). Physiologic Correlates of Perceived Therapist Empathy and Social Emotional Process During Psychotherapy. *Journal of Nervous and Mental Disease*, 195 (2), 103-111.

Mazmanian, M., Yates, J., & Orlikowski, W. (2006). Ubiquitous email: Individual experiences and organizational consequences of Blackberry use. *Proceedings from the 65th Annual Meeting of the Academy of Management*. Retrieved 27 March, 2017 from http://seeit.mit.edu/Publications/BlackBerry_AoM.pdf

Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2001). Emotional intelligence as a

standard intelligence. *Emotion*, 1, 232–242.

McCarthy, W.C., & Frieze, I.H. (1999). Negative aspects of therapy: Client perceptions of therapists' social influence, burnout, and quality of care. *Journal of Social Issues*, 55(1), 33-50.

McCrindle, M., & Wolfinger, E. (2010). Generations Defined. *Ethos*, 18 (1), 8-13

McKinnon, M.C. & Moscovitch, M. (2007). Domain-general contributions to social reasoning: theory of mind and deontic reasoning re-explored. *Cognition*, 102 (2), 179-218.

McPherson, M., Smith-Lovin, L. & Brashears, M.E. (2006). Social isolation in America: changes in core discussion networks over two decades. *American Sociological Review*, 71 (3), 353-375.

Mead, G. H. (1934). *Mind, self and society*. Chicago: University of Chicago Press.

Meffert, H., Gazzola, V., den Boer, J.A., Bartels, A. A. J., Keysers, C. (2013). Reduced spontaneous but relatively normal deliberate vicarious representations in psychopathy. *Brain*, 136 (8), 2550.

Megargee, E.I. (2009). The California Psychological Inventory. In J.N. Butters (Eds.). *Oxford Handbook of Personality Assessment*. Oxford: Oxford University Press.

Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. *Journal of Personality*, 40, 525-543.

Melchers, M., Montag, C., Markett, S. & Reuter, M. (2015). Assessment of empathy via self-report and behavioural paradigms: data on convergent and discriminant validity. *Cognitive Neuropsychiatry*, 20 (2): 157-171.

Melchers, M., Montag, C., Reuter, M., Spinath, F.M., & Hahn, E. (2016). How heritable is empathy? Differential effects of measurement and subcomponents. *Motivation and Emotion*, 40 (5), 720-730.

Mercer, S.W., Maxwell, M., Heaney, D., & Watt, G.C. (2004). The consultation and relational empathy (CARE) measure development and preliminary validation and reliability of an empathy-based consultation process measure. *Family Practice*, 21 (6), 699-705.

Mercer, S.W. & Reynolds, W.J. (2002). Empathy and quality of care. *British Journal of General Practice*, 52 (Suppl): S9-12.

Merriam, S.B., Courtenay, B.C., & Reeves, P.M. (2001). Time and its relationship to development in the life course: some reflections from a study of HIV-positive adults. *Journal of Adult Development*, 8 (3), 173-182.

Merriam, S.B. (1999). Time as an Integrative Factor. In M.C. Clark & R.S. Cafferella, R.S. (1999). An update on adult development theory: New ways of thinking about the life course. *New Directions for Adult and Continuing education*, no. 84 (pp.67-76). San Francisco, CA : Jossey-Bass Inc.

Merriam - Webster (2015). *Dictionary*. Retrieved 11 December from <http://www.merriam-webster.com/dictionary/therapist>

Messer, S.B. & Wampold, B.E. (2002). Let's face facts: common factors are more potent than specific therapy ingredients. *Clinical Psychology Science and Practice*, 9 (1), 21-25.

Mestre, V., Samper, P., Frias, M.D. & Tur, A.M. (2009). Are women more empathetic than men? A longitudinal study in adolescence. *The Spanish Journal of Psychology*, 12 (1), 76-83.

Meyer, D. E., Kieras, D. E., Lauber, E., Schumacher, E. H., Glass, J., Zurbriggen, E., Gmeindl, L. & Apfelblat, D. (1995). Adaptive executive control: Flexible multiple-task performance without pervasive immutable response-selection bottlenecks. *Acta Psychologica*, 90 (1-3), 163– 190.

Michalska, K.J., Kinzler, K.D., & Decety, J. (2013). Age-related sex differences in explicit measures of empathy do not predict brain responses across childhood and adolescence. *Developmental Cognitive Neuroscience*, 3, 22-32.

Miettinen, O.S. (1985). *Theoretical Epidemiology: Principles of Occurrence Research in Medicine*. John Wiley & Sons, New York.

Mikulincer, M. & Shaver, P. (2010). *Prosocial motives, emotions, and behavior: the better angels of our nature*. Washington, DC, US: American Psychological Association.

Miller, W.R, & Rollnick, S. (1991). *Motivational Interviewing: Preparing people to Change addictive behavior*. London/New York: The Guilford Press.

Milivojevic, T. and Ercegovac, I. (2015). Empathy and the Internet: Positive potentials vs. risks. *KYJITYPA, Culture, 11, 103-112*.

Miller, J.D., Campbell, W.K., & Pilkonis, P.A. (2007). Narcissistic personality disorder: relations with distress and functional impairment. *Comprehensive Psychiatry*, 48 (2), 170-177.

Miller, W. R., & Rose, G. S. (2009). Toward a theory of motivational interviewing. *American Psychologist*, 64, 527–537.

Millsap, R.E. & Maydeu-Olivares, A. (2009). *The Sage Handbook of Quantitative Methods in Psychology*. Thousand Oaks, CA: Sage Publications.

Milton, M., Craven, M. and Coyle, A. (2010) Understanding human distress: Moving beyond the concept of ‘psychopathology’, in M. Milton (Eds) *Therapy and beyond: Counselling psychology contributions to therapeutic and social issues*, Wiley Blackwell: Chichester.

Mishra, S. & Monippally, M.M. (2014). *Online Communication Strategies for Managers*. New Delhi: McGraw-Hill Education.

Misra, S. and Stokols, D. (2011). Psychological and health outcomes of perceived information overload. *Environment and Behaviour*, 44 (6) 737-759.

Moons, W.G., Chen, J.M. and Mackie, D.M. (2015). Stereotypes: A source of bias in affective and empathic forecasting. *Group processes and intergroup relations*, 20 (2), 139-152.

Mooradian, T.A., Davis, M., & Matzler, K. (2011). Dispositional Empathy and the Hierarchical Structure of Personality. *The American Journal of Psychology*, 124 (1), 99-109.

Morison, L., Trigeorgies, C., & John, M. (2014). Are mental health services inherently feminised? *The Psychologist*, 27, pp. 414-417. Retrieved on 23 October 2016 from <https://thepsychologist.bps.org.uk/volume-27/edition-6/are-mental-health-services-inherently-feminised>

Morrow, S.L. (2007). Qualitative research in Counseling Psychology. *The Counseling Psychologist*, 35 (2), 209 – 235.

Mowszowski, L., Batchelor, J., & Naismith, S.L. (2010). Early Intervention for cognitive decline: can cognitive training be used as a selective prevention technique. *International Psychogeriatrics*, 22 (4), 537-548.

Moyers, T.B. & Miller, W.R. (2013) Is low empathy toxic? *Psychology of Addictive Behaviours*, 27 (3), 878-884.

National Careers Service (2016a). *Counsellor*. Retrieved on 22 November 2016 from <https://nationalcareersservice.direct.gov.uk/job-profiles/counsellor>

National Careers Service (2016b). *Psychotherapist*. Retrieved on 23 November 2016 from <https://nationalcareersservice.direct.gov.uk/job-profiles/psychotherapist>

National Health System. (2014). *Talking Therapies Explained*. Retrieved 6 December, 2015, from <http://www.nhs.uk/conditions/stress-anxiety-depression/pages/types-of-therapy.aspx>

National Health System. (2015). *Can I get free therapy or counselling?* Retrieved 11 December, 2015 from

<http://www.nhs.uk/conditions/stress-anxiety-depression/pages/free-therapy-or-counselling.aspx>

Nerdrum, P., Rustøen, T., & Rønnestad, M. H. (2006). Student psychological distress: A psychometric study of 1750 Norwegian 1st-year undergraduate students. *Scandinavian Journal of Educational Research*, 50, 95-109.

Neugarten, B. L. (1976). Adaptation and the life cycle. *The Counseling Psychologist*, 6 (1), 16-20.

Neumann, M., Edelhauser, F., Tauschel, D., Fischer, M.R., Wirtz, M., Woopen, C., Haramati, A. and Scheffer, C. (2011). Empathy decline and its reasons: a systematic review of studies with medical students and residents. *Academic Medicine*, 86 (8), 996-1009.

Newzoo (2015). *Global Games Market Report*. Retrieved 13 December, 2016 from https://newzoo.com/wp-content/uploads/2011/06/Newzoo_T11_Beijing_FINAL_Public.pdf

Ng, E.S., Lyons, S.T., & Schweitzer, L. (2012). *Managing the new workforce. International perspectives on the Millennial generation*. Cheltenham, UK: Edward Elgar Publishing Limited.

