

The Endorsement of Paranormal and New Age Belief as a Unique
Form of Coping

By

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ABSTRACT

The Psychodynamic Functions Hypothesis (PFH; Irwin, 2009) suggests that paranormal belief develops as a response to experiences of diminished control in childhood, often as a result of trauma or maltreatment. This can become re-activated during adulthood when life is seen to be chaotic or unpredictable as a form of coping. Despite this, only five studies have examined the association between paranormal belief and traditional coping, with mixed results. The current research sought to identify and explore the notion of paranormal coping. Qualitative interviews confirmed the existence of paranormal coping, provided a number of concepts for further exploration, and allowed for item generation for a paranormal coping questionnaire. Exploratory factor analysis revealed a five-factor model, of paranormal coping, which was not confirmed by subsequent data. After several rounds of data collection, and the development and rejection of a three-factor model, a four-factor model of paranormal coping (Cognitive-Orientated Coping, Avoidance-Orientated Coping, Lack of Control, and Practitioner Authenticity) demonstrated the most acceptable model fit. This model was validated using standardised questionnaires and demonstrated good internal subscale reliability. Subsequent analyses partly supported Irwin's (2009) PFH, however there were some limitations with regards to the measure of perceived childhood control. Individual paranormal coping subscales were also differentially associated with thinking styles, supporting previous research linking paranormal belief with reasoning ability. The current research is particularly important given the prevalence of paranormal belief in the general population. Likewise, understanding the coping mechanisms used by adults who experienced trauma or maltreatment in childhood is essential to provide them with the most appropriate support.

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CHAPTER 1: INTRODUCTION

1.01 PREVALENCE OF PARANORMAL BELIEF AND EXPERIENCE

Previous research suggests paranormal beliefs and experiences are relatively common. Hill (2011) claims almost half the British population, and two-thirds of Americans, believe in some aspect of the paranormal. In one of the most commonly cited pieces of research, Newport and Strausberg (2001) state the majority of the American population embraces at least one paranormal belief, for example, psychic/spiritual belief (54%), or extrasensory perception (ESP; 50%). In a telephone survey of over 1000 American citizens, Moore (2005) found 41% of participants endorsed the veracity of ESP, 37% believed in haunted houses, and 25% in astrology. Another 12-27% of the sample reported that they were unsure about the authenticity of each paranormal phenomenon. This is similar to findings reported by Hamilton (2001) who found only 25% of their sample had “no belief at all” in astrology. Similar incidence rates are reported for paranormal experiences. In the UK, a recent large-scale survey of over 4000 adults, revealed that 37% of individuals reported a paranormal experience (Castro, Burrows, & Wooffitt, 2014).

The common prevalence of paranormal beliefs in research is also supported by online survey data: 30% of Americans believe Bigfoot exists, 45% believe in the existence of ghosts, and 64% confess to belief in some form of afterlife (Angus Reed Public Opinion Poll, 2012¹). Another poll suggested approximately 36% of Americans believe in the existence of UFOs with almost 80% stating they thought the government had hidden evidence of them (National Geographic Survey, 2012²). A YouGov study (2013)³ conducted on behalf of the Association for the Scientific Study of Anomalous

¹ http://www.huffingtonpost.com/2013/02/02/real-ghosts-americans-poll_n_2049485.html

² <http://abcnews.go.com/Technology/ufos-exist-americans-national-geographic-survey/story?id=16661311#.UZEwubXqkvk>

³ <http://metro.co.uk/2013/09/16/do-you-believe-in-ghosts-more-and-more-britons-apparently-do-4028008/>

Phenomena found 52% of Britons believe in paranormal activity with 20% claiming a personal experience of paranormal activity. Personal experience of paranormal phenomena is cited by individuals as the most common reason for paranormal belief (Blackmore, 1984; Glicksohn, 1990; Marks, 2000).

Aside from direct personal experience, evidence for interest in the paranormal is apparent within the media (Clarke, 1995; Sparks, Nelson, & Campbell, 1997). Across modern western society, the media frequently publishes material with paranormal connotations. Television programmes such as *Most Haunted*, *The X-Files* and *Buffy the Vampire Slayer* depict paranormal and supernatural phenomena, presented in a seductive and captivating manner. Research has identified a correlation between paranormal TV exposure and paranormal belief for those who report a subjective paranormal experience (Sparks & Miller, 2001).

The endorsement of paranormal phenomena and self-reported experiences are not limited to research studies, online survey data, and the media. Superstitious beliefs are common across various professional and collegiate sports (Bleak & Frederick, 1998; Burger & Lynn, 2005; Todd & Brown, 2003). Players often carry what they consider to be lucky items, eat lucky foods, and wear lucky clothing to games. Outside of the sporting world, areas of superstition are familiar to most (e.g., breaking a mirror is bad luck). Often people will hold strong superstitious beliefs despite the fact they cannot logically explain why their belief should be considered substantial (Schick & Vaughn, 2002).

The popularity of paranormal phenomena gains further support from the number of individuals (Wooffitt, 2006) earning money from New Age practices (e.g., tarot card reading, mediumship, and astrology). Since the beginning of the most recent technology boom in the mid-1990's, endorsement of these practices has increased exponentially due to increased accessibility (Jenkins, 2007). Private readings can be provided over the

telephone, and personal daily horoscopes can be received directly by email or through smartphone apps. Face-to-face readings can even be provided remotely over the internet through Skype or Facebook live.

Similarly, the popularity of Complementary and Alternative “Medicines” (CAM) are an important indicator of the prevalence of New Age phenomena in western society. This is as some CAM practices (e.g., body-mind therapies and energy therapies) draw upon Eastern perceptions about the influence of spiritual energy flows common within New Age belief systems (Ellison, Bradshaw, & Roberts, 2012; Levin & Coreil, 1986). Despite the relative accessibility of health services and biomedical treatments, a substantial percentage of the population also use CAM. UK-based studies have estimated 20-28% of the population use CAM each year (Ernst & White, 2000; Hunt et al., 2010; Thomas, Nicholl, & Coleman, 2001). The most popular alternative therapies (e.g., herbalism, aromatherapy, homeopathy, and acupuncture) are frequently used alongside biomedical treatments for a full spectrum of ailments despite little evidence of effectiveness (Fischer et al., 2014) ranging from serious illnesses such as cancer to pain management in labour (Ernst & Cassileth, 1998; Horneber, Bueschel, & Dennert, 2012; Smith, Collins, Cyna, & Crowther, 2006).

Overall, paranormal and supernatural beliefs are arguably universal, and their influence has shaped cultures, religions, economics, and politics. The paranormal continues to capture the public’s imagination across the media, sports, medicine, and beyond. These trends are long-standing, raising the question as to why, in the absence of strong evidence, such beliefs continue to persist (French & Stone, 2014).

1.02 INDIVIDUAL DIFFERENCES IN PARANORMAL BELIEF

French and Stone (2014) and Irwin (2009) state that anomalistic psychologists work under the assumption that paranormal phenomena do not exist and attempt to explain the prevalence of paranormal belief and experiences from different perspectives.

They suggest that if this hypothesis is correct there should be psychological differences when comparing groups of believers to non-believers. There is a large body of evidence suggesting that this is the case. Individual differences in paranormal belief have been shown when considering factors such as age, gender, socioeconomic status, and personality traits (Irwin, 2009).

The evidence for age-related differences in global paranormal belief is mixed. There are several studies reporting that the prevalence of paranormal belief is greater in younger, college or university age students (Heintz & Baruss, 2001; Lange, Irwin, & Houran, 2000) when compared to elderly adults. Paranormal belief has also been shown to decline with age (Irwin, 2001a; Preece & Baxter, 2000; Sjodin, 2002). Similar trends have been reported for specific facets of paranormal belief, for example spiritualism, astrology, superstition, ghosts, and ESP (Clarke, 1991; Emmons & Sobal, 1981; Rice, 2003; Torgler, 2007), except for traditional religious beliefs which tend to increase with age (Bengston, Silverstein, Putney, & Harris, 2015; Heintz & Baruss, 2001; Jupp, 2008). Conversely, other studies report no age-related differences in paranormal belief across a range of different participant groups and sample sizes (Aarnio & Lindeman, 2005; Houran & Williams, 1998). There are several limitations to this research. Most use cross-sectional samples (Preece & Baxter, 2000; Rice 2003) rather than longitudinal participant samples. A decline in paranormal belief could be due to the aging process, or a representation of how paranormal belief was viewed across the population at different points in time. Irwin (2000a) and Lange et al. (2000) also report issues with differential item functioning, meaning that individuals interpret questions (using the Revised Paranormal Belief Scale; RPBS; Tobacyk, 2004) differently depending on their age. Older participants (>30 years) showed separate Psi and Spiritualism factors, whereas in younger participants these two factors are combined.

Much like the research considering age, there is mixed evidence for gender-related differences in paranormal belief. Several studies have shown women report greater levels of global paranormal belief compared to men (Castro, Burrows, & Wooffitt, 2014; Goritz & Schumacher, 2000; Schuler & Papousek, 2008). Others have shown no gender-related differences in paranormal belief (Donovan, 1998; Fox & Williams, 2000; Sjoberg & Wahlberg, 2002). However, women have consistently been shown to have a stronger endorsement of specific dimensions of paranormal belief for example astrology, precognition, New Age spirituality, superstition, CAM, and traditional religious concepts (Aarnio & Lindeman, 2005; Clarke, 1991; Farias, Claridge, & Lalljee, 2005; Frass et al., 2012; Jupp, 2008; Rice, 2003, Torgler, 2007; Wiseman & Watt, 2004). This general pattern is reversed for other paranormal related concepts, with men reporting stronger belief in extraordinary life forms and UFO's (Aarnio & Lindeman, 2005; Clarke, 1991; Lange et al., 2000; Rice, 2003). As with age, Irwin (2000a) and Lange et al. (2000) also report issues with differential item functioning when using the Revised Paranormal Belief Scale; Tobacyk, 2004). In this case, individuals interpret questions differently depending on their gender. Specifically, any fixed factor solutions resulted in a significantly poorer fit to the data than those allowing differentially correlated factor solutions for men and women.

Additional evidence suggests that there may be several underlying factors which explain higher levels of paranormal belief in women. Simmonds-Moore and Moore (2009) found women who report their gender role as more feminine or androgynous had higher levels of paranormal belief than those who reported their gender role as more masculine. Other research suggests that individuals with a preference for intuitive (over analytical) thinking are more inclined to endorse paranormal concepts and report more subjective paranormal experiences (Bouvet & Bonnefon, 2015; Epstein, Pacini, Denes-Raj, & Heier, 1996; Irwin & Wilson, 2013; Lasikiewicz, 2016; Lindeman, 2011). A

higher prevalence of paranormal belief in women has been attributed to a preference for intuitive thinking (Aarnio & Lindeman, 2005; Hollinger & Smith, 2002). Whilst it is generally accepted that women report higher levels of paranormal belief, this is partly determined by social constructs rather than biological sex.

There is evidence that socio-economic status (i.e., education, income, and employment status) like age and gender is predictive of paranormal belief. Increasing educational status is generally linked to a reduction in global paranormal belief (Donovan, 1998; Schuler & Papousek, 2008) and specific facets of paranormal belief, for example superstition and astrology (Rice, 2003; Sjoberg & Wahlberg, 2002, Wuthnow, 1976). Other aspects of paranormal belief (e.g., psychic healing, CAM and ESP) have, in contrast, been linked to increasing educational status (Chao & Wade, 2008; Frass et al., 2012; Hunt et al., 2010; Rice, 2003; Wuthnow, 1976). Similar patterns were found when considering income. Higher income was associated with CAM and psychic healing (Frass et al., 2012; Hunt et al., 2010; Rice, 2003) and lower belief in astrology and superstition (Rice, 2003). Unemployment or the inability to work due to illness or disability has also been linked to increased paranormal belief (Emmons & Sobal, 1981).

As well as basic demographic factors, specific personality traits have been associated with paranormal belief. A fantasy-prone personality is associated with having vivid daydreams, wilful fantasies, a strong imagination, and being absorbed in them for a large proportion of the time, experiencing them as though they are real (French & Stone, 2014; Lynn & Rhue, 1988). Fantasy-proneness has been associated with paranormal belief (Berkowski & Macdonald, 2014; Irwin, 1990; Lawrence, Edwards, Barraclough, Church, & Hetherington, 1995; Perkins, 2001; Rogers, Qualter, & Phelps, 2007) and perceived paranormal abilities (Parra & Argibay, 2012) in numerous studies. Individuals high in fantasy-proneness also report vivid childhood memories, paranormal

experiences, and intense religious experiences (Merckleback, Horselenberg, & Muris, 2001). Wiseman and Watt (2006) suggest fantasy-prone individuals are more likely to experience “quasi-perceptual phenomena,” such as visions and hallucinations, and due to the vividness of such experiences are more likely to erroneously attribute these to a paranormal cause. Evidence supports this hypothesis, with higher levels of fantasy-proneness being found in participants who report having a Near-Death Experience (NDE; Gow, Lane, & Chant, 2003; Gow, Lang, & Chant, 2004) or an Out-of-Body Experience (OBE; Wilson & Barber, 1983) compared to control groups.

Further evidence for fantasy-proneness as a predictor of paranormal belief comes from two key related concepts; absorption and hypnotic susceptibility. Absorption is a personality characteristic which reflects an individual’s cognitive capacity to fully engage all sensory resources in an experience (Tellegen & Atkinson, 1974). All attention is focused on the experience which can then alter an individual’s perception, mood, and memory (Menzies, Taylor, & Bourguignon, 2008). There is a strong correlation between the traits of fantasy-proneness and absorption (Kennedy, Kanthamani, & Palmer, 1994; Lynn & Rhue, 1988) and, as expected, absorption has also been associated with paranormal belief (Glicksohn & Barrett, 2003; Nadon & Kihlstrom, 1987). Similarly, hypnotic susceptibility (how easily a person can be hypnotised) is strongly correlated with fantasy-proneness and absorption (Glicksohn & Barrett, 2003; Wilson & Barber, 1983) and paranormal belief (Glicksohn & Barrett, 2003; Hergovich, 2003; Nadon & Kihlstrom, 1987). Like fantasy-proneness, hypnotic susceptibility is associated with quasi-perceptual phenomena such as NDE’s and OBE’s (Pekala, Kumar, & Cummings, 1992).

Another personality correlate linked closely with paranormal belief is locus of control. Locus of control considers an individual’s tendency to believe that control over their life resides internally with them, or externally with other people, events, or

situations (Rotter, 1975). Individuals with a high internal locus of control believe in their own ability to influence the world around them. They feel in control of their own future and understand that their own choices lead to success or failure. In contrast, those with an external locus of control believe that control over events and other people is outside of their power. They believe their outcomes are a function of chance or luck or simply unpredictable (Rotter, 1990). In most research, a higher external locus of control has been associated with greater paranormal belief (Newby & Davis, 2004) as well as specific facets of paranormal belief for example, precognition, spiritualism, superstition, witchcraft, and extraordinary life forms (Allen & Lester, 1994; Dag, 1999; Groth-Marnat & Pegden, 1998; Peltzer, 2002; Sagone & De Caroli, 2014; Tobacyk & Milford, 1983; Tobacyk & Tobacyk, 1992). However, it should be noted that some studies found no relationship between paranormal belief and locus of control (Billows & Storm, 2015). Others found contrasting findings, with belief in Psi (Irwin, 2000b) and endorsement of CAM (Schutzler & Witt, 2014) related to a stronger internal locus of control. This may be in part because CAM encourages its users to participate in their own healing process (Schutzler & Witt, 2014). Similarly, Irwin (2000b) suggests his results should be interpreted cautiously as the usual associations between external locus of control and various facets of paranormal belief were also not discernible in this study.

There is some evidence to suggest that other personality traits are associated with paranormal belief. Indeed, individuals who scored higher on measures of extraversion (Goritz & Schumacher, 2000; Peltzer 2002), openness to experience (Eudell & Campbell, 2007; Smith, Johnson, & Hathaway, 2009) and sensation seeking (Smith et al., 2009) endorse more paranormal phenomena. Other studies failed to report such findings (Francis, Williams & Robbins, 2010; Sjoberg & Wahlberg, 2002; Curtis & Wilson, 1997). Similarly, research into neuroticism (the tendency to experience negative emotions) is inconsistent with studies finding a positive relationship

(Lindeman & Aarnio, 2005; Williams, Francis, & Robbins, 2007) or no relationship with paranormal belief (Francis, Williams, & Robbins, 2010; Peltzer, 2002; Sjoberg & Wahlberg, 2002). However, it is postulated that neuroticism is only related to those paranormal beliefs which assume an external force is acting to influence outcomes (French & Stone, 2014). As such, paranormal belief has been associated with superstitious belief (Wiseman & Watt, 2004), spiritualism (Peltzer, 2002), and precognition (Schredl, 2009). Likewise, narcissism (a belief in one's own self, power, and importance) is also associated with aspects of paranormal belief which assume personal control over other people, objects, or events, for example precognition and ESP (Tobacyk & Mitchell, 1987; Roe & Morgan, 2002).

The evidence reviewing age, gender, socioeconomic status, and specific personality traits supports the notion that there are psychological differences between believers and non-believers. This provides support for the sceptical assumption (alongside a lack of rigorous scientific evidence) that paranormal phenomena do not exist. This combined with the pervasiveness of paranormal belief within the population suggests that paranormal belief must serve some cultural, psychological, or social purpose and that further research into this area will allow for a deeper understanding of an important construct within human psychology. This notion has allowed a variety of perspectives (e.g., biological, cognitive, social, developmental) and hypotheses to be produced (e.g., social marginality, cognitive deficits, psychodynamic) to understand the continuing prevalence of paranormal belief. Each of these theoretical viewpoints is plausible with researchers providing supporting and contesting evidence. The main explanations are reviewed to facilitate an understanding of the development and resulting prevalence of paranormal belief.

1.03 SOCIAL MARGINALITY HYPOTHESIS

One theory closely linked to individual differences in paranormal belief is the social marginality hypothesis (Irwin, 2009). This suggests that the people who are most susceptible to paranormal belief are those who possess characteristics which categorise them into groups considered socially marginal. It is hypothesised that this low social rank encourages people to turn to mystical, paranormal, and religious beliefs to compensate for other areas of their lives. The primary indicators of social marginality are suggested to be (old) age, (female) gender, (low) socio-economic status, and (minority) ethnicity (Irwin, 2009).

The predominant negative relationship between most facets of paranormal belief and age deviates significantly from the social marginality hypothesis. In western cultures youthfulness is a social advantage whereas age represents social marginality and disempowerment (Irwin, 2009). It would be expected, according to this theory, that paranormal belief would increase rather than decrease with age, much like traditional religious belief. Gender-related research suggests that women are more likely to endorse specific types of paranormal belief (Aarnio & Lindeman, 2005; Clarke, 1991; Farias, Claridge, & Lalljee, 2005; Jupp, 2008; Rice, 2003, Torgler, 2007; Wiseman & Watt, 2004) consistent with the social marginality hypothesis. Despite recent advances towards equality for women across western society there is still a distinct gender-gap (Cotter, Hermsen, & Vannemen, 2011; Joshi, Son, & Roh, 2014). It is hypothesised that women may endorse paranormal belief to compensate for their lesser social and economic standing. However, evidence suggesting men have great belief in extraordinary life forms and UFO's (Aarnio & Lindeman, 2005; Clarke, 1991; Lange et al., 2000; Rice, 2003) alongside research considering socially constructed gender roles over biological sex (Simmonds-Moore & Moore, 2009) appears to nullify the veracity of this hypothesis. Socio-economic status also provides mixed evidence for the social

marginality hypothesis. Generally, lower levels of income, education, and employment are associated with paranormal belief (Emmons & Sobal, 1981; Rice, 2003; Schuler & Papousek, 2008). However, there are some important caveats to that relationship, with belief in, and use of, CAM and psychic healing increasing with education and income (Chao & Wade, 2008; Frass et al., 2012; Hunt et al., 2010). Overall, whilst there is some evidence to support the social marginality hypothesis it appears that paranormal belief is far more complex and cannot be determined through the examination of simple demographic factors alone.

1.04 PSYCHOBIOLOGICAL PERSPECTIVE

Another explanation of paranormal belief takes a psychobiological approach, suggesting that some individuals have particularly active brain systems which leads them to attribute a paranormal meaning to common neurological phenomena. Approximately 10% of the population report an out of body experience (Alvarado, 2000), 10-15% a hallucinatory experience (Poulton et al., 2000), and approximately 20% of those reporting a near death experience also assign a paranormal meaning to it (Greyson, 2013). One example of a common neurological phenomenon is sleep paralysis, where some aspects of REM sleep collide with a conscious state (Hishikawa & Shimizu, 1995). An individual is awake but experiences temporary paralysis along with various other visual (e.g., seeing a person) or auditory hallucinations (e.g., talking, screaming, shouting). Often, these are interpreted as a supernatural entity attempting to cause harm to the individual (Adler, 2011; French & Santomauro, 2007; Santomauro & French, 2009). It is not difficult to imagine how sleep paralysis can be interpreted as paranormal in origin.

High temporal lobe activity in the brain has been associated with reports of paranormal experiences, for example, sensing an individual who is not present, OBE's, and apparitions (Booth, Koren, & Persinger, 2005, Cook & Persinger, 1997), at both a

clinical and non-clinical level. Some studies have suggested this is due to changes in transcranial magnetic fields which influence temporal lobe activity (Braithwaite & Townsend, 2008; Persinger, 2001), however others failed to support such a hypothesis (Granqvist et al., 2005; French, Haque, Bunton-Stasyshyn, & Davis, 2009).

Researchers have linked paranormal belief and experience to hemispheric dominance in the brain. Traditionally, the left hemisphere is associated with logic and analytical thought, reasoning, and number skills. The right hemisphere is responsible for intuitive and holistic thought, creativity, and imagination (Iaccino, 2014). Increased right hemispheric activity has been reported across numerous EEG (electroencephalography) studies when comparing groups of believers to non-believers (Brugger & Graves, 1991; Gianotti, Faber, & Lehmann, 2002; Pizzagalli et al., 2000). This echoes previous observations associating paranormal belief with intuitive styles of thinking.

Similarly, OBE's and NDE's have been described as psychobiological in origin. It has been suggested that OBE's are the result of a failure to integrate information from different senses (visual, movement, touch) at the temporo-parietal junction (Blanke & Arzy, 2005; De Ridder, Van Laere, Dupont, Menovsky, & Van de Heyning, 2007). The brain is unable to collate information received with regards to the position and location of the body with other information, for instance whether sensations, events and objects should be attributed to one's own body (Tsakiris, Costantini, & Haggard, 2008). When these interruptions occur, subjective OBE's are possible (Blanke & Arzy, 2005). Other researchers (Braithwaite, Samson, Apperly, Brogna, & Hullerman, 2011) suggest that it is a disruption in the pathway between the prefrontal cortex and temporo-parietal junction. Indeed, in tasks involving perspective switching (a function designed to measure connectivity in this brain region), those who reported experiencing OBE's performed worse than those who had never experienced an OBE (Braithwaite et al.,

2011; Easton, Blanke, & Mohr, 2009). The temporo-parietal junction in the right hemisphere supports other findings that paranormal belief and experiences, as well as OBE's specifically, are due to a high level of activation in the right hemisphere and increased temporal lobe activity (Brathwaite, Broglia, Bagshaw, & Wilkins, 2013). Overall there is evidence to suggest that some experiences of paranormal phenomena may be psychobiological in origin (e.g., OBE's and NDE's). However, given the prevalence and range of other paranormal beliefs, experiences and practices (e.g. CAM, superstition, astrology) which cannot be explained by psychobiology alone, further explanation is necessary.

1.05 COGNITIVE DEFICITS HYPOTHESIS

Other researchers have examined paranormal belief from a cognitive perspective. It is hypothesised that paranormal belief is the result of a collection of processes which affect our memory, perception, and reasoning ability allowing individuals to experience events in a slightly different way to how they occurred in reality (French & Stone, 2014). Indeed, the cognitive deficits hypothesis (Irwin, 2009) suggests that those with a high belief in the paranormal are irrational/uncritical thinkers, less intelligent, and unable to employ basic probability and reasoning skills. Evidence partly supports this hypothesis.