NHS Digital (2016). Adult Psychiatric Morbidity Survey: Survey of Mental Health and Wellbeing, England, 2014. Retrieved 27 March, 2017 from <http://content.digital.nhs.uk/catalogue/PUB21748>

NHS England (2013). Compassion in Practice – One year on. Retrieved 30 March 2017 from <https://www.england.nhs.uk/wp-content/uploads/2016/05/cip-one-year-on.pdf>

Nie, N. H. (2001). Sociability, interpersonal relations, and the Internet: Reconciling conflicting findings. *American Behavioral Scientist*, 45(3), 426-437.

Nielsen, L., Knutson, B., & Carstensen, L.L. (2009). Correction. Affect dynamics, affective forecasting, and aging. *Emotion*, 8 (3), 318-330.

National Institute for Health and Care Excellence - NICE (2011). *Service user experience in adult mental health: improving the experience of care for people using adult NHS mental health services*.

Retrieved 20 January from

<https://www.nice.org.uk/guidance/cg136/resources/service-user-experience-in-adult-mental-health-improving-the-experience-of-care-for-people-using-adult-nhs-mental-health-services-35109513728197>

Norcross, J.C. (2010). The Therapeutic Relationship. In Duncan, B.L., Miller, S.B.E., and Hubble, M.A. (Eds.). *The heart and soul of change: Delivering what works in therapy*. 2nd ed (pp.113-141), Washington, D.C.: American Psychological Association.

Norcross, J. C. (2011). *Psychotherapy relationships that work: therapist contributions and responsiveness to patients*. New York, New York: Oxford University Press Inc.

Nunnally, J. & Bernstein, L. (1994). *Psychometric theory*. New York: McGraw-Hill Higher, INC.

O'Brien, E., Konrath, S. H., Grühn, D., & Hagen, A. L. (2013). Empathic concern and perspective taking: Linear and quadratic effects of age across the adult life span. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 68(2), 168-175.

Odenweller, K.G., Booth-Butterfield, M., & Weber, K. (2014). Investigating helicopter parenting, family environments and relational outcomes for Millennials. 65, (4), 407-425.

Oelofsen, N. (2012). The importance of reflective practices. *Health Service Journal*. Retrieved 27 March 2017 from <https://www.hsj.co.uk/topics/workforce/the-importance-of-reflective-practices/5048994.article>

Ofcom (2015). *The Communications Market Report*. Retrieved on 28 November, 2016 from https://www.ofcom.org.uk/_data/assets/pdf_file/0022/20668/cmr_uk_2015.pdf

Ofcom (2016a). *Adults Media use and Attitudes*. Retrieved on 28 November, 2016 from https://www.ofcom.org.uk/_data/assets/pdf_file/0026/80828/2016-adults-media-use-and-attitudes.pdf

Ofcom (2016b). *The Communications Market Report*. Retrieved on 28 November, 2016 from https://www.ofcom.org.uk/_data/assets/pdf_file/0024/26826/cmr_uk_2016.pdf

Office of National Statistics – ONS. (2015a). Main Points. *Internet Access – Household and Individuals 2015*. Retrieved 11 December 2015, from <http://www.ons.gov.uk/ons/rel/rdit2/internet-access---households-and-individuals/2015/stb-ia-2015.html>

Office of National Statistics - ONS. (2015b). *Mobile Internet Access*. Retrieved 11 December, 2015 from <http://www.ons.gov.uk/ons/rel/rdit2/internet-access---households-and-individuals/2015/stb-ia-2015.html#tab-Mobile-internet-access>

Office of National Statistics - ONS (2016a). *Population estimates*. Retrieved 14th October 2016 from <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates>

Office of National Statistics. (2016b). Main Points. *Internet Users: in the UK*. Retrieved 30 June 2016, from <https://www.ons.gov.uk/businessindustryandtrade/itandinternetindustry/bulletins/internetusers/2016>

Oh, E., & Reeves, T. C. (2011). Generation differences and the integration of technology in learning, instruction, and performance. In Spector, J. M., Merrill, M. D., Elen, J., & Bishop, M. J. (2014). *Handbook of research on educational communications and technology*. 4th ed. New York: Springer Science + Business Media.

Olick, D. (2016). *Millennials are moving, but mortgages don't follow*. CNBC. Retrieved on 6 December, 2016 from <http://www.cnbc.com/2016/05/02/millennials-are-moving-but-mortgages-dont-follow.html>

Olson, K. E., O'Brien, M.A., Rogers, W.A., & Charness, N. (2011). Diffusion of technology: frequency of use for younger and older adults. *Ageing International*, 36 (1), 123-145.

Ophir, E., Nass, C., & Wagner, A.D. (2009). Cognitive control in media multitaskers. *Proceedings of the National Academy of Sciences of the United States of America*, 106 (37), 11583-15587.

Orlinsky, D.E., Grawe, K. & Parks, B.K. (1994) Process and Outcome in Psychotherapy. In A.E. Bergin & S.L. Garfield (Eds). *Handbook of Psychotherapy and Behaviour Change*. Chichester: John Wiley and Sons Inc.

Oulasvirta, A., Rattenbury, T., Ma, L., & Raita, E. (2011). Habits make smartphone use more pervasive. *Personal and Ubiquitous Computing*, 16 (1), 105-114.

Palfrey, J., & Gasser, U. (2008). *Born Digital: Understanding the first generation*. New York: Basic Books.

Parker, K. & Patten, E. (2013). *The Sandwich Generation: Rising Financial Burdens for Middle-Aged Americans*. Pew Research Centre. Retrieved 23 October, 2016 from http://www.pewsocialtrends.org/files/2013/01/Sandwich_Generation_Report_FINAL_1-29.pdf

Parsons, N.L. & Manierre, M. J. (2014). Investigating the Relationship among Prepaid Token Incentives, Response Rates, and Nonresponse Bias in a Web Survey. *Field Methods*, 26 (2), 191-204.

Paterson, H., Reniers, B., Vollm, B. (2009). Personality types and mental health experiences of those who volunteer for helplines. *British Journal of Guidance Counselling*, 37, 459-471.

Patten, E., and Fry, R. (2015). *How Millennials today compare with their grandparents 50 years ago*. Pew Research Centre. Retrieved on 6 December, 2016 from <http://www.pewresearch.org/fact-tank/2015/03/19/how-millennials-compare-with-their-grandparents/>

Perez-Albeniz, A., de Paul, J., Etxeberria, J. Montes, M.P., & Torres, E. (2003). Psychometric properties of the Interpersonal Reactivity Index in Spanish child and adolescent population. *Psicothema*, 15 (2), 267-272.

Pew Research Center, (2015a). The Whys and Hows of Generations Research. Retrieved 23 September, 2017, <http://www.people-press.org/2015/09/03/the-whys-and-hows-of-generations-research/>

Pew Internet Research, D.M. (2015b). *Comparing Millennials to Other Generations*. Retrieved 9 December, 2015, <http://www.pewsocialtrends.org/2015/03/19/comparing-millennials-to-other-generations/>

Pew Research Centre (2015c). *Parenting in America: Outlook, worries, aspirations are strongly linked to financial situation*. Retrieved 13 December, 2016 from http://www.pewsocialtrends.org/files/2015/12/2015-12-17_parenting-in-america_FINAL.pdf

Phillips, L.H, MacLean, R.D.J, Allen, R (2002). Age and the understanding of emotions: Neuropsychological and sociocognitive perspectives. *Journal of Gerontology: Psychological Sciences*. 57(B), 526–530.

Piaget, J. (1932). *The moral judgment of the child*. London: Kegan Paul, Trench, Trubner.

Polaschek, D.L.L. (2015). (Mis) understanding psychopathy: consequences for policy and practice with offenders. *Psychiatry, Psychology and Law*, 22 (4), 500-519.

Pollak, K.I., Alexander, S.C., Tulsy, J.A., Lyna, P., Coffman, C.J., Dolor, R.J., Bulbrandsen, P. & Ostbye, T. (2011). Physician empathy and listening: associations with patient satisfaction and autonomy. *Journal of the American Board of Family Medicine*, 24 (6), 665-672.

Ponterotto, J. (2005). Qualitative research in counselling psychology: a primer on research paradigms and philosophy of science, *Journal of Counseling Psychology*, 52 (2), 126-136.

Pope-Edwards, C., & Liu, W. L. (2002). Parenting toddlers. In M. H. Bornstein (Ed.), *Handbook of parenting: Status and social conditions of parenting. Vol.1* (pp. 45–71). Mahwah, NJ: Lawrence Erlbaum.

Preece, J. (1999). Empathic communities: balancing emotional and factual information. *Interacting with Computers*, 12 (1), 63–77.

Prensky, M (2001) Digital Natives, Digital Immigrants: Part 1., *On the Horizon*, 9(5), 1 - 6.

Preston, S. D. and deWaal, F. B. M. (2002). Empathy: Its ultimate and proximate bases. *Behavior and Brain Sciences* , 25 (1), 1-72.

Preti, A., Vellante, M., Baron-Cohen, S., Zucca, G., Petretto, D. R., & Masala, C. (2011). The empathy quotient: A cross-cultural comparison of the Italian version. *Cognitive Neuropsychiatry*, 16 (1), 50–70.

Pricewaterhouse Coopers LLP (2016). *Employee Financial Wellness Survey*. Retrieved 6 December, 2016 from <http://www.pwc.com/us/en/press-releases/2016/pwc-financial-wellness-survey-press-release.html>

Qualtrics (2015). *Security Statement*. Retrieved 12 December, 2015, from <http://www.qualtrics.com/security-statement/>

Quince, T.A., Parker, R.A., Wood, D.F. & Benson, J.A. (2011). Stability of empathy among undergraduate medical students: a longitudinal study at one UK medical school. *BMC Medical Education*, 11, 90.

Rafalin, D. (2010). Counselling psychology and research: Revisiting the relationship in light of our mission. In M. Milton (Ed.), *Therapy and beyond: Counselling psychology contributions to therapeutic and social issues*. (pp.41-56). Oxford: Wiley.

Reinecke, L., Aufenanger, S., Beutel, M. E., Dreier, M., Quiring, O., Stark, B., Wolfing, K., & Muller (2016). Digital Stress over the Life Span: The Effects of Communication Load and Internet Multitasking on Perceived Stress and Psychological Health Impairments in a German Probability Sample, *Media Psychology*, 1, 1-26.

Reither, E., Hauser, R. M. & Yang, Y. (2009). Do birth cohorts matter? Age-period-cohort analyses of the obesity epidemic in the United States. *Social Science and Medicine Journal* 69 (10), 1439-1448.

Reniers, R.L.E.P., Corcoran, R., Drake, R., Shryane, N.M. & Vollm, B.A. (2010). The QCAE: A Questionnaire of Cognitive and affective empathy. *Journal of Personality Assessment*, 93 (1), 84-95.

Richter, D., Dietzel, C. & Kunzmann, U. (2011). Age differences in emotion recognition: the task matters. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 66 (1), 48-55.

Richter, D. & Kunzmann, U. (2011). Age Differences in Three Facets of Empathy: Performance-Based Evidence. *Psychology and Aging*, 26 (1), 60-70.

Riding, R.J., & Rayner, S.G. (2000). *International Perspectives on Individual Differences, Volume 1 Cognitive Styles*. USA: Ablex Publishing Corporation.

Ritter, K., Dziobek, I., Preissler, S., Rüter, A., Vater, A., Fydrich, T., Lammers, C.H., Heekeren, H.R., Roepke, S. (2011). Lack of empathy in patients with narcissistic personality disorder. *Psychiatry Research*, 187, 241–247.

Rivers, A., Wichramasekera, I.E., Pekana, R.J., Rivers, J.A. (2015). Empathic Features and Absorption in Fantasy Role-Playing. *American Journal of Clinical Hypnosis*, 58 (3), 286-294.

Roberts, B.W., & Mroczek, D. (2008). Personality Trait Change in Adulthood. *Current Directions in Psychological Society*, 17 (1), 31-35.

Roberts B.W., & Wood, D. (2006). Personality development in the context of the Neo-Socioanalytic Model of personality. In D. Mroczek & T. Little (eds). *Handbook of personality development*. (pp.11-39) Mahwah, NJ: Erlbaum.

Roche, M.J., Shoss, N.E., Pincus, A.L., & Menard, K.S. (2011). Psychopathy moderates the

relationship between time in treatment and levels of empathy in incarcerated male sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 23 (2), 171-192.

Rogers, C. R. (1951). *Client-centered Therapy*. Boston: Houghton Mifflin.

Rogers, C. R. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting Psychology*, 21 (2), 95-103

Rogers, C. R. (1959). A theory of therapy, personality and interpersonal relationships, as developed in the client-centered framework. In S. Koch (Ed.), *Psychology: A study of science, Volume 3*, (pp. 184-256). New York: Mc Graw Hill.

Rogers, C. R. (1965). A humanistic conception of man. In R.E. Farson (ed.) *Science and human affairs* (pp. 18-31) California: Science and Behavior Books Inc.

Rogers, C. R. (1975). Empathic: An unappreciated way of being. *Counseling Psychologist*, 5, 2-10.

Rogers, K., Dziobek, I., Hassenstab, J., Wolf, O.T., & Convit, A. (2007). Who Cares? Revisiting Empathy in Asperger Syndrome. *Journal of Autism Developmental Disorder*, 37, 709-715.

Romanyshyn, R. D. (2010). The wounded researcher: making a place for unconscious dynamics in the research process. *The Humanistic Psychologist*, 38 (4), 275-304.

Rønnestad, M. H., & Skovholt, T. M. (2003). The journey of the counselor and therapist: research findings and perspectives on professional development. *Journal of Career Development*, 30, 5-44.

Rosen, L. (2012) *iDisorder: Understanding our obsession with technology and overcoming its hold on us*. New York, NY: Palgrave Macmillan.

Rosenberg, M. (1965). When dissonance fails: On eliminating evaluation apprehension from attitude measurement. *Journal of Personality and Social Psychology*, 1, 28-42.

Rosnow, R. L., & Rosenthal, R. (2008). *Beginning Behavioral Research: A Conceptual Primer* (6th ed.). Upper Saddle, NJ: Pearson/Prentice Hall.

Rueckert, L., Branch, B., & Doan, T. (2011). Are gender differences in empathy due to differences in emotional reactivity? *Psychology*, 2 (6), 574-578.

Ryan, D. (2014). *Understanding Digital Marketing: Marketing Strategies for Engaging the digital generation*. Great Britain: Kogan Page Limited.

Saarnio, P. (2010). Big five personality traits and interpersonal functioning in female and male substance abuse therapists. *Substance Use & Misuse*, 45 (10), 1463-1473.

Sadri, G., Weber, T. J. and Gentry, W. A. (2011). Empathic Emotion and Leadership Performance: An Empirical Analysis Across 38 Countries. *The Leadership Quarterly*, 22 (5), 818 – 830.

Sale, J. E. M., Lohfeld, L. H., & Brazil, K. (2002). Revisiting the quantitative-qualitative debate: Implications for mixed-methods research. *Quality and Quantity*, 36 (1), 43-53.

Salthouse, T. A. (1996). The processing-speed theory of adult age differences in cognition. *Psychological Review*, 103, 403–428.

Sapsford, R. (2007). *Survey Research*, 2nd Edition (pp.100-108). London: SAGE Publications Ltd.

Sarnio, P. (2002). Factors Associated with Dropping out from outpatient treatment of alcohol-other drug abuse. *Alcoholism Treatment Quarterly*, 20 (2), 17-33.

Scharkow, M. (2016). The accuracy of self-reported Internet use—A validation study using client log data. *Communication Methods and Measures*, 10(1), 13–27.

Schieman, S., & Van Gundy, K. (2000). The personal and social links between age and self-reported empathy. *Social Psychology Quarterly*, 63 (2), 152-174.

Schultz, Y. (2012). Time representations in social science. *Dialogues in Clinical Neuroscience*, 14 (4), 441-447.

Schiffrin, H.H., Liss, M., Miles-McLean, H., Geary, K.A., Erchull, M.J., & Tashner, T. (2014). Helping or hovering? The effects of helicopter parenting on college student's well being. *Journal of Child and Family Studies*, 23 (3), 548-557.

Schultze-Krumbholz, A., Schultze, M., Zagorscak, P., Wolfer, R., & Scheithauer, H. (2016). Feeling cybervictims' pain – the effect of empathy training on cyberbullying. *Aggressive Behavior*, 42 (2), 147-156.

Schulze, L., Dziobek, I., Vater, A., Heekeren, H.R., Bajbouj, M., Renneberg, B., Heuser, I., & Roepke, S. (2013). Gray matter abnormalities in patients with narcissistic personality disorder. *Journal of Psychiatric Research*, 47 (10), 1363-1369.

Scott, B. A., Colquitt, J. A., Paddock, E. L. & Judge, T. A. (2010). A Daily Investigation of the Role of Manager Empathy on Employee Well-Being. *Organizational Behavior and Human Decision Processes*, 113, 127–40.

Shapiro, J. (2002). How do physicians teach empathy in the primary care setting? *Academic Medicine*, 77, 323–328.

Shaughnessy, J.J., Zechmeister, E.B., & Zechmeister, J.S. (2012). *Research Methods in Psychology*. New York, NY: McGraw-Hill.

Sheppes, G., Scheibe, S., Suri, G., & Gross, J.J. (2011). Emotion-regulation choice. *Psychological Science*, 22 (11), 1391-1396.