Although research suggests a negative relationship between educational attainment and paranormal belief (Donovan, 1998; Schulter & Papousek, 2008), there are notable exceptions to this trend (i.e., psychic healing, CAM). Another facet of cognitive ability, intelligence, is often assessed using IQ tests, with mixed findings produced when considering paranormal belief. IQ has been found to be negatively related to specific facets of paranormal belief e.g., superstition, psi, precognition, and spiritualism (Killeen, Wildman, & Wildman, 1974; Smith, Foster, & Stovin, 1998; Thalbourne & Nofi, 1997). However, these findings are not supported when considering

IQ and global paranormal belief (Stuart-Hamilton, Nayak, & Priest, 2006; Thalbourne & Nofi, 1997). Thus, it was proposed that individuals who endorse paranormal concepts may be deficient in specific areas of intelligence not measured by IQ tests. There is evidence to suggest that the amount of scientific education an individual has received is related to paranormal belief. Students studying science-based subjects have fewer overall paranormal beliefs than humanities students (Aarnio & Lindeman, 2005) and fewer beliefs in specific facets of paranormal belief, for example psychic healing, New Age practices, and superstitions (Gray & Mill, 1990; Grimmer & White, 1990; Preece & Baxter, 2000). Overall, evidence relating to education and intelligence, whilst suggestive, are not conclusive.

Other areas of cognitive ability have been examined to provide further empirical support for the cognitive deficits hypothesis; for example, critical thinking and reasoning ability. Those endorsing specific paranormal concepts (i.e., superstition and precognition) score lower than non-believers on measures of critical thinking and reasoning ability (Gray & Mill, 1990; Hergovich & Arendasy, 2005). Similarly, believers are more likely to make ontological confusions⁴ (Aarnio & Lindeman, 2007; Lindeman & Saher, 2007; Lindeman, Svedholm-Hakkinen, & Lipsanen, 2015), have less syllogistic reasoning⁵ ability (Lawrence & Peters, 2004; Watt & Wiseman, 2002), and less analytic cognitive reasoning skills even when controlling for cognitive ability (Pennycook, Cheyne, Seli, Koehler, & Fugelsang, 2012).

Alternatively, some researchers propose that differences in paranormal belief are related to reasoning style rather than reasoning skills. Individuals with a preference for an intuitive (over analytical) thinking style are more inclined to endorse paranormal

⁴ Lindeman et al., 2015 describe ontological confusions as a type of mentalising bias. They are category mistakes where the distinctive properties of mental, physical, animate, inanimate, life and lifeless categories are inappropriately mixed. For example, "A house knows its history."

⁵ French and Wilson (2007) state that a syllogism is a structured logical argument consisting of two statements which function as premises followed by a third which acts as a conclusion. For example, "All men are mortal. No Gods are mortal. Therefore no men are Gods."

concepts and report more subjective paranormal experiences (Bouvet & Bonnefon, 2015; Epstein et al., 1996; Irwin & Wilson, 2013; Lasikiewicz, 2016). Likewise, paranormal believers performed worse on a variety of analytical and logical thinking tasks and vocabulary knowledge (Gray & Gallo, 2016).

Further support for the cognitive deficit hypothesis comes from evidence suggesting that paranormal believers are prone to heuristic⁶ biases, including probability judgements, misperceiving randomness, and misattributing meaning to seemingly remarkable, but nonetheless objective, co-occurrences. There is some evidence to suggest paranormal believers are less accurate in calculating probabilities (Blagrove, French, & Jones, 2006). However, others have suggested this trend does not extend to general probabilistic reasoning skills and judgements of probability (Blackmore, 1997; Stuart-Hamilton et al., 2006). Musch and Ehrenberg (2002) suggest that most of the differences between believers and non-believers in their study on probabilistic reasoning tasks were due to general cognitive ability rather than specific deficits in probability skills and judgements.

Whilst most people are poor at judging the likelihood of uncertain events (Kahneman, Slovic, & Tversky, 1982; Gilovich, Griffin, & Kahneman, 2002), this seems particularly true of paranormal believers who, studies suggest, are particularly prone to misrepresenting randomness or chance (Dagnall, Parker, & Munley, 2007; Dagnall, Drinkwater, Parker, & Rowley, 2014; Dagnall, Drinkwater, Denovan, Parker, & Rowley, 2016), developing illusionary correlations between statistically unrelated events (Tobayck & Wilkinson, 1991), and demonstrate a heightened susceptibility to the

⁶ Heuristics are simple mental rules or shortcuts, which ease cognitive load and facilitate rapid formation of judgments and decisions (Tversky & Kahneman, 1974).

conjunction fallacy⁷ (Rogers, Davis, & Fisk, 2009; Rogers, Fisk, & Wiltshire, 2011; Rogers, Fisk, & Lowrie, 2016, 2017).

Another cognitive aspect which supports the view that paranormal belief is associated with the way in which an individual processes information about the world is the memory distortions hypothesis (Gallo, 2010). There has been a large body of evidence from the field of eyewitness testimony showing that memory can be very unreliable in the general population (Foster, Huthwaite, Yesberg, Garry, & Loftus, 2012; Laney & Loftus, 2013) even when no deliberate attempt is made to distort witness memories. It has been suggested that false memory⁸ biases are more pronounced in paranormal believers (French, 2003). Studies have found that the number of false memories reported by participants is significantly associated with paranormal belief and experiences (Corlett et al., 2009; French & Wilson, 2006; Wilson & French, 2014), although others have found no differences (French, Santomauro, Hamilton, Fox, & Thalbourne, 2008). False memories are also related to specific facets of paranormal belief, those who claim to have memories of past lives (reincarnation) or being abducted by aliens were more likely to be susceptible to false memory illusions (Clancy, McNally, Schacter, Lenzenweger, & Pitman, 2002; Meyersburg, Bogdan, Gallo, & McNally, 2009).

Similar evidence has been provided for other types of memory, where deficits in working memory capacity⁹ (Richards, Hellgren, & French, 2014) and memory recall (Wiseman & Morris, 1995) have been associated with paranormal belief. Others report conflicting results, finding no relationship between memory accuracy (Blackmore &

⁷ The conjunction fallacy is the tendency to mistakenly judge the likelihood of two independent events (conjunction) as being more likely than the occurrence of each individual event alone (Tversky & Kahneman, 1983).

⁸ False memories are unique memory distortions where people possess definite (to an extent) memories of events which did not actually happen to them (Brainerd & Reyna, 2005).

⁹ Working memory capacity is a term used which refers to the amount of information an individual can temporarily hold for ongoing cognitive processing (Wilhelm, Hildebrandt, & Oberauer, 2013).

Rose, 1997; Rose & Blackmore, 2001), selective memory recall¹⁰ (Watt, Ashley, Gillett, Halewood, & Hanson, 2014), false memories or working memory capacity (Gray & Gallo, 2016).

The cognitive deficits hypothesis suggests that belief in the paranormal is due to shortfalls in a range of cognitive skills. However, several studies allude that paranormal believers may subscribe to a more intuitive form of intelligence (Bouvet & Bonnefon, 2015; Epstein, Pacini, Denes-Raj, & Heier, 1996; Irwin & Wilson, 2013; Lasikiewicz, 2016). Likewise, paranormal belief is associated with increased creativity (Gianotti, Mohr, Pizzagalli, Lehmann, & Brugger, 2001; Rabeyron, Rowe, Mousseau, & Deledalle, 2018; Thalbourne, 1998; Thalbourne & Delin, 1994) and imagination (Billows & Storm, 2015). Research around transliminality supports this notion further. Transliminality suggests that certain individuals demonstrate increased sensitivity to psychological material (imagery and perception) originating in the unconscious, and/or the external environment (Thalbourne, 1998; Thalbourne & Maltby, 2008). It is hypothesised that some individuals have a thinner or more permeable mental boundary between conscious and unconscious material (Hartman, 1989, 1991). Those high in transliminality are believed to become aware of thoughts, images and senses that would usually remain below conscious awareness (French & Stone, 2014), due to increased temporal lobe activity (Thalbourne, Crawley, & Houran, 2003). Transliminality has been linked to self-reported paranormal and unusual experiences (Houran & Lange, 2009; Thalbourne & Houran, 2000), paranormal belief (Thalbourne, 2001), creativity (Thalbourne, 2000), fantasy proneness, and absorption (Thalbourne, Bartemucci, Delin, Fox, & Nofi, 1997).

Overall the evidence presents a convincing argument that paranormal belief and experience is the result of precise cognitive deficits in areas of reasoning, thinking, and

¹⁰ Selective memory recall is the tendency to remember the most interesting, belief congruent events and forget those considered less salient or ambiguous (French & Stone, 2014).

memory (Hergovich & Arendasy, 2005; Lindeman et al., 2015; Pennycook et al., 2012). Belief in the paranormal has been associated with false memories, poor analytical thinking skills (French et al., 2008; Richards et al., 2014; Wilson & French, 2014), and specific probabilistic reasoning deficits, for example, susceptibility to the conjunction fallacy and the misinterpretation of randomness or chance (Dagnall et al., 2014, 2016; Rogers et al., 2016, 2017). It appears paranormal believers may possess a different type of holistic aptitude, consisting of creative, intuitive, and imaginative qualities (Billows & Strom, 2015; Bouvet & Bonnefon, 2015; Thalbourne, 2000). However there are two remaining hypotheses to consider, clinical explanations and the psychodynamic functions hypothesis.

1.06 CLINICAL EXPLANATIONS

One common clinical explanation is that paranormal beliefs and experiences reflect psychological dysfunction on some level. Paranormal belief and experience have been linked repeatedly to a variety of mental illnesses including schizophrenia, dissociative identity disorder, and bi-polar disorder (Sar, Alioglu, & Akyuz, 2014; Thalbourne, 1994). This explains why paranormal belief has traditionally been of pervasive interest to many psychiatrists (Murray, 2012). However, many symptoms (e.g., dissociation, hallucinations, perceptual and memory distortions) which are often taken to be indicators of serious psychopathology are distributed (albeit to varying degrees) across the majority of the population (van Os, Linscott, Myin-Germeys, Delespaul, & Krabbendam, 2009; Nuevo et al., 2012). Recently, there has been a shift from defining specific mental illnesses by categorising symptoms to viewing them on a continuum like many other personality traits (Angst et al., 2003; Maser & Akiskal, 2002; Walsh, Royal, Brown, Barrantes-Vidal, & Kwapil, 2012). There is an increased understanding amongst professionals that there is no specific point at which characteristic diagnostic criteria moves from a normal range to a clinical range

(French & Stone, 2014). Nevertheless, there are characteristics and symptoms which are associated with both paranormal belief and the continuum of mental illness.

Dissociation is defined as a disruption to the usually seamless interactions between various aspects of memory, identity, and the environment, which can be chronic, gradual, or sporadic (American Psychiatric Association, 2000; Levy & Swanson, 2008). Many experiences such as derealisation (feeling that one's surroundings are not real) and depersonalization (feeling disconnected from one's body or experiences) can be measured on a continuum of dissociative tendencies (French & Stone, 2014; Seligman & Kirmayer, 2008). Arguably normal experiences such as "tuning out" of long conversations, daydreaming and absorption in pleasurable activities are classed as dissociative characteristics (Butler, 2006; Butler & Palesh, 2004; Pica & Beere, 1995). At the opposite end of the scale, losing memory of one's own identity is the founding characteristic of dissociative identity disorder (Levy & Swanson, 2008). Dissociativity has been correlated with paranormal belief and experience in a number of studies (Irwin, 1994b; Pekala, Kumar, & Marcano, 1995; Wolfradt, 1997; Ross & Joshi, 1992), although some studies have not found such an association (Groth-Marnat, Roberts, & Ollier, 1998). Higher levels of dissociation have been found in those reporting NDE's (Greyson, 2000), and alien contact (French et al., 2008; Powers, 1994).

Schizotypy is another complex concept within psychopathology (Claridge, 2010; Claridge & Beech, 1995) which can, like dissociativity, be assessed on a continuum. This ranges from relatively common dissociative and imaginative states to clinical schizophrenia (American Psychiatric Association, 2000). Symptoms of schizophrenia include hallucinations (e.g., hearing or seeing things which do not exist) and delusions (e.g., believing that one can read minds). Many studies have demonstrated an association between schizotypy and facets of paranormal belief and experience (Dagnall, Drinkwater, Parker, Denovan, & Parker, 2015; Goulding, 2004; Hergovich,

Schott, & Arendasy, 2008; Houran, Irwin, & Lange, 2001). Specific associations also vary by belief type (Dagnall, Denovan, Drinkwater, Parker, & Clough, 2017). Cognitive-perceptual scores correlate with New Age Philosophy, interpersonal scores with a belief in extraordinary life forms and witchcraft, whereas disorganisation scores were associated with the interpretation of paranormal experiences (Schofield & Claridge, 2007). The association between paranormal belief and schizotypy can, in part, be explained by the overlap in constructs. The diagnostic criteria for schizophrenia specifically refers to odd beliefs or magical thinking (Hergovich et al., 2008). This evidence could lead some to suggest that those who believe in the paranormal are experiencing some form of psychopathology but given the high prevalence of paranormal belief and experiences it would be presumptuous to assume that a large proportion of the population are mentally unwell. Whilst there is a definite link between schizotypy and paranormal belief and experience, there is also evidence to suggest that paranormal experiences described by clinical groups are more negative, strange, and distressing (Bentall, 2000; Targ, Schlitz, & Irwin, 2000) and clinical individuals appear less likely to have insight into the strangeness of their paranormal experiences compared to non-clinical individuals (Targ et al., 2000). Furthermore, the directional nature of the correlation between schizotypy and paranormal belief is uncertain (Hergovich et al., 2008). Clearly, a further explanation is required to understand the development of paranormal beliefs.

1.07 PSYCHODYNAMIC FUNCTIONS HYPOTHESIS

The final main theory of paranormal belief is known as the Psychodynamic Functions Hypothesis (PFH; Irwin, 2009). This theory assumes that, like many psychological processes, paranormal beliefs are primarily needs-serving (Roe & Morgan, 2002). Paranormal beliefs develop as a means of coping with a diminished sense of control experienced in childhood. More precisely, paranormal beliefs develop

in childhood, often because of childhood maltreatment or trauma, and become “re-activated” during adulthood when life is seen to be chaotic or unpredictable and in times of stress. Stressful situations - which can undermine an individual’s sense of control (Lazarus & Folkman, 1984) - are filtered through believers’ “supernatural” framework, creating an illusion of control that helps preserve feelings of personal security by giving a semblance of order and meaning (Irwin, 1993, 2003, 2009). The implication is that, through heightened fantasising, paranormal believers are able to withdraw into a make-believe world to escape stress and cope with their perceived loss of personal control (Rogers, Qualter, Phelps, & Gardner, 2006; Watt, Watson, & Wilson, 2007).

For example, it is plausible that endorsement of extrasensory perception (ESP), engenders illusory feelings of control over an uncertain, unpredictable future (Main, van IJzendoorn & Hesse, 1993). Belief in psychokinesis (PK) may allow individuals to feel in control over distant items, events and/or other people (Greenaway, Louis, & Hornsey, 2013). Lastly, a belief in the veracity of life after death (LAD) may be an adaptive psychological needs-serving mechanism for coping with bereavement, in particular the death of a friend or family member (Mathijssen, 2012; Walliss, 2001; Stroebe, Schut, & Boerner, 2010). Irwin (2009) suggests that social, cognitive, and individual differences (gender, locus of control, fantasy proneness, thinking style, and cognitive biases) act as mediators and/or moderators to the relationship between diminished sense of childhood control, illusory control in adulthood and the various constructs of adult paranormality. The PFH allows much of the evidence surrounding paranormal belief to be amalgamated into a working model.

Several areas of research offer support for Irwin’s PFH. Firstly, theories of early child development support the notion of paranormal belief originating in early childhood. Piaget (2008/1972) suggests that magical thinking, specifically the belief that individual thoughts and intentions have a direct effect on the external world, are

particularly apparent in children's cognitive development until they reach the age of twelve. Others suggest that this continues into adulthood (Woolley, 1997). Similarly, other researchers (Busch, Watson-Jones, & Legare, 2017; Legare, Evans, Rosengren, & Harris, 2012) argue that supernatural explanations can often be more prevalent in adulthood. They also claim that at an individual level both natural and supernatural interpretations can be held simultaneously, in that people can explain the origin of the species, illness and death using both biological and theistic reasoning concurrently. Taken together, this research is consistent with the PFH. It is likely that the origins of adult paranormality develop in childhood, a natural extension of children's cognitive development. However, for those experiencing trauma, or other forms of maltreatment, magical thinking may be used as a mechanism to dissociate from a difficult reality (Irwin, 2001b). In adulthood, such strategies are reactivated in times of stress as a form of coping. As such, adults endorsing paranormal belief and experiences score higher than average on measures of dissociativity, fantasy-proneness, schizotypy, and intuitive thinking (Berkowski & Macdonald, 2014; Dagnall et al., 2015; 2017; Merckleback et al., 2001; Perkins, 2001; Wiseman & Watt, 2006).

Secondly, adult paranormal beliefs and reported paranormal experiences are linked to childhood abuse generally (Rogers, Qualter, & Phelps, 2007; Sar, Alioglu, & Akyuz, 2014). Specific types of childhood abuse, for example, sexual, physical, or emotional abuse and/or neglect have all been linked to stronger paranormal beliefs amongst adults (Berkowski & MacDonald, 2014; French & Kerman, 1996; Irwin, 1992, 1994a; Lawrence et al., 1995; Perkins & Allen, 2006; Rabeyron & Watt, 2010; Rogers & Lowrie, 2016; Scimeca, Bruno, Pandolfo, Ciura, Zoccali, & Muscatello, 2015). For children experiencing trauma it is suggested that withdrawing into a fantasy world and using avoidance-orientated coping strategies could lead to better emotional outcomes in adulthood (Brand & Alexander, 2003). Paranormal belief appears to be one way in

which individuals withdraw into fantasy to cope with trauma. This is supported by research linking paranormal belief with heightened fantasy-proneness. It is suggested that this mediates the relationship between childhood trauma and paranormal belief and experiences (Berkowski & Macdonald, 2014; Irwin, 1990; Lawrence et al., 1995; Rogers & Lowrie, 2016).

Thirdly, other arguably less traumatic but nevertheless destabilising experiences in childhood, such as frequent house moves (Lawrence et al., 1995), and growing up with alcoholic parents, who may be by implication neglectful or abusive (Irwin, 1994a), have also been linked to heightened adult paranormality. Likewise, other types of inappropriate parenting styles for example parental threats of rejection and instrumental parentification predict more paranormal beliefs and experiences through the mediating impact of heightened fantasy-proneness (Rogers & Lowrie, 2016). Similarly, support for the veracity of “unusual” beliefs and paranormal phenomena is more predominant amongst adults classified as having a non-secure attachment type (Main et al., 1993; Rogers, 2013). In a similar vein, non-secure attachment type or parental insensitivity has been linked to the endorsement of New Age beliefs (Granqvist & Hagekull, 2001; Granqvist, Ivarsson, Broberg, & Hagekull, 2007; Granqvist, Fransson, & Hagekull, 2009; Granqvist, Broberg, & Hagekull, 2014).

Whilst evidence has been presented considering the association between external locus of control and paranormal belief there is very little evidence (often inconsistent) for the relationship between perceived loss of childhood control (due to trauma or other negative experiences) and paranormal belief. Watt et al. (2007) found that retrospective recall of diminished experiences of childhood control in adulthood was linked to paranormal belief, although more recent work failed to support this hypothesis (Hynam, 2012). However, Perkins and Allen (2006) found that facets of paranormal belief which engender a sense of control (e.g., Psi, spiritualism, and precognition) were the most

strongly held beliefs in those with a history of childhood abuse compared to those without such experiences.

Finally, paranormal belief has been linked with illusionary control. For example, self-reported stress, namely how unpredictable, uncontrollable, and overloaded participants perceived their lives to be, has correlated positively with global paranormal belief (Lasikiewicz, 2016; McGarry & Newberry, 1981). Paranormal experiences have been found to occur soon after negative life experiences (Rabeyron, 2006; Rabeyron & Watt, 2010). In line with this, those living in volatile environments scored higher on measures of magical thinking (Keinan, 1994). Other unpredictable environments (e.g., sports) are also conducive to the endorsement of paranormal belief. In sport, superstitions are seen as an attempt to seek control over, and by implication cope, with a highly stressful uncertain situation (Bleak & Fredrick, 1998; Foster, Weigand, & Baines, 2006; Ofori, Tod, & Lavalley, 2017), a trend also seen in other diverse populations, for example, gamblers (Bersabe & Martinez Arias, 2000) and market place consumers (Block & Kramer, 2009; Kramer & Block, 2011). Intolerance of uncertainty has also been associated with paranormal belief. Individuals gravitate towards paranormal explanations of events when there is no other plausible explanation (Hart, Sullivan-Sanchez, Packer, & Loveless, 2013).

Further support for the role of control comes from experimental research, where feelings of uncertainty and uncontrollability have been manipulated. Paranormal belief was found to increase following an unsolvable puzzle task but decreased after completing a solvable puzzle (Dudley, 1999). Individuals who had been induced to feel they had little control (high vs. low) reported a stronger belief in precognition (Greenaway et al., 2013). Paranormal believers have been found to be more likely to create an illusion of control when accounting for their performance at a chance-based task (Blackmore & Troscianko, 1985). A recent study by Lasikiewicz and Teo (2018)

also found that participants who were provided with a lucky pen before a stressful psychosocial task experienced significantly less state anxiety than those not given a lucky pen. It is suggested that superstitious thinking was activated in participants who were given the lucky pen which facilitated coping with the stressful task.

The PFH presents the development of paranormal belief as a response to diminished control in childhood. In adulthood, the reactivation of paranormal belief is proposed to be needs-serving, a psychological response to feelings of uncertainty, by providing the illusion of control. In other words, paranormal belief in adulthood is a coping mechanism to deal with stressful situations. The field of coping within psychological literature is expansive, spanning the last five decades. However, to date, little attention has been given to paranormal belief within the coping literature.

1.08 COPING THEORY

Coping has been explained as a response which aims to reduce physical, emotional, and psychological symptoms resulting from stressful life events, negative experiences, and daily hassles (Snyder, 1999). It encompasses a diverse range of behavioural, emotional, and cognitive processes. Coping is distinct from other adaptational reflexes, such as unconscious defensive reactions, as it requires an element of effort recognised by the person engaging in them (Compas, Connor, Saltzman, Thomsen, & Wadsworth, 1999). Some would argue that these should be included within the concept of coping (Skinner & Zimmer-Gembeck, 2007). Coping processes can be adaptive or maladaptive, with various strategies or styles linked to a range of positive and negative physiological, psychological, and social outcomes.

Lazarus and Folkman's (1984) transactional theory of stress and coping remains the most influential model of psychological stress and coping across many fields of research. Stress is seen as an ongoing process, a transaction between the individual and their environment (Folkman & Lazarus, 1985; Lazarus, 1991, 1993; Lazarus &

Folkman, 1984). The transactional model of stress and coping contains two core elements, appraisal and coping. An appraisal refers to an individual's judgement about a potentially stressful event, a process by which someone decides the significance and impact of a given situation. Appraisal is comprised of both primary and secondary appraisals (Lazarus, 1999). In the primary appraisal phase an event can be categorised into one of three groups, irrelevant, positive, or stressful. It is important to note that it is an individual's perception of the event based on their own experiences which determines whether the situation will be appraised as stressful, rather than what the event actually encompasses (Lazarus, 1999). For example, to a novice driver, driving during rush-hour may be appraised as stressful due to the increased traffic, a situation irrelevant to a more experienced driver. When a situation is appraised as irrelevant or positive there is no need for further appraisal until an aspect of the event changes. When in the primary appraisal phase, an event is perceived to be stressful, secondary appraisal occurs. In this phase an individual evaluates their own abilities and resources, assessing how they could cope with the perceived stressful event (Lazarus, 1991).