Silverstein, L. B., Auerbach, C.F., & Levant, R.F. (2006). Using qualitative research to strengthen clinical practice. *Professional Psychology: Research and Practice*, 37 (4), 351-358.

Singer, T. (2006). The neuronal basis and ontogeny of empathy and mind reading: Review of

literature and implications for future research. *Neuroscience and Biobehavioural Reviews*, 30, 855-863.

Singer, T. & Lamm, C. (2009). The social neuroscience of empathy Annual NY Acad Sci, 1156, pp.81-96. In Vyskocilova, J., Prask, J., and Slepecky, M. (2011) Empathy in cognitive behavioural therapy and supervision. *Activitas Nervosa Superior Rediviva*, 53 (2), 72-83.

Singer, T., Seymour, B., O'Doherty, J. P., Stephan, K. E., Dolan, R. J., & Frith, C. D. (2006). Empathic neural responses are modulated by the perceived fairness of others. *Nature*, 439, 466–469.

Siu, A.M.H., & Shek, D.T.L. (2005). Validation of the Interpersonal Reactivity Index in a Chinese Context. *Research on Social Work Practice*, 15 (2), 118-126.

Skitka, L.J. & Sargis, E.G. (2005) Social Psychological Research and the Internet: The Promise and the Perils of a New Methodological Frontier. In Amichai-Hamburger, Y. (Eds). *The Social Net: The Social Psychology of the Internet*. New York: Oxford University Press.

Skovholt, T. M., & Rønnestad, M. H. (1992). *The evolving professional self: Stages and themes in therapist and counselor development*. New York: Wiley.

Small, G.W., Moody, T.D., Siddarth, P. & Bookheimer, S.Y. (2009). Your brain on Google: patterns of cerebral activation during Internet searching. *The American Journal of Geriatric Psychiatry*, 17 (2), 116-126.

Small, G., & Vorgan, G. (2008). *IBrain: Surviving the technological alteration of the modern mind*. New York, NY: HarperCollins.

Small, G. & Vorgan, G. (2011). *Is the Internet killing empathy?* Special to CNN. Retrieved on 9th October 2016 from <http://edition.cnn.com/2011/OPINION/02/18/small.vorgan.internet.empathy/index.html?hpt=C2>

Smith, A. (2014). *Older adults and technology use*. Pew Research Centre. Retrieved on 30

November, 2016 from <http://www.pewinternet.org/2014/04/03/older-adults-and-technology-use/>

Smith, D.D., Kellar, J., Walters, E.L., Reibling, E.T., Phan, T., & Green, S.M. (2016). Does emergency physician empathy reduce thoughts of litigation? A randomised trial. *Emergency Medicine Journal*, 33 (3), 548-552.

Somerville, J.A., & Decety, J. (2017). *Social Cognition: Development across the lifespan*. New York: Routledge.

Soubelet, A. & Salthouse, T. A. (2011). Influence of social desirability on age differences in self-reports of mood and personality. *Journal of Personality*, 79 (4), 741-762.

Spreng, R.N., McKinnon, M.C., Mar, R.A., & Levine, B. (2009). The Toronto Empathy Questionnaire. *Journal of Personality Assessment*, 91 (1), 62-71.

Stanley, J.T., & Isaacowitz, D.M. (2015). Caring more and knowing more reduces age-related differences in emotion perception. *Psychology and Aging*, 30 (29), 385-95.

Staub, E. (1990). Commentary on Part 1. In N. Eisenberg, & J. Strayer, (Eds). *Empathy and its development*. Cambridge: Cambridge University Press.

Steckley, P. L. (2006). *An examination of the relationship between clients' attachment experiences, their internal working models of self and others, and therapists' empathy in the outcome of process-experiential and cognitive-behavioural therapies*. In dissertation abstracts International Section A: Humanities and Social Sciences, 2055-2055. ProQuest Information and Learning.

Steier, F. (1991). *Research and Reflexivity*. London: SAGE Publications Ltd.

Steinberg, L., Bornstein, M.H., Lowe Vandell, D., & Rook, K.S. (2011). *Lifespan Development. Infancy through Adulthood*. Belmont, CA. USA: Wadsworth, Cengage Learning.

Steiner-Adair, C. (2013). *The big disconnect: Protecting childhood and family relationships in the*

digital age (First edition.). New York: Harper.

Stephens, M. (2000). *The History of Television*. Grolier Multimedia Encyclopedia. Retrieved on 11 December, 2016 from

<https://www.nyu.edu/classes/stephens/History%20of%20Television%20page.htm>

Stocks, E.L., Lishner, D.A., & Decker, S.K. (2009). Altruism or psychological escape: why does empathy promote prosocial behavior? *European Journal of Social Psychology*, 39 (5), 649-665.

Stoltenberg, C. D., McNeill, B. W., & Delworth, U. (1998). *IDM: An integrated developmental model for supervising counselors and therapists*. San Francisco: Jossey-Bass.

Subrahmanyam, K., Greenfield, P.M., Kraut, R., & Gross, E. (2001). The impact of computer use on children's activities and adolescents' development. *Journal of Applied Developmental Psychology*, 22 (1), 7-30.

Suler, J. (2004). The online disinhibition effect. *Cyberpsychology and Behaviour*, 7 (3), 321-326.

Sullivan, M., Skovholt, T., & Jennings, L. (2005). Master therapists construction of the therapy relationship. *Journal of Mental Health Counselling*, 27, 48-70.

Swan, L.K. & Heesacker, M. (2013). Evidence of a pronounced preference for therapy guided by common factors. *Clinical Psychology*, 69 (9), 869-879.

Swift, J. K., & Callahan, J. L. (2010). A comparison of client preferences for intervention empirical support versus therapy common factors. *Journal of Clinical Psychology*, 66, 1217-1231.

Sze, J.A., Guyrak, A., Goodkind, M.S., & Levenson, R.W. (2012). Greater emotional empathy and prosocial behavior in late life. *Emotion*, 12(5), 1129-1140.

Tangney, J.P., Stuewig, J., Mashek, D., & Hastings, M. (2011). Assessing jail inmates' proneness to shame and guilt. Feeling bad about the behaviour or the self? *Criminal Justice and Behaviour*, 38

(7), 710-734.

Taylor, B.J. (2006). Factorial surveys: Using vignettes to study professional judgment. *British Journal of Social Work*, 36, 1187-1207.

Taylor, P. & Keeter, S. (2010). *Millennials: confident. Connected. Open to change*. Pew Research Centre. Retrieved 6 December, 2016 from <http://www.pewsocialtrends.org/2010/02/24/millennials-confident-connected-open-to-change/>

Teclaw, R., Price, M.C. & Osatuke, K. (2012). Demographic Question Placement: Effect on Item Response Rates and Means of a Veterans Health Administration Survey. *Journal of Business and Psychology*, 27 (3), 281-290.

Teding van Berkhout, E. & Malouff, J.M. (2016). The efficacy of empathy training: A meta-analysis of randomized controlled trials. *Journal of counseling psychology*, 63 (1), 32-41.

Teyber, E. (2006). *Interpersonal process in therapy: An integrative model* (5th ed.). Belmont: Thomson Brooks/Cole.

The National Archives (2016). *Education Act 1996*. Retrieved on 23 November, 2016 from <http://www.legislation.gov.uk/ukpga/1996/56/part/I/chapter/I/crossheading/compulsory-education>

The UK Council for Psychotherapy (2015). *UKCP Standards of Education and Training*. http://www.ukcp.org.uk/UKCP_Documents/consultations/SETS-for-consultation-03092015.pdf

Thomas, G. & Maio, G.R. (2008) Man, I feel like a woman: when a how gender-role motivation helps mind-reading. *Journal of Personality and Social Psychology*, 95 (5), 1165-1179.

Thomas, J. (2013). Association of Personal Distress with burnout, compassion fatigue, and compassion satisfaction among clinical social workers. *Journal of Social Service Research*, 39 (3), 365-379.

Thomée, S., Härenstam, A., & Hagberg, M. (2011). Mobile phone use and stress, sleep disturbances, and symptoms of depression among young adults-a prospective cohort study. *BMC Public Health*, 11, 66. Retrieved 27 March, 2017 from <http://www.biomedcentral.com/1471-2458/11/66>

Thorne, B., & Sanders, P. (2013). *Carl Rogers*. London: Sage Publications.

Tidwell, L. C., & Walther, J. B. (2002). Computer-mediated communication effects on disclosure, impressions, and interpersonal evaluations: Getting to know one another a bit at a time. *Human Communication Research*, 28 (3), 317–348.

Tobari M (2003). The development of empathy in adolescence: A multidimensional view. *Japanese Journal of Developmental Psychology*, 14, 136-148. In Garaigordobil, M. (2009). A comparative analysis of empathy in childhood and adolescence: gender differences and associated socio-emotional variables. *International Journal of Psychology and Psychological Therapy*, 9, (2), 217-235.

Todd, T.C. & Storm, C.L. (2002). *The complete systemic supervisor: Context, philosophy and pragmatics*. Lincoln, NE: iUniverse Inc.

Tourangeau, R. and T. Smith (1996). Asking sensitive questions: The impact of data collection mode, question format, and question context. *Public Opinion Quarterly*, 60, 275–304.

Trepte, S. & Reinecke, L. (2013). The reciprocal effects of social network site use and the disposition for self-disclosure: a longitudinal study. *Computers in Human Behaviour*, 29 (3), 1102-1112.

Truax, C. B. (1961). A scale for the measurement of accurate empathy. *Psychiatric Institute Bulletin*. University of Wisconsin, 1, 12.

Truax, C. B., & Carkhuff, R.R. (1967). *Toward effective counselling and psychotherapy*. Chicago: Aldine Publishing Company.

Truax, C.B. & Mitchell, K.M. (1971). Research on certain therapist interpersonal skills in relation to process and outcome. In A.E. Bergin & S.L. Garfield (Eds.), *Handbook of psychotherapy and behavioral change: An empirical analysis* (pp. 299-344). New York: Wiley.

Twenge, J.M. (2006). *Generation Me: Why today's Americans are more confident, assertive, entitled – and more miserable than ever before*. New York, NY: Free Press.

Twenge, J. M. (2013). The evidence for Generation Me and against Generation We. *Emerging Adulthood*, 1 (1), 11-16.

Twenge, J. M., & Campbell, W. K. (2001). Age and birth cohort differences in self-esteem: A cross-temporal meta-analysis. *Personality and Social Psychology Review*, 5, 321–344.

Twenge, J. M., & Campbell, W. K. (2009). *The narcissism epidemic: Living in the age of entitlement*. New York: Free Press.

Twenge, J. M., Campbell, W.K., & Freeman, E.C. (2012). Generational differences in young adults life goals, concern for others, and civic orientation, 1966-2009. *Journal of Personality and Social Psychology*, 102 (5), 1045-1062.

Twenge, J. M. & Foster, J. D. (2008). Mapping the scale of the narcissism epidemic: Increases in narcissism 2002-2007 within ethnic groups. *Journal of Research in Personality*, 42(6),1619-1622.

Twenge, J. M., & Foster, J. D. (2010). Birth cohort increases in narcissistic personality traits among American college students, 1982-2009. *Social Psychological and Personality Science*, 1, 99–106.

Twenge, J.M., Konrath, S. Foster, J.D., Campbell, W.K. Bushman, B.J. (2008a). Egos inflating over time: A cross-temporal meta-analysis of the Narcissistic personality inventory. *Journal of Personality*, 76 (4), 876–901.

Twenge, J.M., Konrath, S., Foster, J.D., Campbell, W.K. & Bushman, B.J. (2008b). Further evidence of an increase in narcissism among college students. *Journal of Personality*, 76 (4), 919-

927.

Tucker, C. J., Updegraff, K. A., McHale, S. M., & Crouter, A. C. (1999). Older siblings as socializers of younger siblings' empathy. *Journal of Early Adolescence*, 19 (2), 176-198.

Turnbull, C.F. (2010). Mom Just Facebooked Me and Dad Knows How to Text: The Influences of Computer-Mediated Communication on Inter-personal Communication and Differences Through Generations. *The Elon Journal of Undergraduate Research in Communications*, 1 (1), 5-16.

United Kingdom Council for Psychotherapy. (2015). *About Us*. Retrieved 11 December, 2015 from <http://www.psychotherapy.org.uk/about-us>

United States Census Bureau (2016). *U.S. and World Population Clock*. Retrieved on 4 December, 2016 from <https://www.census.gov/popclock/>

Utz, S., & Beukeboom, C.J. (2011). The role of social network sites in romantic relationships: effects on jealous and relationship happiness. *Journal of Computer-mediated communication*, 16 (4), 511-527.

Valkenburg, P.M., & Peter, J. (2009). Social consequences of the Internet for adolescents. *Current Directions in Psychological Science*, 18(1), 1-5.

Valkenburg, P.M. & Peter, J. (2011). Online communication among adolescents: an integrated model of its attraction, opportunities, and risks. *Journal of Adolescent Health*, 48 (2), 121-127.

Valkenburg, P.M., Sumter, S.R. & Peter, J. (2011). Gender differences in online and offline self-disclosure in pre-adolescence and adolescence. *The British Journal of Developmental Psychology*, 29 (Pt 2), 253-269.

VanderStoep, S.W., & Johnston, D. (2009). *Research Methods for Real Life: Blending Qualitative and Quantitative Approaches*. San Francisco: Jossey-Bass.

Verhaert, G.A., & Van den Poel, D. (2011). Empathy as added value in predicting donation behavior. *Journal of Business Research*, 64 (12), 1288-1295.

Voorveld, H. A. M., & van der Goot, M. (2013). Age differences in media multitasking: A diary study. *Journal of Broadcasting & Electronic Media*, 57 (3) , 392– 408.

Vossen, H.G.M., & Valkenburg, P.M. (2016). Do social media foster or curtail adolescents empathy? A longitudinal study. *Computers in Human Behaviour*, 63, 118-124.

Walther, B.E. (2005). The rules of virtual groups: Trust, liking, and performance in Computer-mediated communication. *Journal of Communication*, 5 (4), 828-846.

Walther, J. B. (1996). Computer-mediated communication: Impersonal, interpersonal, and hyperpersonal interaction. *Communication Research*, 23(1), 3-43.

Wampold, B.E. (2015). How important are the common factors in psychotherapy? An update. *World Psychiatry*, 14 (3), 270-277.

Wampold, B. E., & Budge, S. L. (2012). The 2011 Leona Tyler Award Address: The relationship- And its relationship to the common and specific factors of psychotherapy. *Counseling Psychologist*, 40, 601–623.

Wandel, T.L. (2009). Online Empathy: Communicating via Facebook to bereaved college students. *Journal of New Communications Research*, 4 (2), 42 – 53.

Watson, J. C. (2002). Re-visioning empathy. D. Cain, (Eds). *Humanistic psychotherapies: Handbook of research and practice*, 445-471. Washington, DC. US: American Psychological Association.

Watson, J.C., & Prosser, M. (2002). Development of an observer rated measure of therapist empathy. In J. C. Watson, R. Goldman,& M Warner (Eds.), *Client-centered and experiential psychotherapy in the 21st century: Advances in theory, research and practice* (pp.303-314). Ross on

Wye: PCCS Books.

Wechsler D. (1981). *Wechsler Adult Intelligence Scale-Revised*. San Antonio: The Psychological Corporation.

Weiner, J. (2009). *The Therapeutic Relationship: Transference, countertransference and the making of meaning*. USA: Texas A&M University Press.

Welikala, J. (2014). Respect, dignity and compassion to be mandatory for NHS training posts. 2014. Retrieved 30 March, 2017 from <https://www.nursingtimes.net/roles/nurse-educators/%20respect-dignity-and-compassion-to-be-mandatory-for-nhs-training-posts/5070484.fullarticle>

Wellman, B., Quan-Haase, A., Witte, J., & Hampton, K.N. (2001). Does the Internet increase, decrease, or supplement social capital? Social networks, participation, and community commitment. *American Behavioral Scientist*, 45(3), 437–456.

Wesner, M. S., & Miller, T. (2008), "Boomers and Millenials have much in common", *Organizational Development*, 26 (3), 89-96.

Whitty, M. (2008). Revealing the “real” me, searching for the “actual” you: Presentations of self on an Internet dating site. *Computers in Human Behavior*, 24 (4), 1707 – 1723

Wieck, C. & Kunzumann, U. (2015). Age differences in Empathy: Multidirectional and Context-Dependent. *Psychology and Aging*, 30 (2), 407-419.

Willig, C. (2001). *Introducing qualitative research in psychology. Adventures in theory and method*. Buckingham: Open University Press.

Wilhelm, M.O., & Bekkers, R. (2010). Helping Behavior, Dispositional Empathic Concern, and the Principle of Care. *Social Psychology Quarterly*, 73 (1), 11-32.

Williams, E. N., Judge, A. B., Hill, C. E., & Hoffman, M. A. (1997). Experiences of novice

therapists in prepracticum: Trainees', clients', and supervisors' perceptions of therapists' person reactions and management strategies. *Journal of Counseling Psychology*, 44, 390–399.

Williams, K.N. & Kemper, S. (2010). Interventions to reduce cognitive decline in aging. *Journal of Psychosocial Nursing and Mental Health Services*, 48 (5), 42-51.

Willis, S.L., Tennstedt, S.L., Marsiske, M., Ball, K., Elias, J., Koepke, K.M., Morris, J.N., Rebok, G.W., Unverzagt, F.W., Stoddard, A.M., Wright, E., & ACTIVE Study Group. Long-term effects of cognitive training on everyday functional outcomes in older adults. *JAMA*, 296 (23), 2805-2814.