The second core element of the transactional model of coping occurs when an individual's appraisal of their own abilities, skills, and resources are outweighed by the demands of the situation. In this case coping efforts are employed to deal with the stressful event. Coping efforts are not seen as a singular event, but rather a continuous interaction between the person and the environment; a dynamic series of appraisals and reappraisals. The reappraisal process occurs to help the individual understand if coping efforts have been successful and if further, or different, coping efforts should be employed (Lazarus, 1999, Lazarus & Folkman, 1984).

Research examining the transactional model of stress and coping has traditionally focused upon specific types of coping strategies classified as either problem-focused or emotion-focused. Problem-focused strategies are usually directed at

changing the stressful situation. An individual will take steps to tackle a problem directly or reduce the impact it may have. In contrast, emotion-focused strategies aim to reduce emotional distress associated with the situation, either by altering or embracing the emotional reaction (Lazarus & Folkman, 1984). Skinner, Edge, Altman, and Sherwood (2003) argue, however, that strategies cannot be easily categorised as either problem-focused or emotion-focused, as many coping strategies could be classified as both. The categorisation of the strategy could be determined by the goal behind their use (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001). For example, seeking social support is emotion-focused if an individual is looking to vent to friends, or problem-focused if help and advice is sought.

It has been suggested that rather than being viewed as two distinctly separate forms of coping, problem-focused and emotion-focused should be seen as complimentary co-occurring strategies (Lazarus, 2006). Individuals often use both problem-focused and emotion-focused strategies within a single coping episode (Folkman & Lazarus, 1980; Tennen, Affleck, Armeli, & Carney, 2000). The use of these strategies interchangeably or concurrently makes them difficult to effectively separate within the coping process (Folkman & Moskowitz, 2000). Despite this, traditionally, use of emotion-focused coping has been linked to more psychological distress and negative affect in comparison to problem-focused coping (Billings & Moos, 1981; Sigmon, Stanton, & Snyder, 1995)

Whilst there is still debate about the most useful way to group specific coping strategies (Skinner et al., 2003), other researchers accentuate the difference between strategies which approach or avoid a stressful event or situation. Approach strategies are defined as those which take specific steps to deal with an emotion or problem (Carver & Connor-Smith, 2010). Avoidant strategies are those which allow an individual to avoid dealing with a specific problem or emotion directly (Sarafino, 2008). Problem-focused

and emotion-focused strategies can therefore be classified as either approach-orientated or avoidance-orientated in nature. More recent research considering approach emotion-focused coping rather than assuming it is inherently avoidant has found it may be used in an adaptive manner (Austefeld & Stanton, 2004; Stanton, Kirk, Cameron, & Danoff-Burg, 2000). Overall avoidant coping strategies have been linked to more negative outcomes and approach coping strategies to more positive results (e.g., Abbott, 2003; Moos & Holahan, 2003; Stowell, Kiecolt-Glaser, & Glaser, 2001).

Clearly coping is a broad and complex topic (Carver & Connor-Smith, 2010), and whilst most agree that there is a clear need to distinguish between different coping elements, there has been little consensus over the basic categories used to classify how people cope (Compas et al., 2001). Skinner et al. (2003) found in over 100 category systems, some scales relied on two to three distinct categories, whilst others referred to up to ten times as many categories, with over 400 different labels. Despite repeated calls for consistency over the core concepts of coping, category confusion is still very much apparent. Whilst it is outside the scope of this thesis to review and categorise all the potential groups of coping strategies, several others highlighted by Carver and Connor-Smith (2010) are worthy of note.

Accommodative coping is when an individual makes amendments within themselves in order to make provision for the constraints or barriers presented by a stressor. This tends to include strategies such as acceptance and relinquishing goals. Literature in the area tends to look at the benefits of accommodative coping with regards to aging (Boerner, 2004), living with a chronic or terminal illness (Schmitz, Saile, & Nilges, 1996) as well as parents caring for a sick child (Seltzer, Greenberg, Floyd, & Hong, 2004). Another concept, means-focused coping, refers to an individual using a prior belief system or intrinsic values to find meaning or positive outcomes in times of stress (Helgeson, Reynolds, & Tomich, 2006; Tennen & Affleck, 2002;

Wright, Crawford, & Sebastian 2007). Indeed benefit-finding has been consistently linked to positive outcomes/affect (Linley & Joseph, 2004; Pakenham, 2005; Tedeschi, Park, & Calhoun, 1998). Finally, proactive coping is described as preventative coping, which is multidimensional and future-oriented. It is about preparing for potential stressors before their occurrence (Aspinwall, 2005). Proactive coping has been linked to life satisfaction and positive affect (Sohl & Moyer, 2009).

Other researchers have taken a different approach to the investigation of coping efforts. Rather than exploring specific coping strategies as above, coping styles are examined. Research into coping styles assumes that in general individuals tend to cope with stressful events in a uniform manner (Rutherford & Endler, 1999). The implication being that coping is a stable disposition or “trait” regularly adopted by individuals in a variety of different contexts. This approach has been criticised by those who claim coping is contextually-driven (Lazarus, 1991; Lazarus & Folkman, 1984), i.e., the “state” approach, which emphasises the importance of actual strategies used when coping with different situations. The dispositional vs situation coping debate is one of the most enduring deliberations within stress and coping research (Greenaway, et al., 2014).

There are several advantages and disadvantages to each approach, particularly when considering the assessment of coping efforts. Whilst dispositional coping measures may not be specific enough to predict a specific coping instance (Schwartz, Neale, Macro, Shiffman, & Stone, 1999), they have the potential to assess coping patterns over longer time periods (Ptacek, Pierce, & Thompson, 2006; Schwarzer & Schwarzer, 1996). In contrast, situational coping measures are more predictive of specific coping strategies but are more difficult to use (e.g., ecological momentary assessments require individuals to endorse specific strategies directly after experiencing a stressful event). Recent literature acknowledges the importance of both dispositional

and situational factors in understanding stress and coping (Dewe & Cooper, 2007; Dewe, O'Driscoll, & Cooper, 2010), especially as a dispositional coping style could influence specific coping strategies used as part of the situational coping perspective (Bouchard, Guillemette, & Landry-Leger, 2004; Carver & Scheier, 1994; Moos & Holahan, 2003; Roesch & Rowley, 2005).

1.09 INDIVIDUAL DIFFERENCES IN COPING

As with paranormal belief, there are gender differences in the use of coping efforts. Women tend to report experiencing more chronic stress and daily hassles than men (Brougham, Zail, Mendoza, & Miller, 2009; Matud, 2004). Under the transactional model, this suggests that women tend to appraise situations as more stressful, potentially accounting for further differences in coping efforts. In general, women have a more emotion-focused coping style than men and are more likely to seek social support (Brougham et al., 2009; Craciun, 2013; Eaton & Bradley, 2008; Matud, 2004; Ptacek, Smith, & Dodge, 1994; Stanton et al., 2000; Tamres, Janicki, & Helgeson, 2002). However, this view is not shared by all, with some research finding little to no gender-related difference in coping efforts (Lengua & Stormshak, 2000; Porter & Stone, 1995).

It has been suggested these differences are because men and women are socialised to cope with stress in different way (Ptacek et al., 1994). The socialisation hypothesis suggests that because of gender role expectations women are primed to express their feelings and seek social support. They are more likely to engage in coping efforts which adhere to this stereotype. Conversely, men are encouraged to conceal their emotions, and be task focused. Under the socialisation hypothesis they are more likely to engage in problem-focused coping. Additional evidence suggests that it is gender roles rather than biological sex which account for these differences. Women who

endorsed more feminine values were more likely to use emotion-focused coping strategies (Dyson & Renk, 2006). Similarly, individuals high in masculinity engaged in more problem-focused coping (Nezu & Nezu, 1987).

There is little evidence for age-related differences in coping when considering dispositional coping styles. Whilst older individuals report similar numbers of stressful life events and fewer daily hassles than young adults (Folkman, Lazarus, Pimley, & Novacek, 1987; Trouillet, Gana, Lourel, & Fort, 2009), they also appraise them as less stressful. There appears to be little difference in coping efforts when comparing older and younger individuals (Ben-Zur, 2002; Folkman et al., 1987; McCrae, 1982) once the type of problem experienced had been controlled for (Aldwin, Sutton, Chiara, & Spiro, 1996), although some research suggests that older individuals may use less avoidant coping (Blanchard-Fields, Sulsky, & Robinson-Whelen, 1991).

There is evidence to suggest that there are socio-economic differences in coping. Socio-economic status (SES) is proposed to be a key indication of the amount of resources and skills an individual is able to accumulate for coping. Communication and problem-solving skills essential for approach-orientated and proactive coping are developed through education (Ross & Wu, 1995), meaning those with a lower SES are less likely to develop effective coping skills. Similarly, those with lower SES may experience more negative life events (Adler et al., 1994) and stressful living conditions on a long-term basis (Taylor, Repetti, & Seeman, 1997). The remaining resource capacity for dealing with future events may be depleted as individuals have to focus on dealing with present circumstances. As such higher SES is positively related to proactive coping (Ouweland, de Ridder, & Bensing, 2009), approach-orientated coping and planning (Feldman & Steptoe, 2003).

Perceived control is also an important resource for individuals who are dealing with difficult or challenging life events (Skinner & Zimmer-Gembeck, 2011) and its

effects are apparent at every point during the coping process, when considering the transactional model (Lazarus & Folkman, 1984). Loss of control (whether subjective or objective) is a distinct, universally recognised characteristic of almost all negative life events (Miller, 1979; Thompson, 1981). Lazarus and Folkman (1984) suggest that perceived controllability is the key difference in whether a stressful event is appraised as a challenge (where change can be made to the outcome) or a loss (where no change is possible) in the primary appraisal phase. When events are perceived to be objectively controllable or individuals feel they have the internal skills and abilities (perceived controllability) to deal with a stressful event they are more likely to use effective coping responses, showing more planning, proactive and approach-orientated coping (Skinner & Zimmer-Gembeck, 2011). Perceived control is one of the most powerful internal resources used to deal with life events appraised as stressful (Folkman, 1984; Lazarus & Folkman, 1984; Taylor, 2007). As this pattern of coping is more likely to be successful, individuals gain a renewed sense of control as well as an increasing knowledge and skills that could be used to deal with future stressors. This can be represented as a cyclic configuration, which may even reduce the likelihood of events being appraised as stressful in the long-term (Schmitz & Skinner, 1993).

Alternatively, those who appraise events as a loss, or perceive that the outcomes of these events are due to chance or other people's actions rather than themselves, are more likely to engage in avoidance-orientated coping strategies. Those individuals tend to procrastinate, give up quickly, and ruminate about the potential poor outcome or their own self-efficacy (Skinner & Zimmer-Gembeck, 2011). This would result in a negative, cyclic pattern of coping as development of effective coping strategies is hindered, increasing the likelihood of stressful events in the future. The role of control is a central component of the coping process which can vary significantly by type of event and an individual's own perceptions of available coping resources.

1.10 FIVE FACTOR MODEL OF PERSONALITY

The coping process is also significantly influenced by personality characteristics. Personality is broadly defined as characteristic patterns of thoughts, feelings, and behaviours which remain relatively consistent over time and across situations (Connor-Smith & Flachsbart, 2007). Whilst there are many diverse theoretical approaches which attempt to define personality, McCrea and Costa's (2003) five factor model of personality is widely adopted as a conceptual framework. The acronym OCEAN is used to recall each of the five factors which represent Openness to experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism.

Openness to experience has been described as the depth of individual's life experiences (John & Srivastava, 1999). It represents an individual's willingness to try new things and 'think outside the box'. Common traits related to this characteristic are intelligence, curiosity, creativity, and perceptiveness (Schretlen, van der Hulst, Pearlson, & Gordon, 2010). An individual high in openness to experience is likely to enjoy meeting new people, engage in a variety of experiences, and use creative thinking (McCrea & Sutin, 2009). Those low in this characteristic will prefer routine activities and repeating events they have already experienced. Individual high in openness to experience have traits which can facilitate the use of approach-orientated coping. Strategies associated with this personality characteristic include cognitive restructuring and problem-focused coping (Carver & Connor-Smith, 2010; Connor-Smith & Flachsbart, 2007).

Conscientiousness has been described as the tendency to act in a socially desirable manner (John & Srivastava, 1999). It represents an individual's ability to control impulses, and work within a given structure. Traits associated with conscientiousness are being reliable, hard-working, consistent, and energetic. An individual high in this characteristic is likely to be academically successful with an

ambition to succeed in both personal and professional goals (Judge, Higgins, Thoresen, & Barrick, 1999). An individual low in conscientiousness will prefer to procrastinate and is likely to make decisions impulsively. Individuals high in conscientiousness also have traits which increase the likelihood of approach-oriented coping. Their ambition to succeed makes avoidance-orientated coping less likely (Carver & Connor-Smith, 2010). Strategies such as problem-focused coping, cognitive restructuring, and approach emotion-focused coping are positively associated, whilst denial, avoidance emotion-focused coping, and drug and alcohol misuse are negatively associated with conscientiousness (Connor-Smith & Flachsbart, 2007).

Extraversion has been described as the level of enjoyment that an individual takes from interactions with others (John & Srivastava, 1999). It represents an individual's social engagement, with the opposite end of the spectrum indicating introversion. Common traits associated with extroversion are being outgoing, talkative, assertive, and affectionate. Individuals high in extroversion will seek out social opportunities, for example, parties, dinners, and group sports, as they are most comfortable when around other people (McCrea & John, 1992). Individuals low in this characteristic prefer their own company; they are often described as quiet, reserved, and thoughtful. Individuals high in extraversion also have traits required to engage in approach-orientated coping. Their need to actively and energetically engage with people, making avoidance-orientated coping less likely. Strategies positively associated with extraversion are problem-focused coping, cognitive restructuring, and seeking social support. Extraversion is unrelated to all avoidance-orientated coping strategies (Carver & Connor-Smith, 2010; Connor-Smith & Flachsbart, 2007).

Agreeableness is concerned with the interaction an individual has with other people. It represents sensitivity in interpersonal relationships (John & Srivastava, 1999). Common traits associated with agreeableness as loyalty, sensitivity, trusting, and

altruism. Individuals high in agreeableness tend to be well-liked and respected by others. They are kind and affectionate to everyone, from friends to strangers. They are more likely to have positive relationships, attain desired jobs, and have strong social support networks (Carver, Johnson, McCullough, Forster, & Joormann, 2014; Ozer & Benet-Martinez, 2006). Those low in this characteristic are less trusted by others and have a tendency to be blunt or sarcastic. As those high in agreeableness have strong social bonds it would be expected that they may utilise these networks for coping (Carver & Connor-Smith, 2010). Agreeableness is negatively associated with avoidance-orientated coping, particularly denial and emotion-focused coping. This personality characteristic is also positively associated with cognitive restructuring (Connor-Smith & Flachsbart, 2007).

Neuroticism represents an individual's temperament and emotional stability. Common traits associated with neuroticism are insecurity, jealousy, anxiety, fearfulness, and being self-critical. Individuals high in neuroticism generally have low self-esteem, worry a lot, and can easily lose their temper. It has been linked to poorer job performance (Judge & Ilies, 2002) and mental health issues (Soldz & Valliant, 1999). Those low in this characteristic are more likely to be confident and adventurous. Given that an individual high in neuroticism is vulnerable to intense emotions and distress, it is likely they will be more prone to avoidance-orientated coping, to disengage from a stressful event. As per the cyclic nature of coping, this will further inhibit approach-orientated coping strategies (Carver & Connor-Smith, 2010). As expected, neuroticism is positively related to all avoidance-orientated coping strategies including distraction, wishful thinking, denial, and substance misuse (Connor-Smith & Flachsbart, 2007).

Whilst not considered one of the five factors of personality in McCrea and Costa's (2003) model, a construct which features regularly, and is worthy of note, is optimism (Carver, Scheier, Miller, & Fulford, 2009). Optimism is the extent to which

an individual has a widespread propensity to believe that event outcomes will be positive, and ultimately that negative events will pass. Common traits associated with optimism are positivity, hope, confidence, and future-orientation (Carver & Scheier, 2014). Individuals high in optimism have a greater social support network, engage with high priority tasks, and have better physical and mental health (Carver & Scheier, 2014; Carver, Scheier, & Segerstrom, 2010; Srivastava, McGonigal, Richards, Butler, & Gross, 2006). Optimism is positively associated with approach-orientated coping and negatively associated with avoidance-orientated coping (Nes & Segerstrom, 2006).

Whilst most researchers have found significant associations between the five factors of personality and coping, often the effect sizes are small (Connor-Smith & Flachsbart, 2007). One explanation considers the dispositional vs. situational coping debate. Unsurprisingly, personality predicts dispositional coping better than situational coping (Carver & Connor-Smith, 2010). This could suggest that coping is stable and maintains a regular pattern much like personality characteristics. However, consistent with research examining cognitive and memory biases, personality may influence the reporting of coping. Individuals are more likely to recall strategies which are synonymous with their personality and that work well for them (Carver & Connor-Smith, 2010; Connor-Smith & Flachsbart, 2007).

Problematically, many coping measures are retrospective in nature, which can make the resulting findings unreliable. Individuals have been consistently found to overestimate daily coping (Smith, Leffingwell & Ptacek, 1999), to underreport cognitive coping, and overreport behavioural coping (Stone et al., 1998). Retrospective measures are also poor predictors of momentary assessments of situational coping. As momentary assessments have a smaller time lag, they are less likely to have memory and reporting biases (Schwartz et al., 1999; Stone & Shiffman, 2002), although there is some evidence to suggest that time-limited (e.g., <30 days) retrospective reports of

coping correlate well with daily assessments of coping (Todd, Tennen, Carney, Armeli, & Affleck, 2004).

1.11 PARANORMAL BELIEF AND COPING

To date, only five studies have examined the relationship between paranormal belief and coping directly, with mixed results emerging. Callaghan and Irwin (2003) examined dispositional coping styles and found traditional paranormal beliefs correlated positively with emotion-oriented coping and negatively with task-oriented coping. Endorsement of New Age philosophy produced similar results, as well as correlating with more avoidant coping. This suggests that paranormal believers tend to attempt to manage levels of emotional distress in stressful situations, by avoiding the issue rather than trying to overcome the problem directly. Despite these relationships being weak, Callaghan and Irwin (2003) suggest paranormal beliefs serve as a specialised adaptive response.

In other work, Rogers, Qualter, Phelps, and Gardner (2006) examined the relationship between situational coping strategies and paranormal belief. They found neither active-cognitive (e.g., using cognitive reappraisal strategies), active-behavioural (e.g., seeking advice or making action plans), nor avoidant coping (using denial, wishful thinking, or avoidant behaviours) predicted global paranormal beliefs. This suggests that paranormal believers are just as likely to avoid their problems and just as likely to take direct action to overcome a specific issue. Whilst the same was true of traditional paranormal beliefs, a tendency to use avoidant coping did predict New Age philosophy with this relationship moderated by a greater utilisation of emotional intelligence. This implies that for individuals able to utilise positive moods, New Age concepts may be used as a strategy to passively accept, and therefore avoid the reality of events appraised as uncontrollable. Rogers et al. (2006) propose that belief in the paranormal represents a unique way of coping that is different from traditional coping strategies. They also

suggest that paranormal coping strategies may be employed in very specific circumstances, for example, when stressful life events are perceived as especially uncontrollable and/or when all other strategies have been tried or deemed pointless (e.g., following bereavement).

More recently, Berkowski and Macdonald (2014) sought to further evidence the relationship between adult paranormal belief, childhood trauma, and fantasy-proneness. They attempted to expand previous models (Irwin, 1994a, 2009; Lawrence et al., 1995) by including stigma, resiliency, and dispositional coping. Avoidant coping correlated positively with all dimensions of paranormal belief, except traditional religiosity, which was omitted from the measure. In support of the PFH, a significant relationship was found between childhood trauma and paranormal belief, which was fully mediated by avoidant coping and fantasy-proneness. Those facets of paranormal belief which encompass an element of control (witchcraft, psi, and superstition) also showed the highest correlation with trauma variables. These results are in accordance with Callaghan and Irwin's (2003) findings that paranormal belief is a form of coping, a needs-serving psychological response to trauma. Berkowski and Macdonald (2014) conclude that given the support for paranormal belief as a coping mechanism, future research seems warranted to explore this notion further.

Irwin, Dagnall, and Drinkwater (2015) explored the extent to which adult paranormal beliefs were associated with both coping strategies and a tendency to endorse contradictory beliefs concurrently; a concept termed "doublethink". Contrary to expectations, New Age belief and traditional religious belief were unrelated to three main coping strategies (avoidance, problem-solving, and self-deceptive optimism). Irwin et al. (2015) suggest that belief in paranormal phenomena shows little similarity to conventional methods of coping strategies. Again, the implication here is that

endorsement of alleged paranormal phenomena is a coping strategy distinct from any other.

Finally, Mathijssen (2012) considered adolescents' paranormal experiences, with qualitative data, supporting the notion that paranormal experiences serve as an active coping mechanism incorporating cognitive (i.e., to understand and be reassured by knowledge), and affective elements (i.e., the need for contact and interaction). These are used in a practical manner to meet psychological needs. However, such experiences were accompanied by anxiety, fear, and a difficulty in managing one's emotions as individuals often underwent a process of cognitive adjustment in order to relieve the cognitive dissonance caused by the experience. Mathijssen (2012) claims that whilst paranormal experiences appear to bring some comfort to the distressed, their effectiveness as a coping mechanism remains questionable. This suggests that paranormal belief may bring both positive and negative outcomes depending upon the individual and the amount of cognitive dissonance and anxiety experienced.

In sum, past research examining the relationship between paranormal beliefs and coping has produced mixed results. One explanation for these apparent inconsistencies may be the variety of belief measures employed, and thus, different paranormal concepts explored. Whilst most researchers utilised Tobacyk's (1988, 2004) Revised Paranormal Belief Scale (RPBS), some have retained the original seven factor solution (Berkowski & Macdonald, 2014)¹¹. Others have employed the more robust two-factor model forwarded by Lange et al. (2000) (Callaghan & Irwin, 2003; Rogers et al., 2006), or utilised alternative scales such as the Survey of Scientifically Unsubstantiated Beliefs (Irwin et al., 2015). Finally, as already noted, Mathijssen (2012) used no quantitative measures relying instead on spontaneous interview references to spiritualism. Greater

¹¹ Berkowski and Macdonald (2014) omitted the Traditional Religious Beliefs (TRBs) subscale.

methodological consistency pertaining to the most appropriate measure(s) of “paranormal coping” seems warranted.

Inconsistent findings could also reflect heterogeneity in the measurement of coping. Coping is a multidimensional construct containing many different psychological processes (Lazarus, 2006). Perhaps unsurprisingly, there are inherent difficulties in measuring the concept of coping particularly given its generality, relative lack of stability and dynamic nature (Schwarzer & Schwarzer, 1996). Indeed, existing scales have been criticised for being derived both empirically (using factor analytical methods) and theoretically (Edwards & Baglioni, 2000) and falling on either side of the situational/dispositional coping debate. Two of the aforementioned studies (Berkowski & Macdonald, 2014; Callaghan & Irwin, 2003) utilised “trait” measures of coping, the implication being that coping is a stable disposition or style regularly adopted by individuals in a variety of different contexts. This approach has been criticised by those who claim contextually-driven “state” measures of coping, such as the Ways of Coping Questionnaire (Holahan & Moos, 1987) as used by Rogers et al. (2006) or the General Coping Strategies Scale (Iwata, 2002) as used by Irwin et al. (2015), are more appropriate because the focus is on actual strategies used when coping. Finally, Mathijssen (2012) merely refers to coping “mechanisms” in his interview study.