Wilson, S. & MacLean, R. (2011). *Research Methods and Data Analysis for Psychology*. McGraw-Hill Education: Berkshire, UK.

Wink P. (1991). Two faces of narcissism. *Journal of Personality and Social Psychology*, 61, 590–597.

Winter, K., Spengler, S., Bempohl, F., Singer, T. & Kanske, P. (2017). Social cognition in aggressive offenders: Impaired empathy, but intact theory of mind. *Scientific reports* 7, 670.

Wisch, A.F. & Mahalik, J.R. (1999). Male therapists' clinical bias: influence of client gender roles and therapist gender role conflict. *Journal of Counselling Psychology*, 46 (1), 51-60.

Wispé, L. (1986). The distinction between sympathy and empathy: To call forth a concept, a word is needed. *Journal of Personality and Social Psychology*, 50(2), 314-321.

Wolfradt, U. & Doll, J. (2001). Motives of adolescents to use the internet as a function of personality traits, personal and social factors, *Journal of Educational Computing Research*, 24 (1), 13-27.

Woolfe, R. (1996). The nature of counselling psychology . In R. Woolfe & W. Dryden (Eds.), *Handbook of Counselling Psychology*. 1st Edition. London: Sage.

Wright, J.H., Basco, M.R. & Thase, M.T. (2006) *Learning Cognitive-Behavior Therapy: An Illustrated Guide*. Washington DC: American Psychiatric Publishing, Inc.

Wright, K. (2002). Social support within an on-line cancer community: an assessment of emotional support, perceptions of advantages and disadvantages, and motives for using the community from a communication perspective. *Journal of Applied Communication Research*, 30(3), 195–209.

Wright, K., & Bell, S.B. (2003). Health-related support groups on the Internet: linking empirical findings to social support and computer mediated communication theory. *Journal of Health Psychology*, 8 (1), 39-54.

Wright, M.F. and Li, Y. (2011) The Associations between Young Adults' Face-To-Face Prosocial Behaviors and Their Online Prosocial Behaviors. *Computers in Human Behavior*, 27, 1959-1962.

Vallor, S. (2012). Flourishing on Facebook: virtue friendship & new social media. *Ethics and Information Technology*, 14 (3), 185-199.

Vescio, T.K., Sechrist, G.B., & Paolucci, M.P. (2003). Perspective taking and prejudice reduction: the meditational role of empathy arousal and situational attributions. *European Journal of Social Psychology*, 33 (4), 455-472.

Vyskocilova, J., Prask, J., & Slepecky, M. (2011) Empathy in cognitive behavioural therapy and supervision. *Activitas Nervosa Superior Rediviva*, 53 (2), 72-83.

Yeung, D.Y., Wong, C.K.M., & Lok, D. (2011). Emotion regulation mediates age differences in emotions. *Aging and Mental Health*, 15 (3), 414-418.

Yirmiya, N., Sigman, M.D., Kasari, C., & Mundy, P. (1992). Empathy and cognition in high-functioning children with autism. *Child Development*, 63 (1), 150-160.

Youssef, F.F., Nunes, P., Sa, B. & Williams, S. (2014). An exploration of changes in cognitive and emotional empathy among medical students in the Caribbean. *International Journal of Medical*

Education, 5, 185-192.

Zahn-Waxler, C., Cole, P. M., & Barrett, K. C. (1991). Guilt and empathy: Sex differences and implications for the development of depression. In J. Garber & K. A. Dodge (Eds.), *The development of emotion regulation and dysregulation* (pp. 243–272). Cambridge, England: Cambridge University Press.

Zahn-Waxler, C., Radke-Yarrow, M., Wagner, E., & Chapman, M. (1992). Development of concern for others. *Developmental Psychology*, 28 (1), 126-136.

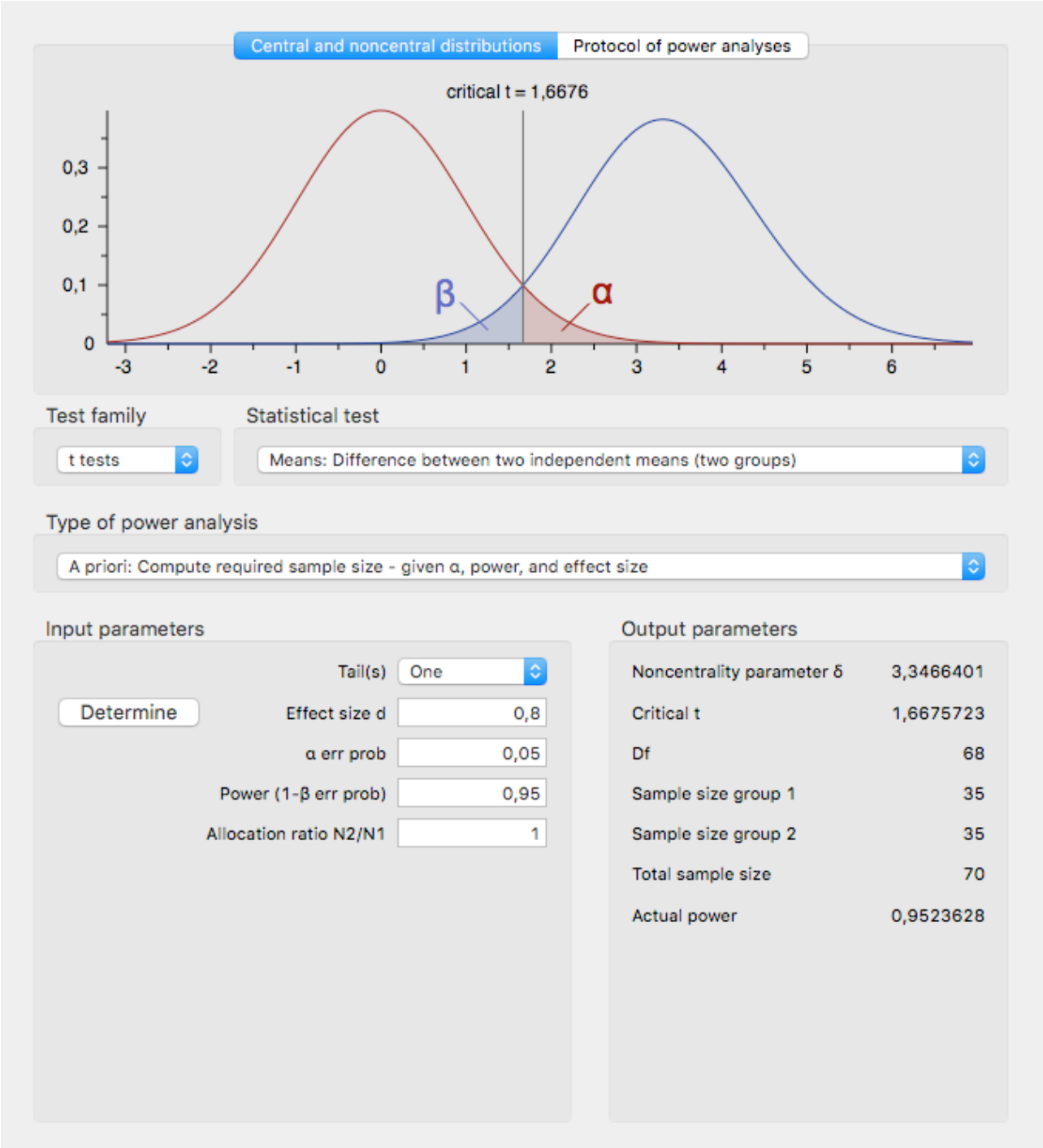
Zahn-Waxler, C., Robinson, J.L., & Emde, R.N. (1992). The development of empathy in twins. *Developmental Psychology*, 28 (6), 1038 – 1047.

Zimbardo, P. G. (1969). The human choice: Individuation, reason, and order versus deindividuation, impulse, and chaos. In W. D. Arnold & D. Levine (Eds.), *Nebraska Symposium on Motivation*, (pp. 237-307). Lincoln: University of Nebraska.

Zwaan, R. A. (2004). The immersed experiencer: toward an embodied theory of language comprehension. In B. H. Ross (Ed.), *The psychology of learning and motivation* Vol. 44 (pp. 35–62). New York: Academic Press.

Appendices

Appendix 1 Power Analysis using *G*Power* (Faul, Erdfelder, Buchner, & Lang, 2009).



Appendix 2

Participation Information Sheet



Title of study Internet and Social Media Age: What is the difference in Empathy Across Generations of Therapists in the UK?

We would like to invite you to take part in a research study. Before you decide whether you would like to take part it is important that you understand why the research is being done and what it would involve for you. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information.

What is the purpose of the study?

This study involves research measuring therapist's ability to relate across three generations and is undertaken as part of the Professional Doctorate in Counselling Psychology. The purpose of the study will be to explore whether there is a difference in how therapists relate to their clients across three generations. Recent literature has demonstrated that Internet and social media use can impact real-life relationships and this study serves to explore whether this phenomenon affects the therapists ability to be relate and ultimately the therapeutic relationship.