1.12 CONTINUING BONDS

To date, research considering the relationship between coping and global paranormal belief and experiences has produced inconsistent findings. However, a large body of research (Benore & Park, 2004; Steffan & Coyle, 2011; Strobe, Abakoumkin, Strobe, & Schut, 2011; Woo & Chan, 2010) suggests that one specific facet of paranormal belief (life after death) is a natural coping strategy following a bereavement. Continuing bonds have been described as a bereaved individual’s endorsement of a continuing relationship with the deceased individual (Stroebe & Schut, 2005). It is

suggested for a time, after the deceased's death, the bereaved individual's attachment system cannot comprehend the permanence of the separation and searches for its continuance. Therefore people continue to activate attachment bonds in various ways as a supportive resource (Steffan & Coyle, 2011). Continuing bonds can be expressed on a continuum from holding memories of the deceased, by looking at photographs (Marwit & Klass, 1996), keeping their possessions (Klass, Silverman, & Nickman, 1996), sensing their presence (Tyson-Rawson, 1996) to attempting to engage in direct communication (Foster et al., 2011; Suhail, Jamil, Oyeboode, & Ajmal, 2011). Continuing bonds maybe therefore act as a grief-specific coping strategy (Asai et al., 2010).

Continuing bonds are proposed to serve as a coping strategy for many reasons. Firstly they may alleviate the stress caused by an attachment separation response, as belief in some form of afterlife may assure the bereaved that separation is temporary (Benore & Park, 2004; Suhail et al., 2011). This may be especially true if it is felt the deceased is in a better place, without pain or suffering (Root & Exline, 2014). Conversely, if they believe the deceased may be suffering (e.g., in hell) this may be frightening for the bereaved (Exline, 2003). Continuing bonds may also serve as a strategy for addressing unresolved conflicts within a relationship by allowing the giving or receiving of forgiveness (Suhail et al., 2011; Woo & Chan, 2010).

Contradictory findings exist, with regards to the effectiveness of continuing bonds as a coping strategy. Qualitative research tends to deduce that continuing bonds are reported as adaptive and positive for the bereaved (Nowatzki & Kalischuk, 2009). However, most quantitative research suggests that they are associated with distress in both the long and/or short term (Field & Friedrichs, 2004; Field, Gal-Oz, & Bonanno, 2003; Field, Nichols, Holen, & Horowitz, 1999). However, this view is not consistent with research suggesting that some types of continuing bonds (i.e., memories as a

source of comfort) are linked to positive adjustment (Field et al., 1999) and others (i.e., keeping possessions) are only linked to immediate but not chronic distress (Boelen, Stroebe, Schut, & Zijerveld, 2006). Whether continuing bonds are adaptive is also dependent upon the strength of the initial relationship, the expectedness of death and the bereaved's perception of the death as a reality or an experience to which they are unable to adjust and must therefore avoid (Root & Exline, 2014; Strobe et al., 2011).

1.13 RELIGIOUS COPING

Another related concept which has generated a plethora of research within the coping field is religious belief. Religion has been defined as a broad-band multidimensional construct (Pargament, 1997; Hill & Hood, 1999) that includes giving answers to the meaning and purpose of life, providing social support, religious activities and services at both an individual and institutionalised level (Calhoun & Tedeschi, 1999). It is described as an organised set of beliefs, rituals, practices, and morals designed to facilitate closeness to a God (Koenig, McCullough, & Larson, 2001). Early empirical studies suggest that religion can be used as a type of coping, with the purpose of increasing an individual's sense of proximity to God when uncertainty arises (Belavich & Pargament, 2002). It is suggested that this attachment to God, compensates for insecure attachments with caregivers in infancy (Kirkpatrick, 2005) much like New Age beliefs (Granqvist et al., 2001, 2005, 2009, 2014).

Concepts within religious belief overlap with those commonly associated with paranormal beliefs and experiences. Both deal with phenomena that by definition, cannot be explained by scientific theory (Goode, 2000). Indeed, measurements of paranormal belief often contain distinctly religious concepts. For example, the Revised Paranormal Belief Scale (RPBS; Tobayck, 1988, 2004) contains items enquiring about belief in God, and the possibility of heaven and hell. The RPBS also considers belief in witchcraft which can have paranormal connotations however, primarily it is the practice

of those who adhere to a Wiccan religion (Moe, Cates, & Sepulveda, 2013). Similarly, concepts which refer to the notion of life after death (LAD) are common within both religious and paranormal belief systems. However, a complicated relationship between religious and paranormal belief has been hypothesised. Some studies (Goode, 2000; Orenstein, 2002; Sjoberg & Wahlberg 2002; Rudski 2003) report a positive correlation between paranormal and religious belief. Other studies (Bainbridge & Stark, 1980; Tobacyk & Wilkinson, 1990) document a negative correlation between the two belief types or that they are independent of each other (Donahue, 1993; MacDonald, 2000; Rice, 2003). The clear overlap between religious and paranormal concepts has an implication for the proposed paranormal coping. An examination of the religious coping literature is therefore warranted.

Over the past 30 years, the study of religion and coping has become an abundant area of research. Religious belief, like many other psychological functions, is proposed to be primarily needs-serving and to provide individuals with a cognitive framework which affords meaning and stability. It is suggested that religion can help individuals to understand life events as well as offer guidance, hope, and support (Kirkpatrick, 2005; Pargament, 1997; Spilka, Shaver, & Kirkpatrick, 1985). Religious coping is commonly used in times of stress (Ferraro & Koch 1994), bereavement (McIntosh, Silver & Wortman 1993), mental and physical ill-health (Koenig, 2012), and war (Pargament et al., 1994).

Pargament (1997) first applied Lazarus and Folkman's (1984) transactional model of coping to the sphere of religion and suggested that it was critical to understand how individuals use religious coping to deal with a stressor. He proposed that this was more important than understanding the different forms of religious coping as many researchers had prior to this. He argued that it is not enough to understand level of engagement with religious practices (e.g., number of times a week an individual prays)

as the content will vary dramatically by person and situation. To better understand the concept of religious coping, Pargament, Koenig, and Perez (2000) developed the RCOPE. They generated 105 items which represented five concepts within religious coping including searching for meaning, control, closeness to God, intimacy with others, and life transformation. Factor analysis revealed 17 factors. For example, seeking support from clergy or members included items such as looking for love, concern for members of the church, and asking others to pray for them. Other factors considered the extent to which each individual chooses to work with God to resolve any problems in an active, collaborative, or passive manner. A 14-item version of the measure (known as the brief RCOPE) was also developed which determined the extent to which individuals engaged in positive or negative religious coping (Pargament, Feuille, & Burdzy, 2011). Positive religious coping included maintaining a positive relationship with God and collaborating to solve problems, as well as seeking support, forgiveness, or a spiritual connection. Negative religious coping includes questioning the power or love of God and the church as well as feeling that the devil has contributed to the situation.

Since the development of the RCOPE and brief RCOPE the prevalence of religious coping has been assessed across America and Europe. Studies report 39-75% of patients with health problems regularly engage in religious activities from attending services once a month to praying every day (Simoni, Martone, & Kerwin 2002; Tarakeshwar et al., 2006; Trevino et al., 2010).

Studies have also sought to understand the impact of religious coping on a variety of outcomes across different religions. Positive religious coping has been associated with decreased stress symptoms (Meisenhelder & Marcum, 2004), including depression (Zwingmann, Wirtz, Muller, Korver, & Murken, 2006), anxiety (Ironson & Kremer, 2009; Zwingmann et al., 2006) and feelings of anger (Ai, Pargament, Kronfol,

Tice, & Apel, 2010). Positive religious coping has also been correlated with increased optimism (Ai, Peterson, & Huang, 2003), and personal growth (Abu-Raiya, Pargament, & Mahoney, 2011; Tarakeshwar et al., 2006). Overall beneficial outcomes are usually associated with positive religious coping (e.g., Falb & Pargament, 2013). As expected negative religious coping is generally associated with less desirable outcomes. Negative religious coping has been associated with a reduced chance of survival at follow-up (Pargament, Koenig, Tarakeshwar, & Hahn, 2001), greater distress (Trevino, Archambault, Schuster, Richardson, & Moye, 2012), and feelings of depression, anger, and isolation (Abu-Raiya et al., 2011; Carpenter, Laney, & Mezulis, 2012; Hills, Paice, Cameron, & Shott, 2005).

Other research into religious coping has also considered the individual's level of belief and active participation in religious activities. There is evidence to suggest that there may be a relationship between levels of religious belief and the effectiveness of religious coping. Individuals with a high religious orientation engaging in religious coping had a quicker recovery time than their moderate religious belief comparators (Koenig, 2007). For those with low to moderate religious belief, religious coping was more likely to be associated with negative, avoidant coping strategies (Krageloh, Chai, Shepherd, & Billington, 2012) and they were the least likely to benefit from religious coping strategies despite turning to them during an episode of coping (Stecz & Kocur, 2015).

Research suggests that religion is a recognised social phenomenon and that religious practice can for many represent their main source of social support. Positive religious coping has been associated with increased social support in many patients with health difficulties (Simoni et al., 2002; Tarakeshwar et al., 2006; Contrada et al., 2004; Wildes, Miller, de Majors, & Ramirez, 2009). One explanation is that active participation in religious services allows individuals to expand their social network,

increasing perceived or actual levels of support in times of need. As such, regular church attendance has been associated with improved physical health (Campbell, Yoon, & Johnstone, 2010) and a longer life expectancy (Li, Stampfer, Williams, & VanderWeele, 2016; Hummer, Rogers, Nam, & Ellison, 1999). Involvement with religious communities has been linked to a greater quality of life (Balboni et al., 2007, 2013) and increased mental health (Brenner, Homaifar, Adler, Wolfman, & Kemp, 2009; Cohen, Yoon, & Johnstone, 2009). These positive outcomes associated with religious involvement are often mediated by social support (Salsman, Brown, Bretching, & Carlson, 2005).

Almost adjacent to religious coping is the concept of spiritual coping. Many publications use the term 'religious/spiritual coping.' However, some researchers view these concepts, at least in part, as separate entities (MacDonald, 2011; Piedmont, Ciarrochi, Dy-Liacco, & Williams, 2009; Saucier & Skrypinska, 2006). They suggest that, like religious beliefs, spiritual beliefs and practices are perceived as an active and effective means of coping with problematic and stressful situations (Paloutzian & Kirkpatrick, 1995), by enhancing a sense of safety and security (Greenberg, Pyszczynski, & Solomon, 1986). Religious belief/coping is primarily concerned with rituals designed to enhance feelings of closeness and connections to God (Socha, 1999). Whereas, spirituality is a complex multidimensional concept (Hill et al., 2000) which means many different things to different people (McSherry Cash, & Ross, 2004), although almost all definitions include feelings of connectedness to oneself (via harmony, knowledge, and inner peace), others, and nature (through compassion and gratitude), and to the transcendent (the universe, a higher power, or God) (de Jager Meezenbroek et al., 2012). To consider religion alone, given the emergence of new spiritual trends appears limited (Charzynska, 2014; Hill et al., 2000).

Spiritual coping has been associated with greater wellbeing and quality of life in cancer patients by providing meaning/peace, and reducing self-focus and worry (Garssen, Uwland-Sikkema, & Visser, 2015; Sasman, Yost, West, & Cella, 2011; Bai & Lazenby, 2015). Specific aspects of spiritual coping, including using guided/spiritual meditation, increased psychological wellbeing (Puig, Lee, Goodwin, & Sherrard, 2006), and positive mood (Wachholtz & Pargament, 2005) in study participants. There is also evidence to suggest reductions in pain (Wachholtz & Pargament, 2008), anxiety and perceived stress (Ogman, Shapiro, Thoresen, Plante, & Flinders, 2010).

It is difficult to define the similarities and differences between religious, spiritual and paranormal beliefs, which in turn, creates complexities when attempting to define the scope of the current research. Religious, spiritual and paranormal concepts often overlap, in a manner which challenges conventional distinctions between categories of faith type (Wilson, Bulbulia, & Sibley, 2014). As stated, commonly used measures of paranormal belief (e.g., RPBS; Tobayck, 2004) contain items pertaining specifically to religious constructs (e.g., belief in God). Other concepts which are important within definitions of spirituality such as mystical experiences (Macdonald, 2000), esoteric beliefs, and meditation are included in measures of New Age orientation (NAOS; Granqvist & Hagekull, 2001), an important aspect of paranormal belief. Similarly, religious and spiritual beliefs overlap (e.g., belief in a higher power/God), despite individuals who identify as religious or spiritual scoring remarkably differently on measures of personality and disposition. One study found individuals identifying as spiritual scored higher on measures of fantasy-proneness, absorption, dissociation, and openness to experience (Saucier & Skrypinska, 2006), much like paranormal believers (Eudell & Campbell, 2007; Pekala, Kumar, & Marcano, 1995; Smith, Johnson, & Hathaway, 2009). Other researchers report that participants who identified as religious

or spiritual displayed similar cognitive profiles, with spiritual participants only scoring higher on measures of schizotypy (Willard & Norenzayan, 2017).

1.14 RESEARCH OUTLINE

To date the relationship between paranormal belief and traditional coping styles and strategies has received little attention despite being alluded to by Irwin's (2009) Psychodynamic Functions Hypothesis (PFH). The few studies previously conducted suggest that paranormal coping may, like religious coping, be a strategy or style distinct from any other. The literature has several implications for the proposed paranormal coping. As religious coping is an abundant area of study, the current research primarily focused on non-religious paranormal belief, often entitled New Age orientation in measures of paranormal belief. As noted there are concepts, such as life after death, which cross both theoretical paradigms. These were not excluded, however, religious constructs such as an individual's relationship with God, prayer activity, and church attendance were not examined directly. Similarly, there is a clear overlap between aspects of spirituality and a New Age orientation (e.g., the concept of universal connectedness and the inclusion of mystical and transcendent experiences) (MacDonald, 2000). These were not excluded from the current research, in order to provide a wide definition of paranormal belief. When the terms paranormal belief, experiences, practitioners or services are used from this point in the current research these refer to range of New Age and traditional paranormal constructs highlighted in this paragraph. The main research aims were;

- 1) To establish if paranormal belief is used as a form of coping
- 2) To provide an understanding of what factors comprise paranormal coping
- 3) To develop a new questionnaire to measure paranormal coping
- 4) To ensure the questionnaire is robust, valid and reliable

- 5) To determine if Irwin's Psychodynamic Functions Hypothesis is supported by the new paranormal coping questionnaire
- 6) To generate further understanding of those individuals who use paranormal coping and how this may support those who have experienced trauma or diminished control in childhood

The first study followed the theoretical perspective of Pargament et al. (2000) and aimed to understand how individuals use paranormal coping to deal with a stressor rather than simply understanding different forms of engagement within paranormal practices. A qualitative study was designed and semi-structured interviews conducted with individuals who believe in the veracity of paranormal phenomena and have used paranormal services. Using thematic analysis, the study identified the use of paranormal coping and five main themes involved in its use; Belief Justification, Triggers of Paranormal Coping, Seeking Positive Feedback and Advice, Practitioner Authenticity and, Comfort and Reassurance. Likewise, factors were conceptualised which related to individual differences in those who use paranormal coping, for example, thinking style.

The second study aimed to further identify the factors involved in paranormal coping. The study objective was the generation, piloting and development of items for a new paranormal coping questionnaire. As per Pargament et al. (2000), items were generated to represent the concepts found through the qualitative research and subject to exploratory factor analysis. This identified five key factors which comprised paranormal coping; Authenticity, Approach-Orientated Coping, Avoidance-Orientated Coping, Lack of Support/Control, and Practitioner Abilities. The items which comprised these factors were used to create the first version of the Use of Paranormal and New Age Services (UPNAS) Questionnaire.

The third study aimed to ensure that underlying factors of the UPNAS questionnaire were robust, and that the measure was valid and reliable. The

questionnaire was presented to participants alongside established measures of paranormal belief and coping to establish concurrent validity. Data was also subject to confirmatory factor analysis, which identified a different but conceptually similar underlying three-factor structure. A fourth study was conducted to collect additional data with the aim of identifying which factor structure should be retained and whether a new version of the UPNAS should be created accordingly. This study revealed a new four-factor structure, which using confirmatory factor analysis was deemed a more suitable fit to the data collected across all three studies. The four factors identified correlated appropriately with subscales within the paranormal belief and coping measures, and the UPNAS questionnaire was deemed a valid and reliable measure of paranormal coping.

The fifth study aimed to examine paranormal coping in line with Irwin's PFH. Specifically, whether retrospective recall of diminished experiences of control in childhood is linked to the subsequent use of paranormal coping in adulthood, and whether this is influenced by individual differences in thinking style. A regression analysis suggested that there was no association between paranormal coping and a perceived lack of control in childhood. However, paranormal coping subscales were differentially related to the use of intuitive thinking and the reduced use of rational thinking providing support for the cognitive deficits hypothesis (Irwin, 2009). Following the fifth study the research was reviewed. The discussion focused upon the implications for paranormal belief and coping theories, an assessment of the current studies limitations, and recommendations for future research.

CHAPTER 2: AN INITIAL INVESTIGATION OF PARANORMAL COPING

Paranormal coping is a concept that is often referred to theoretically within the literature. Indeed, many studies examining the Psychodynamic Functions Hypothesis (PFH; Irwin, 2009) work on the premise that the activation of paranormal belief in adulthood is a needs-serving mechanism, a cognitive framework which can be used to derive meaning, and regain control, in times of stress and disorder (Irwin, 2009; Roe & Morgan, 2002; Rogers et al., 2006; Watt et al., 2007). Research has indicated that paranormal belief is associated with self-reported stress (Lasikiewicz, 2016) and uncertainty (Hart et al., 2013) and that paranormal experiences often happen after uncontrollable events (Rabeyron, 2006; Rabeyron & Watt, 2010). Despite this, only five studies have examined the association between paranormal belief and traditional coping styles or strategies (Berkowski & MacDonald, 2014; Callaghan & Irwin, 2003; Irwin et al., 2015; Mathijssen, 2012; Rogers et al., 2006). This research lent support to the notion that paranormal belief is often used for coping. It was suggested that, much like religious coping, paranormal coping may be distinct from traditional coping styles or strategies. The aim of the first study was to confirm the potential existence of paranormal coping and examine the underlying constructs which comprise it. A qualitative study was proposed to be the most appropriate for this purpose as this would allow for the exploration of all potential factors in detail. This would provide a foundation for the generation of items for the new paranormal coping questionnaire.

2.01 DESIGN

Three types of interviewing were considered. Due to the emergent nature of paranormal coping and the paucity of existing research in this area, using structured interviews would be problematic as there would be little scope to explore key concepts (Bryman & Bell, 2007). Conversational interviews were discounted to minimise the risk of the inexperienced researcher being diverted from the research objective (Warren,

2002). Semi-structured interviews were selected as they allow for greater flexibility and encourage detailed answers, but offer enough structure for comparisons to be made across interviews (Bryman & Bell, 2007).

To develop a set of semi-structured interview questions, previous research into paranormal and religious belief and coping was considered. The opening question was deliberately vague. Participants were asked *“Can you give three examples of something you consider to be paranormal that has happened to you?”* Due to inconsistencies in the definition of paranormal concepts, it seemed warranted that participants should define this personally. It was expected that commonly endorsed paranormal concepts, for example, clairvoyance, astrology, apparitions, and after-life communication, would be discussed. Experiences of coping gained from these examples led the subsequent direction of each interview. Prompts such as *“What did you/they do? Do you feel this helped you? How did you feel before/after/during?”* Questions were intended to be insightful, and to enable an understanding of how, why, and when paranormal coping occurs. Throughout the course of each interview, Lazarus and Folkman’s (1984) transactional model of coping, Irwin’s (2009) PFH and Pargament’s (1997) religious coping were considered. Further prompts to understand participants’ appraisal of events as challenging, threatening, or irrelevant, as well as how specific strategies allowed for control to be gained or meaning to be sought, were considered in line with these models.

Once a basic understanding of an individual’s paranormal coping experiences had been obtained, more specific questions were asked pertaining to the use of paranormal services and those who supply them. For example, *“Have you used any other services? How often? Do you visit/access the same person each time?”* This developed an understanding of the many potential types of paranormal coping. Finally, some questions focused upon how paranormal coping is used in parallel or as an alternative to traditional coping, for example, seeking social support. The study

obtained institutional review board ethical approval (Appendix 1) and no time limit or financial incentives were provided.

2.02 PARTICIPANTS

The present study utilised a snow-balling recruitment method. The first three participants were known by the researcher to have paranormal beliefs or were reported to have had a paranormal experience. Each individual was asked to recommend someone who may like to take part in the interview. All interviewees were recruited from North West England or North Wales. In total 15 participants completed qualitative interviews, at which point data saturation was reached. The participants were predominantly female (66%), aged 20-62 years ($M = 27.33$, $SD = 10.14$), of a white ethnicity (100%), and were employed (60%) or full-time students (40%). No other demographic details were taken.

2.03 PROCEDURE

Participants were contacted via telephone, text, or email to arrange a mutually convenient interview date, time, and location. The interviews took place in local coffee shops or hotel food and beverage areas. Before each interview, a test recording was taken to ensure sound quality was adequate for later transcription. Participants were informed that the interview would take approximately 45 minutes, provided with the study details via a briefing sheet (Appendix 2) and given a short demographics questionnaire to complete (Appendix 3). Participants were given the opportunity to ask any questions before and after the interview. Participants were informed that they could withdraw their data from the study up to one month after the end of the interview. Upon completion, participants were provided with a debriefing sheet (Appendix 4) and asked if they would like to receive a copy of their interview transcription to ensure accuracy.

Two participants reviewed and returned transcripts to the researcher. No alterations or clarifications were necessary.

2.04 ANALYSIS

Thematic analysis was selected to analyse the transcripts as this allows for the identification, organisation, and reporting of patterns within the data (Braun & Clarke, 2006). All identifiable information including names and locations were replaced with pseudonyms prior to the analysis. Transcripts were uploaded to NVivo10 qualitative analysis software as sources to generate initial codes which provided the foundation for the thematic analysis. Each transcript was also manually analysed. This full immersion within the data produced several more codes. These codes were then reviewed by an additional member of the research team. Any discrepancies were discussed until a consensus was reached. Each set of codes was then classified into relevant themes, again confirmed independently by two members of the research team. In due course, five main themes were generated for further discussion. Table 1 presents the themes and accompanying final set of codes.

Table 1: Themes and Codes

Theme	Codes
1. Belief Justification	Family influences Media influences Socio-cultural influences Differential thinking system activation Convincing self
2. Triggers of Paranormal Coping	Bereavement Relationship dissolution Other negative event Seeking meaning/understanding Seeking security/control Sudden change Difficulty adjusting Fate as a means of control Negative emotions Residual relationship issues Need to interact with deceased

Table 1 (continued): Themes and Codes

Themes	Codes
3. Seeking Positive Feedback and Advice	Immediate answers Seeking guidance Receiving advice Positive feedback from practitioner Practitioner cannot give negative feedback Re-framing
4. Practitioner Authenticity	Practitioners honest/objective Friends and family biased/subjective Counsellors unhelpful Provide unique readings Confirmatory statements Support from additional source Disconfirmatory information rejected Recognition of “fakes” Issue with religion/God
5. Comfort and Reassurance	Reassurance Comfort Reduce physical pain Reduce psychological pain Last resort Positive emotions Protection from harm Hope Anxiety management Reduce personal accountability

2.05 RESULTS

The five main themes generated were Belief Justification, Triggers of Paranormal Coping, Seeking Positive Feedback and Advice, Practitioner Authenticity, and Comfort and Reassurance.

The first theme was “Belief Justification”. Interviewees endorsed a wide range of paranormal phenomena. These included traditional paranormal beliefs (e.g., life after death, superstition) and New Age concepts (e.g., aura cleansings). Many also reported engaging with paranormal services (e.g., visiting clairvoyants, spiritual healers), using paranormal resources (e.g., tarot cards, horoscopes), and experience of spontaneous apparitions (e.g., spirits of deceased family members). Whilst discussing various paranormal concepts, interviewees justified the reasons behind such beliefs. They spoke of being influenced by family, the media, and socio-cultural concepts as demonstrated by Interviewees E and A.