Why have I been invited?

You have been invited to participate in this study as you have identified yourself as a therapist (psychologist, psychotherapist or counselor) born in one of the two following time frames, between 1946 and 1964 or between 1981 and 1991. About 100 participants will be involved for this research.

Do I have to take part?

Participation to the study is completely voluntary and you can withdraw at any time. It is up to you to decide whether or not to take part. If you do decide to take part you will be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason, nor resulting in any loss or benefits.

What will happen if I take part?

The researcher will kindly ask you to complete a web-based self-administered survey and will send you a link for the survey which you can complete where and when it is most convenient for you (home, work etc.). The survey responses will be anonymous and the research study will last for 6 months.

Expenses and Payments (if applicable)

To thank you in participating in the survey, you can enter a lottery draw to win a £50 Amazon voucher at the end of the survey by entering a valid email address. Upon completion of the study, the winner will be sent an online voucher to redeem the reward.

What do I have to do?

You will be asked to complete a web-based self-administered questionnaire, which will take no longer than 10 minutes to complete and you can complete via the link provided by the researcher at your preferred location (home, work etc.).

What are the possible disadvantages and risks of taking part?

There are no foreseen disadvantages or risks in taking part as the survey asks therapists how they relate to others, something learnt in their training. Furthermore, there are no questions deemed upsetting.

What are the possible benefits of taking part?

Participants have a chance to win a £50 Amazon voucher and will contribute to knowledge of psychology, counselling and psychotherapy, as well as future training.

What will happen when the research study stops?

When the research study stops, data will be stored safely in a locked cabinet in the researcher's home. The data will be held for 1 year after the completion of the Professional Doctorate In Counselling Psychology and then it will subsequently and professionally, destroyed (shredding and/or erasing).

Will my taking part in the study be kept confidential?

All information resulting from the research will be kept confidential. Data will be kept in password-protected files on a password protected external hard disk, held in a locked cabinet at the researcher's home. Only the researcher and research supervisor will have access to the raw data (i.e. survey). All raw data will be kept for 1 year after the work is presented and after it will be destroyed professionally (shredding and/or erasing).

What will happen to the results of the research study?

Findings resulting from this study will be published in my doctoral thesis in completion of the Professional Doctorate in Counselling Psychology. Anonymity and confidentiality will be maintained throughout. In addition, these findings may be presented in a future publication of a scholarly journal. If you would like, a brief summary of the findings may be emailed to you by contacting me on [REDACTED]

What will happen if I don't want to carry on with the study?

You are free to withdraw from the study at anytime without any explanation or penalty.

What if there is a problem?

If you have any problems, concerns or questions about this study, you should ask to speak to a member of the research team. If you remain unhappy and wish to complain formally, you can do this through the University complaints procedure. To complain about the study, you need to phone [REDACTED]. You can then ask to speak to the Secretary to Senate Research Ethics Committee and inform them that the name of the project is: What is the difference between Generation Y and Baby Boomer therapists' empathy since the advent of social networks?

You could also write to the Secretary at:

Anna Ramberg
Secretary to Senate Research Ethics Committee
Research Office, E214
City University London
Northampton Square
London
EC1V 0HB
Email: [REDACTED]

City University London holds insurance policies, which apply to this study. If you feel you have been harmed or injured by taking part in this study you may be eligible to claim compensation. This does not affect your legal rights to seek compensation. If you are harmed due to someone's negligence, then you may have grounds for legal action.

Who has reviewed the study?

This study has been approved by City University London Psychology Research Ethics Committee, [PSYETH (P/L) 15/16 73].

Further information and contact details

Research Supervisor Dr Pavlos Filippopoulos – email: [REDACTED]

Thank you for taking the time to read this information sheet.

Appendix 3

Questionnaire

1. What is your gender?
 - a. Male
 - b. Female
 - c. Other (please specify)

2. Are you one of the following?
 - a. Psychologist
 - b. Psychotherapist
 - c. Counsellor
 - d. Specialist Therapist
 - e. Other (please specify)
 - f. None of the Above

3. When were you born?
 - a. Between 1981 – 1996
 - b. Between 1965 – 1980
 - c. Between 1946 – 1964
 - d. Between 1928 – 1945

4. What modality of therapy describes better or is closer to your practice style?
 - a. Cognitive Behavioural
 - b. Psychodynamic
 - c. Humanistic (i.e. Person-Centred etc)
 - d. Other (please specify)

5. What electronic forms of Internet based communication do you use?
 - a. Email
 - b. Text based (eg. Whatsapp, Sms, Chats, etc).
 - c. Video based (eg. Skype, Facetime etc.)
 - d. Other (please specify)

6. How often do you use Internet based communication?

- a. All the time
- b. Several times an hour
- c. Once an hour
- d. Several times a day
- e. Once a day
- f. Several times a week
- g. Once a week
- h. Several times a month
- i. Once a month
- j. Never

7. How often do you use Internet based communication from a mobile phone?

- a. All the time
- b. Several times an hour
- c. Once an hour
- d. Several times a day
- e. Once a day
- f. Several times a week
- g. Once a week
- h. Several times a month
- i. Once a month
- j. Never

8. Do you use any of the following social networking sites?

- a. Facebook
- b. Twitter
- c. LinkedIn
- d. Instagram
- e. Other (please specify)
- f. None

9. Roughly, how long have you been using social networking sites?

- a. 1-6 months
- b. 6-12 months
- c. 1-2 years
- d. 2+ years

10. In a week, how often do you use social networking sites?

- a. Everyday
- b. More than half the days
- c. Several Days
- d. Rarely
- e. Never

11. How often do you access social networking sites from a mobile phone?

- a. All the time
- b. Several times an hour
- c. Once an hour
- d. Several times a day
- e. Once a day
- f. Several times a week
- g. Once a week
- h. Several times a month
- i. Once a month
- j. Never

The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by choosing the appropriate letter on the scale at the top of the page: A, B, C, D, or E. When you have decided on your answer, fill in the letter next to the item number.

READ EACH ITEM CAREFULLY BEFORE RESPONDING.

Answer as honestly as you can. Thank you.

ANSWER SCALE:

A	B	C	D	E
DOES NOT				DESCRIBES
DESCRIBE				ME VERY
ME WELL				WELL

1. I daydream and fantasize, with some regularity, about things that might happen to me.
2. I often have tender, concerned feelings for people less fortunate than me.
3. I sometimes find it difficult to see things from the "other guy's" point of view.
4. Sometimes I don't feel very sorry for other people when they are having problems.
5. I really get involved with the feelings of the characters in a novel.
6. In emergency situations, I feel apprehensive and ill-at-ease.
7. I am usually objective when I watch a movie or play, and I don't often get completely caught up in it.
8. I try to look at everybody's side of a disagreement before I make a decision.
9. When I see someone being taken advantage of, I feel kind of protective towards them.
10. I sometimes feel helpless when I am in the middle of a very emotional situation.
11. I sometimes try to understand my friends better by imagining how things look from their perspective.
12. Becoming extremely involved in a good book or movie is somewhat rare for me.
13. When I see someone get hurt, I tend to remain calm.
14. Other people's misfortunes do not usually disturb me a great deal.
15. If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.
16. After seeing a play or movie, I have felt as though I were one of the characters.

17. Being in a tense emotional situation scares me.
18. When I see someone being treated unfairly, I sometimes don't feel very much pity for them.
19. I am usually pretty effective in dealing with emergencies.
20. I am often quite touched by things that I see happen.
21. I believe that there are two sides to every question and try to look at them both.
22. I would describe myself as a pretty soft-hearted person.
23. When I watch a good movie, I can very easily put myself in the place of a leading character.
24. I tend to lose control during emergencies.
25. When I'm upset at someone, I usually try to "put myself in his shoes" for a while.
26. When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me.
27. When I see someone who badly needs help in an emergency, I go to pieces.
28. Before criticizing somebody, I try to imagine how I would feel if I were in their place.

Appendix 4

Informed Consent



Title of Study: Internet and Social Media Age: What is the difference in Empathy across Generations of Therapists in the UK?

Ethics approval code: PSYETH (P/L) 15/16 73

Please initial box

1.	I agree to take part in the above City University London research project. I have had the project explained to me, and I have read the participant information sheet, which I may keep for my records. I understand this will involve completing a questionnaire asking me about my social media use and how I relate to others.	
2.	This information will be held and processed for the following purpose(s): I understand that any information I provide is confidential, and that no information that could lead to the identification of any individual will be disclosed in any reports on the project, or to any other party. No identifiable personal data will be published. The identifiable data will not be shared with any other organisation.	
3.	I understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalized or disadvantaged in any way.	
4.	I agree to City University London recording and processing this information about me. I understand that this information will be used only for the purpose(s) set out in this statement and my consent is conditional on the University complying with its duties and obligations under the Data Protection Act 1998.	
5.	I agree to take part in the above study.	