“Not a lot of things have happened to me. But I investigate a lot. I see different UFO videos and all the psychology videos. I really like it.” (Interviewee E)

“I’m a strong believer in ghosts. . . and clairvoyance and things like that, Ouija boards. I’ve always believed in it. Probably because my birthday is two weeks before Halloween and I’ve always lived next to a graveyard because it’s my back garden.” (Interviewee A)

Interviewees often justified using specific paranormal resources and visiting paranormal services during periods appraised as stressful or challenging. During these coping episodes, interviewees recalled endorsing the veracity of paranormal belief. Once the coping episode had passed, the endorsement of paranormal concepts returned to a pre-stressor level. They had trouble describing this process, many referred to different parts of the brain influencing them alternatively as seen by Interviewee O and I’s excerpts.

“I contradict myself with my views on them because I do do them, I do do them for that reason but then . . . when I think about it afterwards and think about it rationally I think well that could be relating to anything really, I’ve turned those cards before and related their meaning to something else.” (Interviewee O)

“I’m sorry I’m really contradicting myself here, aren’t I? I do believe, and I don’t believe. I think one part of my brain tries to be reasonable and realistic but the other half which it’s all hormonal and emotional does believe in it so it comes out as kind of a mish-mash of nonsense sometimes.” (Interviewee I)

After a stressful or challenging situation had occurred individuals had trouble aligning their paranormal belief and personal experience with rational thought. This led to contradictory statements being made throughout the interviews. Interviewees made substantial effort to validate and explain the contradiction confidently. Interviewee C had difficulty expressing her belief in mediums, combining subsequent rational thinking with personal experience. Interviewee K expresses this more fluently.

“I do now yeh [believe the medium]. I can’t remember, it was something to do with. I don’t know. I don’t know but then, then it leads me to believe you know, if it were a fix [the medium’s answers using a pendulum for guidance], how do, but then I think no. She, she’s right. I do, I did believe that medium.” (Interviewee C)

“I wish I could explain it better . . . I know it sounds a bit crazy when I’m saying it now . . . There’s like one voice in my head going you know it worked but then another going . . . well maybe you just thought it did. . . No, I do think it was [genuine] though, just sometimes I don’t know.” (Interviewee K)

The second theme was “Triggers of Paranormal Coping”. Interviewees spoke of stressful, challenging, or uncontrollable life events which lead to an increase in paranormal belief, resulting in the use of paranormal services or engagement with paranormal resources. Common events included situations such as the loss of a friend or family member, or a problem with, or the dissolution of a romantic relationship as demonstrated by Interviewees G and N.

“Yeh I been back [to a medium] a few times since like, you know every now and again when bad stuff happens . . . Like I went back when I had a miscarriage.” (Interviewee G)

“Yeh, when I first met my wife we had a bit of a bad patch. There was this guy who she used to date and he was always hanging around. . . A friend told me I should go and talk to a psychic.” (Interviewee N)

Often the triggers of paranormal coping were negative, uncontrollable events. Interviewees spoke of utilising paranormal services to regain a sense of meaning and security through an increased understanding of the situation. Interviewee L described using spirit cards (similar to tarot cards) to help him understand his own mental state after the death of a close friend. Interviewee M used horoscopes to help her feel more in control of an undesirable family situation.

“But then I thought no, because I don’t really understand what’s going on in my head at the moment, my friend’s just passed away, maybe these [spirit cards] might help.” (Interviewee L)

“I think when I was about 17 years old, when I was at college I read them [horoscopes] every single day. I think at that time I was going through a hectic time at home. Half the people in my family had fallen out with the other half of the people in my family. I think I just used to read it so it would make me feel a bit more secure or maybe thinking like, things were going to get better.” (Interviewee M)

Often, negative events occurred suddenly and without warning. Interviewees spoke of having little time to adjust to change, which increased the likelihood of accessing paranormal services, and utilising paranormal resources. They would use these to understand why a certain event had occurred, and what action they should take. Interviewee N discusses how the sudden passing of his Granddad triggered his increased use of paranormal services. Interviewee O also explained how the occurrence of a sudden unexpected event would increase the likelihood of her utilising a paranormal resource.

“But he went downhill quick. He died in hospital a couple of days later, on the Wednesday evening. . . . Even though we knew it was going to happen soon I don’t think anyone expected it to be that quick. We only just got our heads around him being ill, it’s like there wasn’t enough time.” (Interviewee N)

“I’m alright with change when I’m given enough time to adjust to it but I’m not good with things that just stop or change suddenly. I don’t like that. . . . That would make me more inclined to do tarot cards if something changed really suddenly I’d want to know why and I’d want to know how to proceed forward with this change that I had no idea was coming.” (Interviewee O)

Interviewees used paranormal services and resources to regain a sense of control following a sudden, negative, and often uncontrollable life event. Many spoke of a specific “path” their lives were meant to follow. During coping episodes, interviewees

believed their future lives were controlled by external forces, which provides a sense of order when most needed. Once the coping episode concluded, this “path” became malleable once again. Interviewees F and L discussed this notion of fate and the choices and options this brings them.

“It can be changed if you want it to though. Like fate. I think there is a sort of fate, like a path that you can follow. And you can’t really stray that far off the path. But every now and again it splits and you get options about what one you want to take.” (Interviewee F)

“I believe there’s options. There’s not like, you can’t just choose at random, but yeh there’s options. Say you, you come to a point and you will have an option. I believe that fate is giving you these options.” (Interviewee L)

Negative emotions synonymous with negative life events were also triggers of paranormal coping. Interviewees recalled feeling upset, sad, lonely, and unhappy. These negative emotions decreased upon engaging with paranormal services and utilising paranormal resources. Interviewee F discusses the negative emotions she experienced upon the occurrence of relationship issues, which prompted her to visit a psychic. Interviewee H discusses how mediums have helped her emotionally after she experienced a family bereavement.

“I was devastated. I couldn’t understand why he had cheated. He then lied about it because he didn’t know that she had sent me the picture. I wanted them to tell me what to do. I couldn’t even hold myself together in public without crying and I needed some help.” (Interviewee F)

“They have a gift and can help so many people. When you lose someone, you need all of the help you can receive to recover from the devastation.” (Interviewee H)

Interviewee’s residual relationship issues also triggered their use of paranormal coping. This was particularly prevalent when discussing deceased family members. They describe feeling guilty for not visiting family members when they were alive and

avoiding difficult conversations with them. These feelings activated a psychological need to interact with the deceased. They sought paranormal services and resources to reconcile these feelings. Interviewee N describes feeling guilty following a bereavement. Interviewee A describes having missed the opportunity to speak to his religious Grandma about his sexuality, concerned that she wouldn't have accepted him.

"I think we all felt guilty because of that, we didn't have enough time, it's only when the worst happens you remember what's really important." (Interviewee N)

"It would be nice. I'm always thinking every day of my life, I could just go to my Grandma's for a cup of tea, you know, but she's obviously not here now. But I would like to talk to her. Just to make sure that she is alright with me. With the way I am and my sexuality and everything with it that we didn't get to talk about before she died." (Interviewee A)

In other cases, interviewees sought to maintain an attachment with the deceased. They wanted to be told that the deceased were in a better place, at peace, and occasionally communicate with them. Paranormal beliefs were activated and paranormal services were accessed primarily to fill this need. Interviewee G provides a dialogue of a conversation through a medium between her and her mum. Interviewee A discusses his deceased Grandmother as though she were still alive.

"Gretta" said my mum was proper happy that I was cause it's not good for my health and that now I've got "George" I shouldn't be smoking round him as well and that. She said she was proud of me for cutting down and it will be good for me because it was for my Uncle "Glen." (Interviewee G)

"I've never seen the ghost of my Grandmother, but I feel like I can talk to her and when I'm frightened I can look to her." (Interviewee A)

The third theme was "Seeking Positive Feedback and Advice". Interviewees frequently sought direct answers to questions from a paranormal practitioner or

resource. They expected immediate answers about themselves and/or others and spoke of guidance they were given. Interviewee A received advice concerning a disagreement with his partner. Interviewee J spoke of seeking guidance about future events from a paranormal practitioner.

“Say for example me and “Adam” have had an argument and I say that’s it, I’m not talking to you for a week. [the psychic advised that] I need to be more stronger and, you know, follow that through.” (Interviewee A)

“Everyone always wants to know what is going to happen next, don’t they? They want to know if something bad was going to happen. I think I would go [to a psychic] if I needed answers to something as well.” (Interviewee J)

A key component of the interviewee-paranormal practitioner interaction was the notion of positivity. Almost all interviewees received positive feedback from the practitioner. Interviewees were told what they wanted to hear, for example, deceased family members were happy, that careers would progress, and relationships would improve. Interviewee I discussed the loss of his first child. He received reassurance that he would have a child in the future. Interviewee B discussed a medium’s revelation that she was surrounded by four spirits, one of which would bring her love after a difficult divorce.

“She [psychic] said that she could see good things in our future, ermm and, and we would have a girl and a boy.” (Interviewee I)

“The fourth one she did talk about though . . . she said it was a teenage girl who was like eighteen, nineteen or something. You know around that sort of age. . . yeh. She said that . . . she said that she was bringing me young love again and wouldn’t need to be there much longer. . . I met my boyfriend, . . . long-term we are going to get married at some point.” (Interviewee B)

Some interviewees revealed that they thought paranormal practitioners could not give negative feedback or that they had never heard of this occurring. Interviewees appear motivated to seek out only positive feedback as demonstrated by Interviewees A and F.

“Because I’ve never done it and it was always something quite scared of because I didn’t want to hear things that may upset me or . . . say the woman came through and said, my Grandma’s dead, she’s a bit disappointed about you being gay for example. I’d have been gutted and that would have been really hard for me to get over, I wouldn’t have known how to deal with that. Obviously, I was told she probably wouldn’t say anything like that and she didn’t.” (Interviewee A).

“Sometimes it will say stuff like about there being a difficult situation and you just have to wait and see what happens. Sometimes it will like say positive stuff. It doesn’t really say anything negative to be honest though. It would say something like time for a change or something in your life has run its course and it’s time to move on to bigger and better things.” (Interviewee F).

When negative feedback was given to interviewees from paranormal practitioners or resources it was quickly re-framed into positive feedback as can be seen by Interviewee G and D’s excerpts.

“She [the psychic] said that I had to be strong and that even though the path that me and “Graham” take will not always be smooth everything will work out for the best and I will be happy.” (Interviewee G)

“She [the psychic] said not to be too disappointed when you don’t get what you want really. They said there is always something better out there for you.” (Interviewee D)

The fourth theme was “Practitioner Authenticity”. Interviewees often perceived paranormal practitioners as impartial, honest, and objective, whereas their own social support systems were viewed as biased and subjective. Friends and family members

were perceived as having their own agendas when providing advice or guidance as discussed by Interviewees F and N.

“But it’s the same stuff that you say to them in the same situation. With your friends, it can be a bit biased because they have to say that kind of stuff to make you feel better, don’t they?”

(Interviewee F)

“I don’t know, because sometimes the way you talk to friends about negative situations they have their own opinions and their own motivations, their own agendas.” (Interviewee N)

Paranormal practitioners were also seen as more authentic than counsellors and therapists. Interviewees spoke disparagingly about counselling and therapeutic services. They stated that they did not provide direct answers and were unable to provide the same services (e.g., future insights and after-life communication). Interviewees believe that counselling and therapeutic services are primarily for those suffering from mental ill-health as demonstrated by Interviewees J and C.

“I just don’t think personally I would find them helpful. I would rather talk to my mum, or friends, or my Nanna rather than some stuck up stranger who just nods and repeats themselves hoping to trip you up and get a different answer so they can tell you stuff about you that you already know.” (Interviewee J)

“I just wouldn’t go to a counsellor because I didn’t need it. I didn’t. I, I went to the medium out of curiosity to see if my dad was okay. A counsellor’s not going to give me that answer. Do you know what I mean. A counsellor’s just going to try and . . . resolve my . . . like, mental, mentality, . . . from his death. So I didn’t bother. Cause I were fine anyway.” (Interviewee C)

Interviewees often discussed the importance of readings or feedback which were specific to them personally. These contributed to the view that paranormal practitioners are authentic. Interviewee J described the importance of a unique reading. Interviewee A discussed a similar concept with regards to a belief in spirits.

“It [horoscope] said something about being single as well and that the whatever of this month is going to be a hot night for a romantic date . . . It’s not very likely that every girl who read that that month who was single and that star sign had a hot date on that night, is it? It’s just not very unique is it? Not like I guess when you go to a psychic or something.” (Interviewee J)

“I know I’m superstitious but you can shuffle a deck of cards and how they come out they come out and tarot cards can mean anything to anybody. At any point in their life. It’s not the same as believing in ghosts and spirits and heaven and hell.” (Interviewee A)

The perception of authenticity was enhanced through confirmatory statements made by the paranormal practitioner. Interviewees believed that practitioners “knew” things about them and gleaned this information through their paranormal abilities. These statements were confirmed both in the presence of the practitioner and retrospectively. Interviewee M recalls confirmatory information being provided by a tarot card reader. Interviewee N discusses a psychic accurately predicting the name of his deceased friend’s child.

“I remember, I’m sure the devil card came up, that scared me a lot with relationships. From what I can remember it was something that was going on in my life for a relationship that I was in at the time. I remember at the time obviously strongly believing what they had said.” (Interviewee M)

“I don’t know, straight afterwards I thought it was bollocks to be honest, it wasn’t until I heard she called the baby “Nori” that I was like shit! It was real.” (Interviewee N)

The accuracy of the information provided by paranormal practitioners was sanctioned further, subsequent to authentication from an additional source. Sources included internal feelings, the occurrence of predicted events, and corroboration from friends and family. This validated their perception of the practitioner as authentic. Interviewee B describes meeting her husband and “knowing” it was him from a

practitioner's description. Interviewee D received advice about her career and relationship which was confirmed retrospectively.

"When I did meet him [her husband] I knew it was him from her [psychics] description and she was right obviously because we are still together and happy and that was years ago."

(Interviewee B)

"She [psychic] knew I wouldn't take her advice that time, like she knew about the army and about my exes. But now, I would try and listen because she knew what was right for me even though I didn't at the time." (Interviewee D)

Some interviewees mentioned times when trusted practitioners had been incorrect. This dis-confirmatory evidence was efficiently dismissed or an alternative explanation offered, as demonstrated by Interviewees D and F.

"Some [questions answered using crystals] have been fairly right. Ermmm but not always, but obviously depending on how strong your aura is and how strong your energy is, and you, where you are in fact." (Interviewee D)

"I suppose I was just being more careful. I didn't want that stuff [things predicted by psychic]. I do but not right now you know, I think she [psychic] read me wrong or looked too far ahead."

(Interviewee F).

Despite dismissing contradictory information from an authenticated paranormal practitioner, many interviewees also discussed "fakes". This pertained to phoney sources of information or practitioners who gave inaccurate information. Some practitioners were seen as dishonest, who took advantage of individuals. Interviewees D and B demonstrate this in their interview excerpts.

"But some of them [fake practitioners] are just preying on people who need help. Telling them what they want to hear instead of the truth. That's why you have to go to one that you know and trust so you can get the answers that you need." (Interviewee D)

“But there are so many people making money off this type of thing. There is no guarantee they would go to a person that can really see spirits or reads people and that. I mean . . . they might get told what they want to hear . . . yeh . . . but, but that wouldn’t help them, would it? Not really, not properly the way stuff like that is meant to help.” (Interviewee B)

Some interviewees discussed finding religion and religious practices inauthentic. Whilst half saw these as synonymous with paranormal belief, the remainder referred to feeling disenchanted with organised religion and a traditional God. This is described by Interviewees E and F.

“I don’t believe in a God as such. Too much bad stuff happens. He rewards people who have killed in some cultures and does not punish them.” (Interviewee E)

“A God, if there is one, is meant to love everyone right? It doesn’t matter what you wear or how many times you go to church or mosque if in your heart you believe in him.” (Interviewee F)

The fifth theme was “Comfort and Reassurance”. Interviewees sought both comfort and reassurance through paranormal belief. Many spoke of engaging with paranormal practitioners for reassurance about future travel, health, career, and relationships as described by Interviewees D and H.

“Ermm, I went for a palm reading just before I went in the army, just to see her for spiritual guidance to ensure obviously, my safety and that.” (Interviewee D)

“If someone can give you an early warning that could lead you to seek medical advice before modern medicine could have detected it. . . I’m not sure why anyone wouldn’t!” (Interviewee H)

Interviewees visited paranormal practitioners for comfort. They claim paranormal practitioners dissipated physical and psychological pain. Interviewee D discussed how her stomach pains improved drastically after having an aura cleansing in which the spirit of her unborn child from a past-life was released. Interviewee K

described how a practitioner used crystals to mend his broken heart after the breakdown of a romantic relationship.

“And as I did so it felt like, my stomach was being ripped out of me. I couldn't stop crying, it was physically unbearable but ermmm . . . then it passed. She [practitioner] said that I either died during childbirth or died after giving birth to a daughter, hence the reason why you are still bearing, ermmm past spirits within your womb [which had been causing her stomach pains].”
(Interviewee D)

“I wish I could explain how much better I felt after she [practitioner] used them [crystals], like I could breathe properly again. My chest wasn't as tight and it was as though I was happier.”
(Interviewee K)

Interviewees believed paranormal practitioners and resources were the only way to gain comfort and reassurance. In some cases, as a last resort when other traditional avenues (e.g., health professionals) had already been considered and dismissed. Interviewee I discussed visiting a spiritual healer after his partner suffered a miscarriage. Interviewee F described a preference to visit a psychic over a counsellor after the breakdown of a relationship.

“Me mum says you go for stuff that doctors can't explain. . . They can't help you with losing a baby, can they? They send you home and go yeh its gone, good luck.” (Interviewee I)

“I wouldn't go to see a relationship counsellor at all. They can't tell you why he did it or that it will get better. They just try and get you to deal with stuff, don't they? Sometimes you're not ready to deal with stuff just yet. You need to get through the angry crying and shouting and swearing and all that emotional stuff first. I suppose if it was like a year later and you were still bat-shit crazy about the idiot who cheated then yeh you should go and see one. But not straight away.” (Interviewee F)

Interviewees described an influx of positive emotions after using paranormal services. Interviewees recall feeling comforted, hopeful, protected, reassured, and

happy. Interviewee L felt comforted after visiting a paranormal practitioner who used spirit cards after a close friend committed suicide. Interviewee G discussed the positive emotions she experienced after communicating with her deceased mother.

“You know I just picked the ones that I liked and she just explained what these cards were saying to her. It made me feel, it made me feel really, it made me feel happier, in that . . . in the way that it was strange how right this is. I guess content is the perfect word to describe how I felt afterwards . . . You know I felt more settled after she gave me her advice based on the cards. I don’t know what it was or why, I just remember the feeling. It made me feel like I wasn’t alone, and that these feelings were normal and I know it sounds clichéd but from her it felt honest . . . it made me feel better.” (Interviewee L)

“She said that she was proud of me for being strong and she misses me every day. My Nan cried at that and promised her she would look after me and make sure I did good for her. Yeh it was nice, I was glad she was happy and that she was proud.” (Interviewee G)

Interviewees felt protected from harm both by paranormal practitioners and deceased friends and family. Interviewee G discussed needing to feel her deceased mother was protecting her. Interviewee H describes childhood events in which she subsequently associated the feeling of protection from a paranormal practitioner.

“Like when “Graham” and me broke up for a bit [be]cause of arguing and stuff about this girl. I went to see her [her mum through a medium] because I wanted to know what to do about it and to know she was looking out for me.” (Interviewee G)

“Now I think they [fortune tellers] were looking out for us youngsters. There was no such thing as paedophiles and stranger danger in those days. . . . Well there was but it was not public knowledge through the use of the media the way everything is today. I feel lucky that some of those traveller women [fortune tellers] warned me to be careful.” (Interviewee H)

Interviewees also describe feeling hopeful. Interviewee B discussed a psychic reading which left her feeling hopeful of finding a new partner after her divorce. Interviewee E referred to afterlife beliefs eliciting feelings of hope.

“I was happy, because she . . . well I . . . after everything that had happened [divorce] with “Ben” and with the boys and everything . . . yeh I guess . . . hopeful, it gave me more confidence that the right one was out there.” (Interviewee B)

“It [an afterlife] gives people hope. It gives them hope and reassurance. That they are not alone. That there is always someone there for them.” (Interviewee E)

Over half of interviewees discussed using paranormal belief to manage anxiety. Interviewee K discusses how a paranormal practitioner enabled him to manage his anxiety surrounding his academic performance. Interviewee N described a spontaneous apparition which decreased his anxiety around speaking at a family member’s funeral.

“Ohhh it [psychic’s feedback] made me feel a million and one times better. I had been really worried about this mark because it was designing an advertising campaign for a fashion house.” (Interviewee K)

“After seeing him [spirit of deceased family member] though. . . I dunno, it was like a weight off my shoulders . . . a bit of a relief, you know. . . Like he wanted me to know I was going to do fine.” (Interviewee N)

Interviewees describe many positive outcomes from using paranormal services. However, there is some evidence to suggest some interviewees were unable to take personal accountability for subsequent behaviour and actions. Interviewee E states that bad things happened to her because of the house she lived in. Interviewee O frankly explains that tarot cards allow her to rely on a source other than herself to direct her future behaviour.

“We [the family] had to leave [the house] because whenever we went there everything bad that happened to us it happened in that house.” (Interviewee E)

“The tarot cards, . . . it takes away your own responsibility, . . . it gives you something else to rely on, if you wanted to like cope with something and didn’t sort of . . . trust your decision-making process at the time then it would help.” (Interviewee O)

2.06 DISCUSSION

The aim of this research was to confirm the existence of a coping style/strategy which has received relatively little empirical attention. The qualitative interviews supported the concept of paranormal coping and gave an insight into the underlying constructs which comprise it. There were five main themes generated; Belief Justification, Triggers of Paranormal Coping, Seeking Positive Feedback and Advice, Practitioner Authenticity, and Comfort and Reassurance, each will be discussed in turn.

The first theme, Belief Justification, supported the concept of paranormal coping, through the activation of paranormal beliefs and the justification of their use to cope with stressful events. Lazarus and Folkman’s (1984) transactional model of stress and coping suggests that once an event is appraised as stressful, an individual evaluates their own abilities and resources, assessing how they could cope with the perceived stressful event. Likewise, Irwin’s (2009) Psychodynamic Functions Hypothesis (PFH) suggests paranormal belief is a psychological needs-serving mechanism, activated in times of stress. Interviewees describe using the two main types of paranormal belief (traditional religious beliefs and New Age concepts) as a form of coping. Interviewees described activating paranormal beliefs which manifested in seeking paranormal services and resources to cope with a stressor. This provides support for paranormal belief as a unique form of coping as alluded to in previous research (Callaghan & Irwin, 2003; Irwin et al., 2015; Rogers et al., 2006).

Under this theme, interviewees had difficulty describing the experience of belief activation. They struggled to assimilate the level of paranormal belief activated during a stressful event with that experienced post-stressor. They continually attempted to justify paranormal experiences, or the engagement of paranormal services and resources, whilst simultaneously trying to assimilate them into their “normal” worldview. Some interviewees described two conflicting thinking styles. One thinking style which is used during a highly emotional stressful experience and a second rational thinking style used once the coping episode concludes. Two main styles of thinking or processing style have been defined by cognitive scientists (Epstein, 1990; Epstein et al., 1996; Pacini & Epstein, 1999; Stanovich, West, & Toplack, 2012). An intuitive-experiential thinking style is holistic, emotional, rapid, and unconscious. In contrast, a rational-analytical thinking style is slow, conscious, and reason-orientated. Although people use both systems, it is suggested that individuals have a habitual preference for one over the other. The thinking process described by interviewees demonstrates the constant interaction between the intuitive-experiential and the rational-analytical systems.

Previous research suggests that individuals with a preference for experiential thinking are more inclined to endorse paranormal concepts and report more subjective paranormal experiences (Aarnio & Lindeman, 2005; Bouvet & Bonnefon, 2015; Irwin & Wilson, 2013; Irwin & Young, 2002). Similarly, increased right hemispheric activity is reported for paranormal believers (Gianotti et al., 2002; Pizzagalli et al., 2000) which is responsible for intuitive thinking, creativity, and imagination (Iaccino, 2014). It is conceivable individuals who use paranormal coping do so because of increased right hemispheric activity and a preference for experiential thinking. These experiences are then subsequently rationalised by the rational-analytical thinking system. There is also evidence that the activation of paranormal belief and its subsequent rationalisation has caused interviewees substantial cognitive dissonance when trying to assimilate their

experiences. The contradictory statements presented by interviewees seemed a motivated attempt to achieve consonance. However, whether cognitive dissonance would have been experienced regardless of them participating in the study is unknown.

The second theme suggested the main trigger for increased paranormal belief, occurrence of paranormal experiences, and engagement with paranormal services and resources was an event appraised as stressful. This supports the concept of paranormal coping. These events commonly involved bereavement, family difficulties, career issues, and the breakdown of romantic relationships which evoked a range of negative emotions. Interviewees spoke of utilising paranormal services and resources to regain a sense of order and security in uncontrollable situations. The likelihood of utilising paranormal belief as a coping resource increased if the change was sudden or unexpected. The PFH (Irwin, 2009) states that paranormal beliefs are re-activated during adulthood when life is seen to be chaotic and unpredictable. Paranormal belief creates an illusion of control that helps preserve feelings of personal security by giving a semblance of order and meaning (Irwin, 1993, 2003, 2009). Perceived control is an important resource for individuals who are dealing with difficult or challenging life events (Skinner & Zimmer-Gembeck, 2011) and its effects are apparent at every point during the coping process when considering the transactional model (Lazarus & Folkman, 1984). The need for control and search for meaning is also a prominent facet of religious coping (Pargament, Koenig, & Perez, 2000), increasing the likelihood of its importance as a construct within paranormal coping.

Interviewees spoke often of control-related concepts, for example, fate. This refers to the inevitability that a set of events were predetermined by a supernatural power/or agency and were beyond individual control. This allows individuals to believe that despite the apparent uncontrollability of a specific course of events, everything that happened was part of a larger picture and ultimately ordered. An external locus of

control has been consistently associated with paranormal belief (Newby & Davis, 2004) as well as specific facets of paranormal belief in previous research (Dag, 1999; Groth-Marnat & Pegden, 1998; Peltzer, 2002; Sagone & De Caroli, 2014).

Most interviewees expressed an external locus of control, discussing how stressful life events were part of the “path” they were following. In a similar manner to the interaction between the intuitive-experiential and rational-analytical thinking styles, once the stressful event had passed this “path” became malleable. Interviewees spoke of options and choices presented by fate. This supports previous research which demonstrates an increase in reported paranormal belief following experimental manipulation to increase feelings of uncertainty and uncontrollability (Blackmore & Troscianko, 1985; Dudley, 1999; Greenaway, Louis, & Hornsey, 2013). Perceived control appears to be an important facet of paranormal coping.

Negative events which triggered the use of paranormal coping also activated a psychological need for some interviewees to interact with the deceased. One of the main reasons interviewees engaged with paranormal services with an after-life communication focus was to maintain proximity to a deceased friend or relative. The attachment system (Bowlby, 1969, 1973, 1980) is an organised set of biologically-based behaviours activated by an individual as a response to a perceived threat. These include re-establishing proximity to an attachment figure for comfort and security, a behaviour recognised as the secure-base phenomenon, observable across many social contexts and cultures (Posada et al., 2013). Although attachment theory was originally based on a caregiver-child relationship it has been suggested that adult-adult relationships function in a similar manner (Mikulincer & Shaver, 2010). However, psychological proximity and attachment security take priority in adults as they understand an attachment figure can respond regardless of physical proximity.

The continuing bonds literature suggests that the bereaved individual's attachment system does not recognise the permanence of the separation caused by death and searches for its continuance. Individuals continue to activate attachment bonds in various ways as a supportive resource (Steffan & Coyle, 2011), however, usually this belief is only perpetuated for a short period, as an individual's attachment system realises the finality of the separation. Consultations with paranormal practitioners allow for the attachment bond between bereaved and deceased to be maintained indefinitely. This interpretation has several implications for the concept of paranormal coping. Firstly, it is conceivable that the paranormal practitioner acts as a new secure-base used by an individual for comfort and security. Secondly, it is plausible that paranormal coping may be activated due to a lack of social support. The deceased and/or paranormal practitioner is viewed as an extension of an individual's social support network. These factors deserve further consideration within the development of the paranormal coping concept.

Under the third theme, Seeking Positive Feedback and Advice, interviewees frequently sought direct answers to questions from a paranormal practitioner or resource. They expected immediate responses about themselves or others and spoke of advice and guidance they were given. The underlying incentive for seeking instantaneous feedback from a paranormal practitioner or resource was unclear. Interviewees may be utilising these paranormal services as an approach-orientated method of coping as an active and adaptive technique to enable them to deal with a stressor directly or reduce its impact. Conversely, interviewees may be utilising paranormal services to avoid dealing with a stressor directly (avoidance-orientated coping). Further investigation of this construct appears warranted.

Another important factor was the positive nature of all feedback provided by paranormal practitioners and resources. Self-concept theory (Rogers, 1959) suggests

individuals have an innate desire to feel competent, in control, and connected to other people. They strive for a consistent positive view of themselves and in the future within all life domains, seeking fulfilling social relationships, successful careers, and long healthy lives. In the process of doing so, individuals seek information which supports their self-esteem (Ditto & Lopez, 1993), frame their own traits positively (Dunning & Cohen, 1992), associate themselves with desirable over undesirable outcomes (Hippel, Shakarchi, & Lakin, 2003), and generally believe they are better than they actually are (Alicke & Govorum, 2005). Indeed, desire for feedback in social situations appears to correlate with how positive individuals expect it to be (Hepper, Hart, Gregg, & Sedikides, 2011). This is consistent with interviewees appearing motivated to seek positive feedback from paranormal practitioners. It is plausible that individuals do not receive the positive responses desired from their own family and friends. Positive feedback from paranormal practitioners may be consistent with an individual's own self-image, and reflect what they would like their ideal-self to be like, increasing interviewees' sense of self-worth.

Previous research investigating factors associated with the persuasiveness of cold-reading techniques also highlights the importance of positive feedback. Cold-reading is a procedure by which a practitioner is able to convince an individual, whom they have never met, that they know about their personality, character, and problems. A combination of good observation (e.g., physical appearance, clothing, demeanour) and the statistical likelihood of problems generated by life transitions (e.g., puberty, marriage, divorce, children) provide the basis for a seemingly accurate assessment of an individual (Hyman, 1977). The tendency for individuals to rate generic statements which could apply to many people as reflective of them personally is known as the Barnum effect. In Forer's (1949) now classic study, psychology students readily accepted and rated vague statements as accurate assessments of their personality, a

phenomenon which has been consistently replicated (Allum, 2011; Rogers & Soule, 2009). Others found the more complimentary a profile, the more often it was accepted by an individual (Dickson & Kelly, 1985; Hyman, 1989). Similarly, astrological predictions with positive information were endorsed more than those with neutral or negative information (Blackmore & Seibold, 2001; Glick, Gottesman, & Jolton, 1989). This supports the idea that those who use paranormal coping do so because they are motivated to seek positive feedback.

Alternatively, individuals utilising paranormal coping could be particularly motivated to avoid negative feedback. Interviewees believed paranormal practitioners were unable to provide negative feedback and struggled to recall this occurring. On occasion, information was provided by paranormal practitioners which did not align with an individual's own self-concept, desires, or psychological needs. When this occurred, information was quickly dismissed or re-framed into a positive by either the individual or practitioner. Interviewee's inability to recall negative or incorrect information could be explained by research examining confirmation bias (Nickerson, 1998). This is a tendency for individuals to interpret or recall information that confirms one's pre-existing beliefs. Confirming information requires the least effort to understand and assimilate as it aligns with what an individual already knows. Negative information, or information which is incongruent with an individual's pre-existing beliefs can cause cognitive dissonance, prompting individuals to rationalise away disconfirmatory evidence (Gawronski, 2012). Therefore, when individuals are given feedback that conflicts with their own self-image, they are far less likely to recall it (White, Brockett, & Overstreet, 1993). Similarly, positive information, or information congruent with pre-existing beliefs, is far more likely to be recalled (Ritchie, Sedikides, & Skowronski, 2017). This is supported by research suggesting that paranormal believers have a relatively high reliance on confirmation bias. That is, that paranormal believers are more

susceptible to confirmation bias compared to other individuals protecting personal beliefs (Irwin et al., 2015). It is conceivable that individuals who are particularly susceptible to confirmatory biases may more frequently use paranormal services as a coping resource.

A defining feature of paranormal coping comprised the fourth theme generated through analysis of interview transcripts. Every interviewee discussed a paranormal practitioner, who had supported them during an episode of coping. Paranormal practitioners were described as honest, truthful, objective, and empathetic. Conversely, advice and guidance gained from friends and family was viewed as subject to individual motivations and agendas. Friends and family were seen as having a vested interest in the interviewee's relationship, career, and mood outcomes. Personal opinions were seen to take precedence over objective or neutral advice. This suggests that rather than a lack of social support as postulated under the previous theme (Seeking Positive Feedback and Advice), paranormal coping is used by those dissatisfied with the quality, or perceived objectivity, of information from those within their social support network. This is in line with previous research which links perceived partner and family strain with the use of complementary and alternative medicine (Honda & Jacobson, 2005), although others have not replicated this relationship with social support (Sollner et al., 2000).

Paranormal practitioners were seen as a professional source of support by interviewees. They appear to act as a pseudo-counselling service. This aligns with other research which suggests that paranormal practitioners (mediums) perceive their work as an alternative therapy similar to counselling (Osborne & Bacon, 2015). Interviewees spoke of a reluctance to visit counselling services, attaching a social stigma to their attendance, a finding echoed in previous research (Komiya, Good, & Sherrod, 2000; Vogel, Wade, & Hackler, 2007; Vogel, Wester, Wei, & Boysen). Interviewees described counselling services as dishonest and unhelpful despite recognising that the

counsellor's own views and opinions would not affect the objectivity of the information. This opinion was focused upon a belief that counsellors could not give direct advice or answers, rather they sat, listened, and reflected.

For some interviewees paranormal services could provide a link to the deceased that counsellors could not. Evenden, Cooper, and Mitchell (2013) suggest that this link can be used as a positive tool in helping bereaved individuals cope with grief. It may be that traditional grief counselling approaches which emphasize the acceptance of separation and loss do not work with individuals who endorse the existence of an afterlife. Acknowledging continuing bonds in therapeutic approaches such as mediumship has positive benefits for some bereaved individuals (Beischel, Mosher, & Boccuzzi, 2015). Interviewees appear to place all paranormal practitioners (as well as mediums) within this pseudo-counselling role. It is proposed that paranormal services are used as an approach-orientated method of coping which may have positive benefits for individuals who will not engage with traditional therapeutic approaches or for those with poor quality social support. Most previous research has only considered mediums as pseudo-counsellors, this study suggests other paranormal practitioners may also undertake this role. Further investigation of how paranormal coping may be utilised across different services and practitioners may be important.

The perception of paranormal practitioners as knowledgeable is further enhanced by their efficacy at cold-reading techniques as described in the previous theme. By using a combination of good observation and a knowledge of the statistical likelihood of problems generated at specific life transitions practitioners can provide a seemingly unique and accurate profile of an individual's personality, character, and life events. Interviewees discussed information that the practitioner "just knew" things they could not have found out from other means. These confirmatory statements solidified the authenticity of practitioner's paranormal abilities. Often interviewees spoke of

retrospective confirmation from additional sources, subsequent events, however likely, then corroborated practitioner's predictions, further reinforcing the apparent honesty and competence of individual practitioners.

Similarly, when disconfirmatory information was presented by those paranormal practitioners appraised as authentic it was dismissed, disregarded, or alternative explanations offered. Again, this suggests that those using paranormal coping are particularly susceptible to confirmation bias and are highly motivated to avoid experiencing cognitive dissonance. However, interviewees did not appear to accept disconfirmatory evidence from all paranormal practitioners. Those unable to convincingly present accurate belief or self-concept congruent information were labelled fakes or charlatans. The exact process by which paranormal practitioners are deemed either authentic or fake is unclear and the implications of this for paranormal coping are yet to be explored.

Religion was also a major source of discussion around the concept of authenticity. Half the interviewees spoke of struggling to comprehend a God who did not protect or support those in need. Some interviewees directed their disdain towards organised religion, claiming specific religious practices limited their everyday life and that the rules imposed were too controlling. It is possible that some interviewees utilise paranormal coping over religious coping as individuals can select which beliefs, practices, and practitioners they choose to endorse. This is supported by previous research suggesting that the rising popularity of New Age practices is due to the absence of strict disciplinary systems (Luckmann, 1996). Individuals are free to construct their own identity and moral judgements, rejecting any direction from external tradition or authority (Heelas, 1996; Houtman & Mascini, 2002).

Under theme five, all interviewees sought comfort and reassurance through the activation of paranormal belief, engaging with paranormal services and utilising

paranormal resources. Some interviewees, prioritised visiting paranormal practitioners above other coping mechanisms as they could provide immediate reassurance that current stressors would cease and the future would be positive. Similarly, the activation of paranormal belief, particularly afterlife beliefs, allowed interviewees to feel reassured and protected by deceased friends and family members. However, for some using paranormal services or resources was not the first option. Interviewees often spoke of visiting doctors for health-related matters and engaging with social networks after the breakdown of a relationship. When these alternative methods of coping were deemed unsuccessful individuals turned to paranormal coping. It appears that initially paranormal belief, services, and resources were used as a last resort when other forms of coping had been unsuccessful. The perceived success of paranormal coping increased the likelihood of interviewees utilising this method of coping again.

Often interviewees discussed the effectiveness of paranormal services and resources in supporting them to manage emotional responses after negative events (most notably relationship dissolution and bereavement). Interviewees recalled experiencing a range of positive emotions such as comfort, hope, protection, reassurance, and happiness after engaging in paranormal coping. Both religious belief (Hassankhani et al., 2010; Koenig, Larson, & Larson, 2001; Sigel, Anderman, & Scrimshaw, 2001) and paranormal belief (Cooper, 2011; Drewry, 2003) have been linked to feelings of comfort and hope. It is plausible that paranormal coping may involve elements of emotion-focused coping. This is more likely when a situation is appraised as uncontrollable, to reduce emotions such as anxiety, sadness, and frustration (Carver, 2011; Lasikiewicz & Teo, 2018). This supports previous research suggesting paranormal belief correlates positively with emotion-focused coping (Callaghan & Irwin, 2003).

Traditionally, emotion-focused coping was assumed to be inherently avoidant. However, recent research suggests emotion-focused coping can be used in an adaptive manner (Austenfield & Stanton, 2004; Stanton et al., 2000). Indeed, Rogers et al. (2006) found the tendency not to use active-behavioural coping is moderated by low emotional appraisal in predicting global paranormal belief and a tendency to use avoidant coping is moderated by a high utilisation of emotions in predicting the endorsement of New Age belief. This supports the view that emotion management could be an important aspect of paranormal coping whether adaptive or avoidant in nature.

Interviewees also discussed relying on paranormal services and resources in times of stress when they did not feel able to make decisions about future actions or behaviour. It is possible interviewees were avoiding taking personal responsibility for any future outcomes resulting from the directed choices they made because of feedback from paranormal practitioners. The consequences of such decisions could be attributed to the paranormal practitioner thus alleviating any future stress which may occur because of such a choice. As previously highlighted in this discussion, interviewees may be utilising paranormal services as a form of avoidance-orientated coping. Further investigation of this construct is necessary.

The five themes revealed by thematic analysis of interview transcripts identify concepts which may represent important aspects of paranormal coping. Many of these constructs (e.g., control, searching for meaning, positive feedback, continuing bonds) are supported by previous research examining paranormal belief. Similarly, the presence of many traditional coping processes (e.g., approach and avoidant coping, problem-focused, and emotion-focused coping) lend support to the existence of paranormal coping.

2.07 STUDY STRENGTHS AND LIMITATIONS

One strength of the study is its exploratory nature. Having few prior expectancies about concepts related to paranormal coping has allowed many possible factors to be examined. Another major strength of the study is that it offers an alternative explanation, aside from methodological differences, for the inconsistent findings reported by previous researchers examining paranormal belief and traditional coping styles/strategies. Interviewees often spoke of taking immediate action (approach, problem-focused coping), managing emotional distress (emotion-focused coping), and relying on practitioners to direct subsequent behaviour (avoidant coping). The use of these processes interchangeably or concurrently makes them difficult to effectively separate within the coping episode. The cognitive dissonance caused by the interaction between interviewees' intuitive-experiential and rational-analytical thinking led to a mix of contradictory statements from interviewees. It is possible that recollections of coping vary significantly based on the amount of time passed since the stressful event, the number of times paranormal belief has been successfully used, and individual differences within cognitive ability and susceptibility to the confirmation bias. Further investigation into each of these factors could provide an explanation for the heterogeneity of previous findings.

One limitation of this study was researcher inexperience. Upon reviewing the transcripts, it was apparent that some of the themes could have been explored further within the interviews. An investigation of motivations behind specific behaviour and actions may have allowed certain coping processes to be classified more effectively. Similarly, extended questioning of interviewees' need for positive feedback, immediate advice and guidance, and how exactly reassurance and comfort was provided by paranormal practitioners may have provided further insights into paranormal coping. Despite this, the research generated several important concepts which warrant further

exploration. These may enable an understanding both of paranormal coping and how those experiencing stressful or challenging life events can be supported utilising this knowledge. It provides an insight into why traditional counselling methods may not be beneficial for some individuals. Alternatively, this research may provide a foundation for therapeutic services becoming more belief-informed. Paranormal coping may be particularly important for those with unsettled or traumatic childhood experiences as suggested by Irwin's (2009) Psychodynamic Functions Hypothesis. Individuals who require subsequent psycho-therapeutic treatments (e.g., counselling, cognitive behavioural therapy) in adulthood because of childhood trauma may view paranormal-belief informed services as more acceptable and relevant to their needs. This may lead to improved treatment adherence and lower attrition rates across a range of services.

2.08 CONCLUSION

The interviews generated a number of concepts which provide an insight into paranormal coping. Likewise, factors were conceptualised which related to individual differences in those who use paranormal coping (e.g., cognitive thinking style, susceptibility to confirmation bias). To examine both to the extent required is not conceivable within this thesis. The remainder of the current research will be limited to an examination of the former. Future research should consider the importance of investigating individual differences in more detail. Similarly, instances of coping were prominent when interviewees discussed the use of paranormal (especially New Age) services, particularly when considering the role of the practitioner in the coping process. As such, subsequent studies will focus upon this aspect of paranormal coping. Future research could build on the overall findings of this research and examine other relevant concepts (e.g., spontaneous apparitions and coping). The following study will explore the identified five themes of paranormal coping in more detail through the generation of items for a paranormal coping questionnaire. This will allow core concepts of

paranormal coping to be identified and defined and provide an initial assessment of the psychometric properties of paranormal coping.

CHAPTER 3: THE CONSTRUCTION AND PILOT OF A PARANORMAL COPING QUESTIONNAIRE

The qualitative interviews generated five main themes of paranormal coping, Belief Justification, Triggers of Paranormal Coping, Seeking Positive Feedback and Advice, Practitioner Authenticity, and Comfort and Reassurance. Each theme is summarised as follows.

Interviewees discussed a wide range of paranormal beliefs including traditional religious beliefs and New Age concepts. They often began interviews by justifying their belief, referencing various media, socio-cultural, and family influences. This theme supported the concept of paranormal coping as paranormal belief was activated in times of stress or challenge. This aligns with the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) which highlights that events must be appraised as stressful, before individual abilities and personal resources are assessed to begin the coping process. Similarly, this aligns with the Psychodynamic Functions Hypothesis (Irwin, 2009), from which paranormal coping was first theorised in the literature, as paranormal belief is activated to create a semblance of order in times where an individual has a psychological need to regain control. Interviewees experienced a level of cognitive dissonance when explaining how paranormal belief, services, and resources helped them to cope. Several interviewees struggled to align their supportive and helpful paranormal coping experience with subsequent rational thinking post-stressor.

Interviewees discussed activating paranormal belief and using paranormal services and resources shortly after events appraised as stressful or challenging. This was particularly apparent after unexpected events or experiences which led to a sudden change. The two most common events were bereavement and relationship breakdown. Again, this lends support to the concept of paranormal coping as individuals appear to be utilising paranormal services after such events. Whether utilising these services and resources was primarily approach or avoidant coping requires further examination.

Interviewees often spoke of a belief in fate and a predetermined set of events, providing interviewees with a sense of order and meaning. Perceived control as postulated in previous research (Greenaway et al., 2013; Rogers et al., 2006; Watt et al., 2007) examining paranormal belief is highlighted as an important facet of paranormal coping. Other triggers of paranormal coping were a range of negative emotions (e.g., loneliness, sadness, and guilt) which tended to accompany negative events, alongside residual relationship issues. Using paranormal services to maintain continuing bonds with the deceased was an important factor in utilising paranormal coping.

Interviewees often sought direct answers to questions from paranormal practitioners, services, and resources. This included questions about relationship outcomes, deceased family members, career directions, and future events. They expected to be given advice and guidance and to learn things about themselves and others. Feedback received from practitioners was recalled as positive and described as what interviewees needed to hear at the time. Indeed, positive feedback appears to be a prominent feature of many cold-reading techniques and astrological predictions. Very few interviewees recalled negative feedback. The rare recollections of negative feedback were often positively re-framed. It is possible those engaging in paranormal coping are particularly motivated to seek positive feedback, avoid negative feedback, or are particularly susceptible to confirmation bias.

Interviewees all described paranormal practitioners as impartial, honest, and objective. They were seen as a source of professional support by interviewees and acted as a pseudo-counselling service. Interviewees appeared to be particularly susceptible to cold-reading techniques in which paranormal practitioners utilise good observation skills and knowledge of the statistical likelihood of events at different life transitions. This manifested in interviewee's perceptions of practitioners having special paranormal abilities which gave them access to unique otherwise unobtainable information. In

contrast, friends and family members' advice and guidance was seen as subjective and biased. Feedback from this social support network was viewed as subject to individual life experiences, personal agendas, and private opinions about interviewees' situations. Interviewees did not accept information from all paranormal practitioners and other resources without question. Often, times were recalled when "fake" practitioners were accessed. These practitioners were unsuccessful at eliciting seemingly accurate advice during an interaction. Many interviewees also rejected organised religion, the notion of God, and/or traditional counselling as methods of coping. These were seen as unrealistic and unhelpful.

Interviewees often sought comfort and reassurance through paranormal coping. This came from both the paranormal practitioner and (supposedly) from deceased friends or family members. Some interviewees used paranormal coping prior to other coping methods as the information they sought could only be gained through paranormal practitioners or resources (e.g., forecasting future events and after-life communication). Others used paranormal coping as a last resort subsequent to dissatisfaction with social support or healthcare providers. However, the perceived success of paranormal coping increased its subsequent use following further events appraised as stressful or challenging. Using paranormal services and resources often increased positive emotions (e.g., hope, happiness). Use of emotion-focused coping may play an important role in paranormal coping. Finally, some interviewees spoke of being able to rely on paranormal services and resources to direct their behaviour. There was some evidence to suggest that paranormal coping is avoidant in nature. Being told how to act and behave reduces personal autonomy. Interviewees may be less likely to take personal responsibility for their behaviour and the consequences of any actions taken may be attributed back to the paranormal service or resources.

Evidence from the interviews supported the concept of paranormal coping. It is suggested that paranormal coping may comprise of a number of key concepts including searching for meaning, control, emotion management, positive feedback, and practitioner authenticity. Several other factors, for example, cognitive reasoning skills, thinking styles, and confirmation bias, were also postulated to influence an individual's use of paranormal coping. The current research will consider primarily the former, as an examination of factors which comprise paranormal coping. The decision was also taken to focus upon the use of paranormal services with practitioners as many examples of paranormal coping were taken from these parts of interviewees' excerpts.