Name of Participant

Signature

Date

Name of Researcher

Signature

Date

When completed, 1 copy for participant; 1 copy for researcher file.

Appendix 5

Recruitment Flyer



**Department of Psychology
City University London**

Relating in the era of Social Media: Are we feeling it?

We want to better understand how therapists relate across generations.

We are looking for volunteers to take part in a study who are: qualified therapists (psychologists, psychotherapists, specialist therapists or counsellors) born between 1946 and 1996.

You would be asked to complete an *anonymous web-based Self-administered survey*, which takes no longer than 10 minutes.

In appreciation for your time, you can enter a draw to win a £50 Amazon voucher!

For more information about this study, or to take part,
please contact:

Research Supervisor Dr Pavlos Filippopoulos – email: [REDACTED]

Psychology Department
at

Email: [REDACTED] or [REDACTED]

This study has been reviewed by, and received ethics clearance through the Psychology Research Ethics Committee, City University London PSYETH (P/L) 15/16 73.

If you would like to complain about any aspect of the study, please contact the Secretary to the University's Senate Research Ethics Committee on [REDACTED] or via email: [REDACTED]

Part Two: Client Study

Healing Through Reconnection

A trauma focused cognitive behavioural therapy client study

Submitted in partial fulfillment of the requirements for the degree of:

Professional Doctorate of Counselling Psychology

City University London

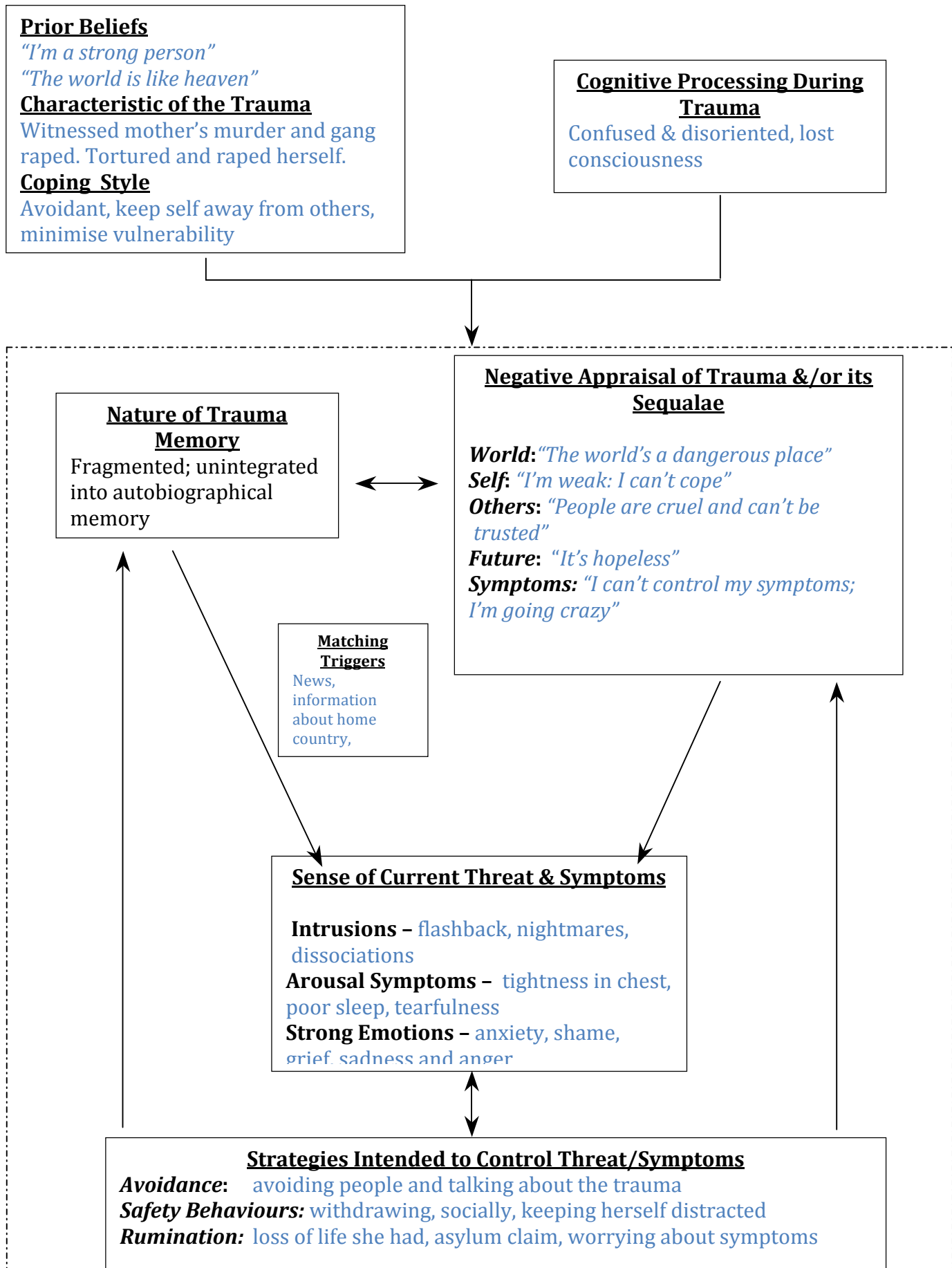
Department of Psychology

**The Professional Practice Component of this thesis has been
removed for confidentiality purposes.**

**It can be consulted by Psychology researchers on application at
the Library of City, University of London.**

Appendix A

Formulation according to Ehlers & Clark's (2000) PTSD model

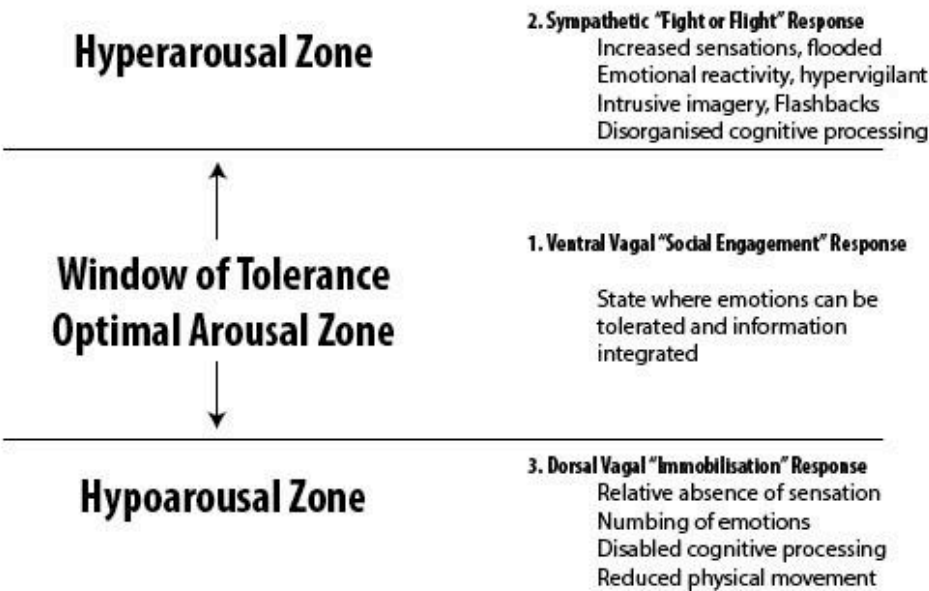


Appendix B - Kim's Therapeutic Plan

- Collaborative formulation of Kim's complex PTSD symptoms (Ehlers & Clark, 2000).
- Develop trusting, safe and collaborative therapeutic relationship (Courtois 2004, 1999).
- Psychoeducation about complex PTSD (Briere & Scott, 2015).
- Writing housing support letter, liaising with solicitor and charity for asylum claim.
- Symptom relief and management of flashbacks, nightmares and dissociative episodes through the practice of grounding techniques (Kennerley, 1996) and nightmare protocol (Rothschild, 2000).
- Increase Kim's body awareness of physiological arousal, mindfulness (Ogden, et.al., 2006) and skills to self-regulate (Cohen, et. al., 2012).
- Identifying and challenging negative cognitions and appraisals of the trauma event and its sequelae (Ehlers & Clark, 2000) using cognitive restructuring (Shiperd, et. al, 2006).
- Processing of trauma memory through exposure work (Grey, 2009).
- Consolidation of techniques learnt, developed and maintenance of new changes made.

Appendix C

Window of Tolerance



Adapted from Ogden, Minton, & Pain, 2006, p. 27, 32; Corrigan, Fisher, & Nutt, 2010, p. 2

Appendix D

Responsibility Pie



Part Three: Publishable Article

Psychology and Aging

(Intend to submit)

Submitted in partial fulfilment of the requirements for the degree of:

Professional Doctorate of Counselling Psychology

City University London

Department of Psychology

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removed for copyright reasons**