This study aimed to design a paranormal coping questionnaire to test the themes generated from the qualitative interviews. In order to encapsulate the breadth of situations mentioned by interviewees which lead to the use of paranormal coping, the questionnaire was initially designed as a dispositional measure. To develop a valid and reliable measure is a challenging task which takes time (Slavec & Drnovsek, 2012), the next step to which is the process of item generation (Hinkin, Tracey, & Enz, 1997). In total 149 items were generated for the new measure (Appendix 5). Items 01-04 provided contextual data about the range and frequency of paranormal service use. Item 05 enquired as to the amount spent visiting services per year. The following 144 items were generated using an inductive approach based on the codes and themes from the qualitative interview. Each of these was reviewed by an additional researcher to ensure that they were simple, short, addressed only one concept (e.g., no double-barrelled items), in language that would be familiar to participants and unambiguous (DeVellis, 2016; Hinkin et al., 1997; Mourougan & Sethuraman, 2017). Each item was rated using a seven-point scale with a three-point range of discrimination for both positive and negative choices as recommended in previous research (Dawes, 2008; Fink, 1995; Foddy, 1994). An N/A option was added following feedback from the institutional

research ethics committee, to prevent participants feeling coerced into responding to all questionnaire items. Ethical approval can be viewed in Appendix 6.

In order to generate face validity, the questionnaire was subject to pilot testing. This is an important phase of new questionnaire development as it provides the opportunity for participants to feedback on the comprehensibility of instructions, relevance, and similarity of items (Hassan, Schattner, & Mazza, 2006; van Teijlingen & Hundley, 2002).

3.01 PILOT STUDY

3.02 MATERIALS

The 149-item paranormal coping questionnaire was presented alongside a standard demographics questionnaire (Appendix 5) which requested participants gender, age, ethnicity, occupational status, and highest qualification both in general and specifically relating to mathematics, statistics, and/or psychology (Appendix 3). The questionnaire pack also contained a briefing sheet detailing confidentiality, anonymity, consent, withdrawal, and data protection procedures (Appendix 7). The debriefing sheet contained contact details for additional support for participants in the unlikely event that the questionnaire raised any personal issues they wished to discuss further (Appendix 8).

3.03 PARTICIPANTS

An opportunity sample consisting of members of the general public was recruited from two cafes in a medium-sized town in North-West England. Both marketed themselves as paranormal service locations by advertising tarot readings, mediumship events and supporting New Age practices. In all, 20 individuals were asked to participate, of which 17 provided useable feedback on the questionnaires, a response rate of 85.0%. The participants were predominantly female (94.1%), aged 18-52years

($M = 28.1$, $SD = 10.1$), of a white ethnicity (100%), and employed (64.7%). Most were qualified to an A-level (58.8%) standard with fewer attaining this qualification in maths/statistics and/or psychology (29.4%). No other demographic details were taken.

3.04 PROCEDURE

Individuals were approached and asked if they would be interested in participating in a study supporting the development a questionnaire examining the use of paranormal and New Age services. It was reiterated that although participants were welcome to complete the questionnaire, the main aim of the study was to gain feedback on comprehensibility of instructions, and the relevance and similarity of items. No time limits or financial incentives were given. Participants were given time to review and/or complete the questionnaire before discussing their views with the researcher for approximately 10 minutes.

3.05 RESULTS AND DISCUSSION

All participants decided to complete the questionnaire before providing feedback. Participants took between 15 and 25 minutes to complete the questionnaire and spent approximately five minutes providing feedback. A small number of grammatical errors were highlighted by a minority of participants which were subsequently corrected. Some participants found the formatting of questions considering the range and frequency of paranormal service use too complex. They did not understand the suggested ranking system shown in an example prior to Item 02. Participants suggested separating this question into two separate items, one which assessed the range of paranormal services previously used and another which allowed them to write in free text their preferred three paranormal services. These suggestions for simplification were implemented and the questionnaire adapted accordingly.

Over half of participants rejected the inclusion of questions considering religious coping and counselling, stating as they did not use these services the question could only be answered using the N/A option. Participants did not believe a questionnaire assessing paranormal services should refer to the rejection of counselling and religion as these were separate topics. Questions relating to religion and counselling services were subsequently removed. Finally, participants highlighted the length of the questionnaire and repetitiveness of some of the items. Some asserted annoyance feeling they had already answered a very similar question. Similarly, participants suggested that listing the potential range of positive and negative emotions experienced was unnecessary and added to the length of the questionnaire. Questionnaire items listing different emotions were removed and other similar items condensed. In all, a more concise 81-item version of the “Use of Paranormal and New Age Services (UPNAS) Questionnaire” was created.

3.06 MAIN STUDY

3.07 MATERIALS

A revised 81-item version of the UPNAS questionnaire was developed based on pilot study findings (Appendix 9). This was presented alongside a new brief sheet. The questionnaire pack also contained a briefing sheet detailing confidentiality, anonymity, consent, withdrawal, and data protection procedures (Appendix 10), the debrief sheet and demographics sheet which remained unchanged from the pilot study. These materials were also replicated in online survey-based software (Survey Gizmo) to provide access to a wider range of participants who may use paranormal coping. To recruit participants to the online study an advert was created (Appendix 11) which stated “*Interested in New Age or Paranormal Services? If you have visited a psychic, medium, crystal healer or other paranormal or New Age service at least three times you could take part in this exciting new research project. Please spare 15 minutes to*

complete the questionnaire online at {insert link} or for more information email {insert email}”

3.08 PARTICIPANTS

In total, 246 individuals participated in the study, 199 of which returned useable questionnaire data (81.3%). In total, 186 participants were recruited online, with the majority participating from America, Australia, or Britain. A further 60 participants were recruited from a Mind, Body, Spirit event in North-West England. These responses were uploaded into Survey Gizmo for ease of data analysis. Overall, participants were typically women (76%), aged 16-73years ($M = 42.19$, $SD = 14.08$), of a white ethnicity (82.8%), and employed (58.0%). Most were qualified to an A-level (63.8%) standard with fewer attaining this qualification in maths/statistics and/or psychology (38.0%).

3.09 PROCEDURE

To reach participants online, the study advert was placed in a variety of paranormal interest groups on Facebook and Twitter. Participants were then redirected to the online version of the questionnaire. Those recruited in person were asked in the café of a Mind, Body, Spirit event if they would like to participate in a study examining people’s use of paranormal and New Age services. Participants were informed that this study involved the completion of a questionnaire and that they would be asked to what extent they agreed or disagreed with a range of statements by circling a response on a scale of 1-7. It was made clear that participation was entirely voluntary and that they could withdraw at any point before returning/submitting the questionnaire. Participants were informed that their responses would be completely anonymous and that any information they provided would only be used for academic research purposes. No time limits were imposed and financial incentives were not offered.

3.10 RESULTS

As Table 2 shows, a wide range of services were utilised, the most popular of which was receiving a personal reading using tarot, angel, or spirit cards followed by seeing a medium, and reading horoscopes.

Table 2: Percentage of Participants using each Paranormal Service

Paranormal Service	%	n
Reading from tarot, angel, spirit cards	79.9	159
Mediums	66.3	132
Horoscopes (newspapers, magazines, online)	53.8	107
Healing: spiritual, energy, reiki	48.7	97
Alternative medicine	45.7	91
Crystals	42.7	85
Dream interpretation	35.2	70
Past life regression	26.1	52
Numerology	24.6	49
Astrological report reading	25.1	50
Crystal ball reading	25.1	50
Astrology - face to face/telephone reading	24.1	48
Rune reading	23.1	46
Object reading i.e. psychometry	17.1	34
Other (e.g., aura reading, spell-work)	16.1	32

Most participants used these services 24 or more times over the course of their lives, with a third using this number in the previous year alone (see Table 3).

Table 3: Number of Times Paranormal and New Age Services Have Been Used in (a) Participant's Lifetime and (b) The Past Year

Number of Times Used	Over Lifetime		Over Past Year	
	n	%	n	%
0-3 times	2	1.0	51	25.6
4-7 times	30	15.1	37	18.6
8-11 times	16	8.0	15	7.5
12-15 times	12	6.0	19	9.5
16-19 times	4	2.0	5	2.5
20-23 times	7	3.5	8	4.0
24+ times	128	64.3	64	32.2

Many participants used these services on a regular basis with over 75% doing so *at least* 2-3 times per year (Table 4). Hereafter, participants who used these services less than once a year (i.e., “irregular users”) were excluded from analysis (revised $n = 178$). Table 4 also shows that most participants spend between £0 and £49 on the services per year, perhaps as they used free/less expensive online resources.

Table 4: Frequency and Annual Spending on Paranormal and New Age Service Use

How Often Used?	N	%	Amount Spent per year	n	%
Less than once per year	21	10.5	£0 to £49	127	63.8
Once per year	16	8.0	£50 to £99	32	16.1
2-3 times per year	33	16.5	£100 to £149	14	7.0
Once per month	26	13.0	£150 to £199	8	4.0
2-3 times per month	38	19.0	£200 to £249	6	3.0
2-3 times per week	27	13.5	£250 to £299	5	2.5
One or more times per day	38	19.0	£300+	7	3.5

Correlation analysis revealed all Pearson r coefficients were less than .80 in magnitude (range from $r = \pm.30$ to $r = \pm.60$) indicating an absence of multicollinearity among Items 01 to 75. Data screening supported the correlational matrix's factorability. The Kaiser-Meyer-Olkin value was .83, surpassing the accepted value of .50 with Bartlett's Test of Sphericity also highly significant ($p < .001$). This suggests the data was suitable to perform factor analysis (Tabachnick & Fidell, 2007). Any N/A responses were coded as missing.

Items 01 to 75 of the UPNAS were subjected to Principal Components Analysis (PCA) with direct oblimin rotation. Initially, PCA revealed 15 components with eigenvalues exceeding 1.0 (Kaiser's criterion) which together explained 70.65% of all item variance. With no clear break in the associated scree plot, Horn's Parallel Analysis (HPA; Pallant, 2013) was utilised. HPA suggested five components should be retained which together explained 50.50% of total item variance (see Table 5).

Table 5: Results from Principal Components Analysis and Horn's Parallel Analyses

Component	PCA Eigenvalue	HPA Criterion	Decision
1	21.23	2.46	Retain
2	5.23	2.27	Retain
3	3.63	2.25	Retain
4	3.02	2.24	Retain
5	2.24	2.14	Retain
6	2.01	2.08	Omit

The cut-off for factor loadings was set at .55, a level generally considered "good" for PCA (Comrey & Lee, 1992; Tabachnick & Fidell, 2007). In total, 20 items

did not load onto any factor ($< .55$) with a further four items removed for loading onto more than one factor. Table 6 presents the final PCA solution for the remaining 46 items. As this shows, components one to five all possessed high internal reliability (α 's $\geq .79$) explaining 30.33%, 7.48%, 5.18%, 4.32%, and 3.20% of total item variance respectively.

Table 6: Factor Loadings from the Principle Components Analysis

Factor & Items	F1	F2	F3	F4	F5
Factor 1: “Authenticity”					
Variance = 30.33%; Internal Reliability (α) = .93					
01. Practitioner honest	.85				
02. Practitioner expert	.79				
03. Practitioner truthful	.78				
04. Practitioner professional	.77				
05. Past information given made them believe more	.73				
06. Given accurate information	.71				
07. Given positive feedback	.71				
08. Personalised to their needs	.70				
09. Given information they knew to be true	.70				
10. Practitioner objective	.68				
11. Practitioner understood they were unique	.63				
12. Understand situations they struggle to deal with	.62				
Factor 2: “Approach-Oriented Coping”					
Variance = 7.48%; Internal Reliability (α) = .90					
13. Think about future steps		.75			
14. Look at a situation to understand it better		.74			
15. Take direct action to address a problem		.72			
16. Help to make important decisions		.71			
17. Help understand desires		.69			
18. Help to develop goals		.67			
19. Learn about self		.66			
20. Change something so things turn out better		.61			
21. Positive event has occurred		.58			
22. Distance self from negativity		.58			
23. To feel more in control of life		.56			
24. Help with non-emotional issues		.55			
Factor 3: “Avoidance-Oriented Coping”					
Variance = 5.18%; Internal Reliability (α) = .82					
25. Less trustworthy than family and friends			.70		
26. Given negative feedback			.68		
27. Avoid something bad happening			.68		
28. Don't want to deal directly with a problem			.68		
29. Previously given false information			.66		
30. Told what they wanted to hear at the time			.62		
31. Get even/revenge someone			.58		
Factor 4: “Lack of Support/Control”					
Variance = 4.32%; Internal Reliability (α) = .89					
32. Use when life is chaotic				.74	
33. No other means of support				.74	
34. Experienced emotional distress				.72	
35. Friends and family couldn't help				.69	
36. Struggle to accept certain things have happened				.65	
37. Negative event has occurred				.65	
38. Anticipate difficult circumstances				.62	
39. Don't trust own decision making				.61	
40. Needed help from someone with special abilities				.60	
41. Went as a last resort				.59	
42. Felt rejected by other people				.58	
Factor 5: “Practitioner Abilities”					
Variance = 3.20%; Internal Reliability (α) = .79					
43. Practitioner can contact spirits					.68
44. Guidance about future events					.64
45. Outcome of a current/future relationship					.62
46. Learn about others					.59

Factor 1 comprises 12 items concerned with the extent to which participants viewed the feedback they received as personal, positive, and accurate. This factor also relays participants' perception of paranormal practitioners as being honest, objective, and professional. Factor 1 was named "Authenticity".

Factor 2 also consisted of 12 items referring to the use of paranormal services as an adaptive process. This factor echoes cognitive and behavioural features of approach coping. Problems are reappraised to aid understanding (e.g., reconsidering own desires, goals, and personality) and action is taken to deal with difficult situations. Factor 2 was labelled "Approach-Oriented Coping".

Factor 3 contained seven items concerned with participants' efforts to disengage from difficult issues through avoidance or denial. These were negatively framed with some suggestion of false information being supplied indicating a lack of trust in the paranormal practitioner. Factor 3 was labelled "Avoidance-Oriented Coping".

Factor 4 comprised 11 items highlighting participants' reactions to various negative life events leading to emotional distress, a lack of belief in oneself and the inability or unwillingness of friends and family to help, which ultimately led to participants experiencing a perceived loss of control. Factor 4 was named "Lack of Support/Control".

Finally, Factor 5 included four items focusing on paranormal practitioners' claimed abilities such as obtaining otherwise inaccessible information through precognition or post-mortem communication. Factor 5 was named "Practitioner Abilities".

3.11 DISCUSSION

This study aimed to develop and pilot a new dispositional measure of paranormal coping which focused upon the use of paranormal and New Age services. Initially, 149 items were generated based on the themes and codes identified via

qualitative interviews. Participants' recommendations for item simplification, a reduction in questionnaire length and the removal of items pertaining to religion and counselling were implemented accordingly. Following pilot testing, an 81-item version of the Use of Paranormal and New Age Services (UPNAS) Questionnaire was subject to exploratory factor analysis. This generated an internally reliable five-factor model of paranormal coping, consisting of Authenticity, Approach-Oriented Coping, Avoidance-Oriented Coping, Lack of Support/Control, and Practitioner Abilities. Each factor will be discussed in turn.

The first factor "Authenticity" refers to characteristics associated with practitioners' objectivity, professionalism, and trustworthiness. This implies paranormal practitioners mimic qualified roles, presenting themselves as compassionate, skilled, and their paranormal capabilities as genuine. Participants view these practitioners as providing a professional service, an alternative therapy similar to counselling, a finding consistent with previous claims (Evensen, Cooper, & Mitchell, 2013; Osborne & Bacon, 2015). The first factor accounted for almost a third of the item variance. This suggests that the presentation of an empathetic, trusted practitioner is one of the most important facets of paranormal coping, one that likely increases future demand for services amongst individuals who already utilise them. A positive participant-practitioner interaction is an important predictor of many other service-client type interactions. In sales, trust is a key feature of good customer relationships; as trust in a supplier increases, they are viewed as more honest, likeable, and dependable, rendering future service use more likely (Swan, Trawick, & Silva, 1985). As participant trust increases in paranormal practitioners due to the elicitation and presentation of seemingly accurate and personalised information, so could the likelihood of using paranormal coping, through future paranormal service use.

The second factor “Approach-Orientated Coping” reflects participants’ engagement with paranormal coping. It presents behavioural actions designed to directly engage with, or remove, stressors by actively seeking advice and knowledge. Also apparent are cognitive approaches designed to change individuals’ perceptions of events or aid alternative explanations through increased understanding. This factor also reflects participants’ desire to manage emotional reactions to difficult circumstances. This suggests that some participants are actively engaging with paranormal services as they are useful in creating positive outcomes, perhaps more so than other traditional counselling approaches which may not align with individual belief systems (Beischel, Mosher, & Boccuzzi, 2015). Other research considering paranormal belief and coping provides support for this factor (Mathijssen, 2012).

Use of approach-orientated coping is known to be adaptive and useful for overcoming stress (Moore, Zoellner, & Mollenholt, 2008), mild depression (Troy, Wilhelm, Shallcross, & Mauss, 2010), and poor social functioning (Cutuli, 2014). However, it is still plausible that participants appear to be engaging positively with paranormal services when in fact, they are avoiding taking more appropriate self-directed action. They could be relying on the positive directional feedback from paranormal practitioners as a method of deflecting personal responsibility for their choices and subsequent outcomes resulting from their decisions. Further investigation of how approach-orientated coping differs between paranormal and non-paranormal service use is necessary.

The third factor “Avoidance-Orientated Coping” echoes traditional avoidant coping. Items here are negatively framed and reflect concepts such as denial, fantasising, and other distraction-based behaviours. Previous research has linked specific facets of paranormal belief to avoidance-oriented coping, providing support for this factor (Berkowski & Macdonald, 2014). However, as discussed, it is plausible that

behaviours which appear approach or avoidant-orientated are in fact the opposite, when the intention behind their use is considered. In the long term, avoidance-oriented coping tends to be non-adaptive, having been linked to both negative affect (Ben-Zur, 2009) and worsening psychological dysfunction (e.g., Holahan, Moos, Holahan, Brennan, & Schutte, 2005). With paranormal belief strongly linked to fantasy proneness (French & Stone, 2014), it seems paranormal service users seek help from practitioners to distract from their problems.

However, it should be noted that in the short-term avoidance-orientated coping has been linked to more positive outcomes (Dempsey, 2002; Sandler, Kim-Bae, & Mackinnon, 2000; Suls & Fletcher, 1985) as they may briefly relieve associated shame, distress, or helplessness (Briere, 2002). Avoidance-orientated coping may serve as a “time-out” which enables an individual to regroup their resources before engaging in approach-orientated coping (Aldwin, 2009). This suggests that paranormal coping utilised from an avoidance-oriented perspective may be beneficial in the short-term. It also suggests that how paranormal coping is utilised may be dependent on when it is used following a negative event.

The fourth factor “Lack of Support/Control” refers to the use of paranormal services when participants feel unsupported by family and friends, and/or out of control following negative life events and are experiencing the associated emotional distress. It is possible that support gained from paranormal practitioners acts as a replacement for the social support usually provided by a good network of friends and/or family. As suggested, this may indicate either a distinct lack of social support or dissatisfaction with the quality of support provided by such a network.

Use of paranormal services to help cope with feelings of diminished control is also consistent with Irwin’s (2009) Psychodynamic Functions Hypothesis (PFH) which suggests that paranormal beliefs develop in childhood, often because of childhood

maltreatment or trauma, and become “re-activated” during adulthood when life is seen to be chaotic, unpredictable, and in times of stress. The implication here is that participants’ belief in, and need to receive paranormally sourced advice (e.g., fortune telling), served as an approach-orientated form of coping in times of uncertainty and/or emotional distress. However, it could be argued that given paranormal believers’ heightened fantasy-proneness, the use of paranormal services allows individuals to withdraw into a make-believe world, escape stress, and cope with their perceived loss of personal control (Rogers et al., 2006; Watt et al., 2007), a concept which can only be considered avoidance-orientated. This factor supports the claim that paranormal beliefs are “re-activated” whenever paranormal believers need to regain a sense of control over their worlds whether this be approach or avoidance-orientated.

This factor (Lack of Support/Control) is consistent with prior research investigating paranormal belief and control. Paranormal belief has continually been linked to illusionary control, namely how uncontrollable and unpredictable participants perceive their lives to be (Lasikiewicz, 2016). Similarly, many past studies suggest paranormal believers have a higher external locus of control (Newby & Davis, 2004). They do not feel in control of their own future or understand that their own choices lead to success or failure. Factor 4 (Lack of Support/Control) suggests that individuals may use paranormal services to feel more in control and enable them to engender support for decisions following negative life events.

The fifth factor “Practitioner Abilities” reflects the supernatural capabilities paranormal practitioners appear to possess possibly as the result of cold reading techniques. The use of statistically likely statement statements about life transitions, combined with good observational skills (Hyman, 1977) convinces individuals that practitioners are able to access otherwise unknown information. The apparent exactness of information gleaned from practitioners reinforces the veracity of paranormal abilities

for example clairvoyance and mediumistic capabilities. Furthermore, the perceived accuracy of practitioners' supernatural giftedness likely reinforces the view that they are both authentic and professional (see Factor 1 - Authenticity). Factor 5 (Practitioner Abilities) confirms that practitioners are seen as having genuine supernatural capabilities at least by those who use their services. This view is less than surprising and, together with the apparent authenticity of such practitioners, helps explain the enduring popularity of paranormal beliefs (Moore, 2005) and the continued use of paranormal services.

3.12 STUDY STRENGTHS AND LIMITATIONS

One strength of this study is the good internal reliability of each of the five factors which ranged from .79 to .93. Another strength of the research is that the five-factor model of paranormal coping is consistent with previous work linking paranormal belief with various measures of coping. Specifically, Factor 2 (Approach-Orientated Coping) suggests some clients utilise services in a similar manner to more traditional approach-oriented (e.g., cognitive-behavioural) coping, supporting Mathijssen (2012). Factors 3 (Avoidance-Orientated Coping) and 4 (Lack of Support/Control) are each consistent with previous evidence linking paranormal belief to avoidance-orientated and emotion-focused coping supporting findings from Berkowski and Macdonald (2014) and Callaghan and Irwin (2003). Together, these three factors may explain previous findings that paranormal belief is unrelated to non-paranormal coping strategies (Irwin et al., 2015; Rogers et al., 2006). This implies paranormal believers are just as likely to utilise approach and avoidance-orientated coping as non-believers. This suggests that a distinct combination of traditional coping methods may comprise paranormal coping. Alternatively, rather than a unique form of coping, paranormal coping may be another resource by which individuals channel dispositional coping styles. This is an avenue which deserves further exploration.

Several methodological issues are noted. First, the decision was made to examine paranormal coping through the utilisation of paranormal services and practitioners as during the interviews used for item generation the most obvious examples of coping came from these experiences. Whilst useful for refining the research, as a result some paranormal beliefs and/or experiences were not examined in the present study. For example, it has been suggested that a belief in the veracity of out-of-body experiences gives order and meaning to the post-traumatic stress reactions of those who have suffered childhood sexual abuse (Bergstrom, 1999). Similarly, whilst the research provides support for Irwin's (2009) PFH, whether the stress-induced "activation" of paranormal beliefs always manifests as seeking help from practitioners is currently unexamined. In summary, the five-factor model supports the notion of paranormal coping through the use of practitioners linking paranormal belief to approach and avoidance-orientated coping. However, future examination of paranormal coping should consider incorporating other types of alleged paranormal phenomena not already included here.

A second limitation concerns the lack of situational context inherent in the current assessment of paranormal coping. In the present study, participants were asked about times they used services regardless of contextual factors, an approach that implicates a "dispositional" measure of paranormal coping (Carver, 1997; Endler & Parker, 1999). This was deemed most appropriate for an initial, exploratory study of paranormal coping. But, as previously noted, a "state-trait debate" exists within the literature. One explanation for the heterogeneity of previous findings considering paranormal belief and coping was that both "state" and "trait" measures of coping were utilised across studies. Supporters of "state" measures of coping argue that coping behaviours are not generalisable across different situations and time-frames (Carver & Scheier, 1994). The current examination of paranormal coping does not consider these

factors. Future measures of paranormal coping might take a “state” approach and include specific items assessing the context in which paranormal coping is utilised, and the times when it is deemed most effective as others have done with non-paranormal measures of coping such as the COPE (Carver, Scheier, & Weintraub, 1989).

3.13 CONCLUSION

Despite these limitations, the current study was the first to identify core features of paranormal coping and investigate its psychometric properties. Initial results provided further support for the concept of paranormal coping and suggest it comprises five internally reliable subscales; Authenticity, Approach-Oriented Coping, Avoidance-Oriented Coping, Lack of Support/Control, and Paranormal Abilities. The next study will use a modified 52-item version of the “Use of Paranormal and New Age Services” (UPNAS) Questionnaire. This will be subject to a robust statistical design to ensure the proposed paranormal coping measure is both reliable and valid.

CHAPTER 4: VALIDATION OF THE UPNAS QUESTIONNAIRE

Exploratory factor analysis indicated paranormal coping consists of five internally reliable constructs; Authenticity, Approach-Orientated Coping, Avoidance-Orientated Coping, Lack of Support/Control, and Practitioner Abilities. Each factor is summarised as follows.

Factor 1: Authenticity comprised of 12 items which related to participants' perceptions of paranormal practitioners as objective, professional, and trustworthy. Paranormal services are viewed as a form of alternative therapy similar to counselling. Participants view the feedback they receive as accurate, personalised and their interactions with practitioners as positive and compassionate.

Factor 2: Approach-Oriented Coping also comprised of 12 items which related to participants' engagement with paranormal coping. It echoes cognitive and behavioural features typically seen in traditional approach-orientated coping. Items reflect actions taken to directly address a stressor or reduce its impact as well as approaches designed to change individual perceptions of events, or reduce negative emotional reactions.

Factor 3: Avoidance-Oriented Coping contained seven items which reflected a participant's efforts to disengage from a stressor. It presents concepts reflective of traditional avoidance-orientated coping such as denial, fantasising, and other distraction-based behaviours. It is suggested that participants use heightened fantasy proneness to withdraw into a make-believe world to escape, at least in the short term, from their problems.

Factor 4: Lack of Support/Control consisted of 11 items which highlighted participants' feelings of diminished control after the occurrence of a negative event. Items reflect participants' inability to make decisions due to emotional distress and a perceived lack of support from friends or family members. This supports Irwin's (2009)

Psychodynamic Functions Hypothesis (PFH) which suggests paranormal belief is activated when there is a psychological need for illusory control.

Factor 5: Practitioner Abilities included four items which focused upon the apparent supernatural capabilities of paranormal practitioners, for example clairvoyance and mediumistic abilities. This factor reinforces the authenticity of paranormal practitioners and explains the enduring popularity of such services.

Overall, the five-factor model supported the notion of paranormal coping and offered an explanation for previous research findings considering paranormal belief and coping. The research was successful in creating an initial dispositional measure of paranormal coping which encompassed a wide range of coping behaviours across different situations and time-frames. The current study aimed to ensure that the Use of Paranormal and New Age Services (UPNAS) Questionnaire was a robust, valid and reliable measure of paranormal coping. The research sought to confirm the five-factor model of paranormal coping and establish concurrent validity, discriminant validity, and test-retest reliability.

Concurrent validity refers to the extent that a newly developed measure produces results which correlate with an established measure of the same construct. However, as the UPNAS is the first measure of paranormal coping there are no comparison questionnaires. Therefore, scales assessing paranormal belief and coping were utilised as an alternative. A range of questionnaires examining both these constructs were assessed to determine which were most suitable for inclusion in the current study. Discriminant validity (which tests whether dissimilar concepts are unrelated) was also assessed by examining scientific belief scales for inclusion in the current research. Finally, test-retest reliability was assessed in participants who consented to be re-contacted to participate in an upcoming associated study. Establishing test-retest reliability would provide additional support for the UPNAS

Questionnaire, by demonstrating that participant responses are representative and that by extension paranormal coping is stable over short periods of time (<30 days).

4.01 ESTABLISHING CONCURRENT VALIDITY: COPING QUESTIONNAIRES

Many different scales and questionnaires have been published that measure coping. Kato (2013) conducted a meta-analysis to determine the most frequently used coping scales in published research in databases between 1998 and 2012. The most commonly used questionnaire was the “COPE” (Carver, 1997). This questionnaire, including its short and revised versions, was applied in 20.20% of research. The “Ways of Coping Questionnaire” (WCQ; Folkman & Lazarus, 1980, 1985), including its short and revised versions, followed this at 13.60%. Other questionnaires of note also included the “Coping Strategies Questionnaire” (CSQ; 4.95%), “Coping Inventory of Stressful Situations” (CISS; 4.15%), “Religious COPE” (RCOPE; 3.40%), and “Coping Response Inventory” (CRI; 3.05%). Each is considered for inclusion alongside the UPNAS.

The COPE (Carver, Scheier, & Weintraub, 1989; Carver, 1997) contains 60-items organised into 15 subscales; positive reinterpretation and growth, mental disengagement, focus on and venting of emotions, use of instrumental social support, active coping, denial, religious coping, humour, behavioural disengagement, restraint, use of emotional social support, substance use, acceptance, suppression of competing activities, and planning. The COPE was designed as a dispositional measure of coping but can be used as a measure of situational coping by altering the wording formats. This was based on research suggesting coping is stable across a wide variety of situations. Indeed, the reliability of the COPE has been demonstrated in a variety of different studies (Litman, 2006; Lyne & Roger, 2000). However, due to the length of the COPE, a brief version was designed to reduce the time and effort required from consenting

participants. This reduced the COPE to 28-items and 14 subscales, selected based on strong loadings from previous factor analyses. Despite the item reduction, internal reliability remained relatively high, similar to that of the original measure. The consistency of findings and frequency of use support the inclusion of the brief COPE in the current research.

The Ways of Coping Checklist (WCC), revised and renamed as the Ways of Coping Questionnaire (WCQ; Folkman & Lazarus, 1980, 1985, 1988), is the second most frequently used questionnaire in coping research. The authors suggest that when participants respond to statements, they must have a specific stressful event in mind. The WCQ consists of 66 items and 8 subscales. The subscales are confrontive coping, distancing, self-controlling, seeking social support, accepting responsibility, escape avoidance, planful-problem solving and positive reappraisal with Cronbach's Alpha coefficients ranging from .61 to .79. However, some researchers have had problems recreating this factor structure with the number of factors extracted changing across situations (Parker, Endler, & Bagby, 1993). This reflects a general problem with most coping measures and is indicative of the unresolved state-trait debate (Schwarzer & Schwarzer, 1996). The authors of the questionnaire encourage researchers to adjust the WCQ to the specific study context to achieve a close match between the stress experience and the coping statements. As the UPNAS was designed as a dispositional measure of coping, the WCQ was rejected for inclusion in the current study.

The Coping Strategies Questionnaire (CSQ; Rosenstiel & Keefe, 1983) contains subscales designed to measure the different methods individuals use to cope with chronic pain. The overall questionnaire was deemed reliable and the nine subscales include diverting attention, reinterpreting sensations, catastrophizing, ignoring sensations, coping self-statements, praying and hoping, increasing activity, ability to

control pain, and ability to decrease pain. As many of these subscales relate to pain management it is not deemed applicable to the current research.

The Coping Inventory of Stressful Situations (CISS; Endler & Parker, 1999) consists of 48 items which assess three main coping styles; task-orientated, emotion-orientated, and avoidance coping. There is also a shorter 21-item situation specific form (CISS:SSC). This has been used in a large number of studies, with consistent results reported across a variety of countries (Furukawa, Suzuki-Moor, Saito, & Hamanaka, 1993; Rafnsson, Smari, Windle, Mears, & Endler, 2006). The CISS is described as a psychometrically valid and reliable measure. However, other studies (Callaghan & Irwin, 2003) have found only modest correlations between the three main types of coping and paranormal belief. Three broad categories may not reflect the complexity and heterogeneity of paranormal coping. This questionnaire will not be considered further for the current research.

Pargament et al. (2000) applied Lazarus and Folkman's (1984) transactional model of coping to the sphere of religion and suggested that it was critical to understand how individuals use religious coping to deal with a stressor. They suggest religious beliefs and practices may guide the individual in the process of selecting solutions to problems. The RCOPE (Pargament, Feuille, & Burdzy, 2011; Pargament, Koenig, & Perez, 2000) consists of three coping styles; self-directing, deferring, and collaborative. These vary on two key dimensions underlying the individual's relationship with God; the locus of responsibility, and the level of activity. The Cronbach's alpha reliabilities for each of these scales was high (.94, .94, and .91 respectively). A brief RCOPE was developed as a shorter measurement of religious coping. This 14-item scale was derived using factor analysis which demonstrated two main styles of religious coping; positive and negative. Despite having overlapping constructs, religious coping is based on a

relationship with a God, unlike paranormal coping. This rendered the questionnaire inappropriate for the current research.

The 48-item Coping Response Inventory (CRI; Moos, 1988, 1993) identifies cognitive and behavioural responses an individual used to cope with a recent problem or stressful situation. There are two forms; actual and ideal. The actual form includes questions about the person's actual coping behaviour. The ideal form comprises questions about preferred coping styles. The eight subscales include approach-oriented coping (logical analysis, positive reappraisal, seeking guidance and support, and problem solving) and avoidance-oriented (cognitive avoidance, acceptance, seeking alternative rewards, and emotional discharge). Alternatively, these can be classified into cognitive and behavioural coping approaches. The CRI has been employed in a variety of populations and has evidence of good internal reliability (Moos, 1988, 1993). The main criticism of the CRI is that it restricts the meaning and interpretation of various coping responses to confine them to a classification system (Wong & Wong, 2006). However, arguably, by combining approach vs. avoidance with cognitive vs. behavioural methods, this questionnaire brings greater conceptual clarity to the different coping responses (Wong, Reker, & Peacock, 2006). This questionnaire will be considered for the current research.

Two questionnaires were therefore considered potentially appropriate for inclusion in the current research, the brief COPE and the Coping Response Inventory (CRI). Both can be used as dispositional measures of coping style in line with the newly developed Use of Paranormal and New Age Services (UPNAS) Questionnaire. However, the CRI takes longer to complete and has a significant cost associated with its use. Therefore, the brief COPE was selected for inclusion in the current research.

4.02 ESTABLISHING CONCURRENT VALIDITY: PARANORMAL BELIEF QUESTIONNAIRES

There are a variety of questionnaires assessing paranormal belief. Irwin (2009) and French and Stone (2014) agree that the most commonly used scales are the Australian Sheep Goat Scale (ASGS; Thalbourne & Delin, 1993; Thalbourne, 1995, 2001, 2010) and the Revised Paranormal Belief Scale (RPBS; Tobayck, 2004). Other scales of note include the Anomalous Experiences Inventory (AEI; Gallagher, Kumar, & Pekala, 1994; Kumar & Pekala, 2001) and the New Age Orientation Scale (NAOS; Granqvist & Hagekull, 2001). French and Stone (2014) comment that the content of the scales reflects the conception of the paranormal by those constructing the scale accounting for the variety of paranormal beliefs surveyed in each. It is important to select a scale which reflects the concepts used to develop the UPNAS questionnaire. Each measurement of paranormal belief is considered for inclusion in the current research.

The Australian Sheep Goat Scale (ASGS; Thalbourne & Delin, 1993) classifies individuals by their level of paranormal belief. Believers are termed “sheep” and disbelievers termed “goats”. The most common version of the scale (Thalbourne, 1995) includes 18 items assessing peoples’ acceptance of extrasensory perception (ESP) and psychokinesis (PK). However, there is also a 26-item version (Thalbourne, 2010). The ASGS often utilises a three-point scale, or a seven-point likert scale (Roe & Morgan, 2002; Rogers, Davis, & Fisk, 2009), there is also a visual analogue scale (Thalbourne & Delin, 1993) and a Rasch-scaled version (Lange & Thalbourne, 2002). However, the scale does not include items pertaining to astrology, cryptozoological creatures, life after death communications, or extra-terrestrial intelligence. As use of mediums was a key service discussed in the development of the paranormal coping questionnaire, this measure was deemed less appropriate for the current research.

The original Revised Paranormal Belief Scale (RPBS; Tobayck, 2004) contained seven subscales including; traditional religious belief, psi belief, witchcraft, superstition, spiritualism, extraordinary life forms, and precognition. The overall scale had an internal reliability of .89 and individual subscales were all above the acceptable .60 ranging up to .87. Tobayck (1988) slightly amended the PBS adding an item to the precognition scale, and changing three of the scale items. This improved the reliability and validity of the measure. This 26-item RPBS was used in many different pieces of research even before its eventual publication in 2004. Some researchers debate the number of subscales demonstrated by the RPBS suggesting it contains seven (Drinkwater, Denovan, Dagnall, & Parker, 2017; Tobayck & Milford, 1983), five (Lawrence & De Cicco, 1997; Lawrence, Roe, & Williams, 1997), four (Hartman, 1999), and even two (Lange et al., 2000) latent factors. Other researchers remain unconvinced by the scale due to the inclusion of religious concepts (Fitzpatrick & Shook, 1994). Despite this, the RPBS is arguably the most commonly used measurement of paranormal belief (Irwin, 2009) due to the inclusion of a wide range of paranormal phenomena. This questionnaire was considered for the current research.

The Anomalous Experiences Inventory (AEI; Kumar & Pekala, 2001), originally known as the Mental Experience Inventory and the Paranormal Experiences and Beliefs questionnaire, contains 70 items and five subscales; experiences, beliefs, abilities, fears, and drug use. Internal reliability of the five subscales was adequate (Gallagher, Kumar, & Pekala, 1994) and showed moderate convergent validity with other measures of paranormal beliefs and experiences, and with selected personality measures. This questionnaire has been used in the study of paranormal belief by many different researchers (Simmonds-Moore, 2009; Rabeyron & Watt, 2010). However, as paranormal fears, abilities, and drug use subscales were not as appropriate for the current research, the AEI was not considered further.

The New Age Orientation Scale (NAOS; Granqvist & Hagekull, 2001) is a 22-item questionnaire which describes New Age concepts such as spirituality, philosophy of life, knowledge, and mental capacities. The NAOS consists of one homogenous factor yielding an alpha coefficient of .95 (average inter-item correlation = .46). Subsequent research validating the NAOS (Farias, Claridge, & Lalljee, 2005) also produced high Cronbach's alpha coefficients of .92. This indicates that the NAOS is reliable and that participants who endorse a few propositions are likely to endorse others as well. This scale is particularly relevant as it includes items pertaining to the use of specific services identified by the UPNAS e.g., tarot cards, mediums, and alternative therapies. It will be considered for inclusion alongside the UPNAS.

The Survey of Scientifically Unsubstantiated Beliefs (SSUB; Irwin & Marks, 2013) is a newly developed measure comprising of 20-items across two subscales; new age beliefs, and traditional religious beliefs. The scale was developed to overcome some difficulties faced by alternative scales, such as a lack of negatively worded items, issues with differential item functioning (items answered differently by gender and/or age), a narrow representation of paranormal beliefs and ambiguous statement structures. The authors of the SSUB employed a robust statistical design during development phases which resulted in a scale with excellent internal reliability and high concurrent validity alongside the Revised Paranormal Belief Scale. Whilst the SSUB shows potential as a new measure of paranormal belief, it still requires validation in additional research studies. For the current research, the inclusion of a new measure to validate another seemed inappropriate. It was therefore not considered further at this time.¹²

Two of the questionnaires examining paranormal belief were deemed suitable for inclusion in the current study. The Revised Paranormal Belief Scale (RPBS) and the

¹² Subsequent to the completion of the current research, the Survey of Unsubstantiated Beliefs Scale (SSUB) has been used by other researchers to measure paranormal belief (Irwin, 2015a; Irwin, 2015b; Irwin et al., 2015) who report excellent internal reliability.

New Age Orientation Scale (NAOS) both have good internal reliability and are used frequently in paranormal belief research. As the measures were of a reasonable length and measured different but overlapping constructs both were included in the current research.

4.03 ESTABLISHING DISCRIMINANT VALIDITY: SCIENTIFIC BELIEF SCALES

Contrary to expectations, there were very few scientific belief scales within the reviewed literature. Often scales found were designed to understand science teachers' (primary and secondary) perspectives on science, teaching and learning (e.g., Aldridge, Taylor, & Chen, 1997; Riggs & Enochs, 1990; Sampson, Enderle, & Grooms, 2013) or students' changing attitudes towards science and learning science (Adams, Perkins, Dubson, Finkelstein, & Wieman, 2005; Lederman, Abd-El-Khalick, Bell, & Schwartz, 2002). None of these questionnaires were appropriate for the current research. Two questionnaires were identified for inclusion in the current research; one assessing belief in science; the Belief in Science Scale (Farias, Newheiser, Kahane, & de Toledo, 2013) and the other scientific determinism; the Free Will and Determinism Scale (FAD-Plus; Paulhus, & Carey, 2011). These will be examined in turn.

The Belief in Science Scale (BISS; Farias et al., 2013) is a 10-item questionnaire which describes ideas about science. The scale consists of one homogenous factor yielding an alpha coefficient of .86 (all inter-item correlations = $>.56$). The scale was developed to support the authors' hypothesis that, when individuals encounter stressors which threaten their sense of perceived control, they exhibit heightened belief in those theories which allow them to regain a sense of order. However, as a newly developed

measure, it is inappropriate to use it to validate another therefore it was not considered further for the current research¹³.

The Free Will and Determinism Scale (FAD-Plus; Paulhus & Carey, 2011) is a 27-item measure of consisting of four subscales; free will, scientific determinism, fatalistic determinism, and unpredictability. This was identified due to the inclusion of the scientific determinism subscale. Belief in science is referenced as the belief that scientific enquiry is a superior method and form of knowledge to enable an understanding of the world (Farias et al., 2013). In contrast, scientific determinism reflects the opinion that environmental and biological constructs shape how individuals think, act, and behave (Paulhus & Carey, 2011). This may be more applicable to the current study. Interest in this measure was also aroused by the remaining three subscales. Free will reflects opinions about autonomy and whether individuals are responsible for their actions. Fatalistic determinism comprises items referencing a belief in fate, whilst unpredictability reflects the perception of luck, chance, and randomness; all concepts which were previously identified within this research project. The FAD-Plus scale has good reported internal reliability across three developmental studies (Paulhus & Carey, 2011) and has been used increasingly since its creation, particularly by researchers investigating free will. This scale was considered for inclusion in the current study

As the Belief in Science Scale (BISS; Farias, et al., 2013) is a relatively new measure it was not deemed suitable to use as a validation tool. As such, the FAD-Plus (Paulhus & Carey, 2011) was identified. Whilst this does not measure belief in science, it measures the related construct of scientific determinism. All subscales included in this

¹³ Subsequent to the completion of the current research, the Belief in Science Scale (BISS) has been used by other researchers as a measure of belief in science (Aghababaei, 2016; Irwin et al., 2015; Valdesolo, Park, & Gottlieb, 2016) although further evidence of the scale's psychometric validity remains unreported to date.

measure were utilised for the current study as they were able to provide further insights into constructs identified as important to paranormal coping.

4.04 PILOT STUDY

The pilot study aimed to ensure that the Use of Paranormal and New Age Service (UPNAS) Questionnaire was a valid and reliable measure of paranormal coping. The research sought to confirm the five-factor model of paranormal coping and establish concurrent and discriminant validity. A pilot study was conducted prior to the main study to gain feedback on the new version of the UPNAS Questionnaire, the comprehensibility of the instructions given, and time taken to complete the study. Ethical approval for this study can be found in Appendix 12.

4.05 MATERIALS

Five different questionnaires were included in the pack provided to participants. This contained the Use of Paranormal and New Age Services Questionnaire (UPNAS), Brief COPE (Carver, Scheier, & Weintraub, 1997), Revised Paranormal Belief Scale (RPBS; Tobayck, 2004), New Age Orientation Scale (NAOS; Granqvist & Hagekull, 2001), and the Free Will and Determinism Scale (FAD-Plus; Paulhus, & Carey, 2011). Instructions outlined the need for honest and constructive feedback when completing the pilot study.

The UPNAS questionnaire (Appendix 13) begins with six items which reflect the type, frequency, and cost of paranormal service use. The second section consists of 46-items across five subscales Authenticity, Approach-Orientated Coping, Avoidance-Orientated Coping, Lack of Support/Control, and Practitioner Abilities. Participants are asked to reflect on why they visit paranormal services and rate items from “strongly disagree” (1) to “strongly agree” (7). An example statement is, “*I mainly use paranormal and New Age services when I need help to make an important decision,*”

(Lack of Control subscale). There is no overall scale score, each subscale is scored individually, with higher scores indicating a greater use of different coping efforts.

The Brief COPE (Carver, 1997; Carver, Scheier, & Weintraub, 1997) consists of 28 items across 14 subscales; Self-Distraction, Active Coping, Denial, Substance Use, Emotional Support, Instrumental Support, Behavioural Disengagement, Venting, Positive Reframing, Planning, Humour, Acceptance, Religion, and Self-Blame. Participants are asked to reflect to what extent they use a range of coping techniques to deal with stress in their lives and rate items accordingly from “I haven’t been doing this at all,” (1) to “I’ve been doing this a lot,” (4). An example item is, “*I get help and advice from other people*” (Use of Instrumental Support subscale). There is no overall scale score, each subscale is scored individually, with higher scores indicating a greater use of coping efforts. The Brief COPE can be viewed in Appendix 14.

The Revised Paranormal Belief Scale (RPBS; Tobayck, 2004) consists of 26 items measuring a range of paranormal beliefs. For the current research, the more robust¹⁴ two-factor structure was retained (Lange et al., 2000; Tobayck & Milford, 1984). The two subscales are Traditional Paranormal Belief and New Age Philosophies. Participants are asked to reflect on how much an item represents their beliefs and attitudes towards paranormal phenomena and rate items accordingly from “strongly disagree” (1) to “strongly agree” (7). An example item is, “*Astrology is a way to accurately predict the future*” (New Age Philosophies subscale). Again, each subscale is scored individually, with higher scores indicating a stronger belief in paranormal concepts. The RPBS can be viewed in Appendix 15.

The New Age Orientation Scale (NAOS; Granqvist & Hagekull, 2001) is a 22-item measure, which describes a range of ideas consistent with a New Age worldview.

¹⁴ Since the completion of the current study more recent work by Drinkwater et al. (2017) indicated that the seven-factor solution provides better model fit for data using confirmatory factor analysis than the two, three, and five factor models.

Participants are asked to indicate the extent to which items correspond with their own opinion and rate items accordingly from “strongly disagree” (1) to “strongly agree” (6). An example item is, *“The position of the stars at birth affects how one will live one’s life or how one’s personality will develop.”* The measure consists of one homogenous factor and is scored as such, with higher scores indicating a greater New Age orientation. The NAOS can be viewed in Appendix 16.

The Free Will and Determinism Scale (FAD-Plus; Paulhus & Carey, 2011) consists of 27 items across four subscales; Free Will, Scientific Determinism, Fatalistic Determinism, and Unpredictability. Participants are asked to indicate how much they agree or disagree with a statement from “totally disagree” (1) to “totally agree” (5). An example item is, *“People’s biological makeup determines their talents and personality”* (Scientific Determinism subscale). Each subscale is scored individually and there is no total scale score, with higher scores representing increased belief in the different types of free will and determinism. The FAD-Plus can be viewed in Appendix 17.

A standard demographics questionnaire was also included which requested participant’s gender, age, ethnicity, occupational status, and highest qualification both in general and specifically relating to mathematics, statistics, and/or psychology (Appendix 3). Participants were also asked to leave their email address at the bottom if they would like to take part in an associated follow up study, to allow for test-retest reliability of the UPNAS Questionnaire to be calculated. The questionnaire pack also contained a briefing sheet (Appendix 18) detailing confidentiality, anonymity, consent, withdrawal, and data protection procedures. The debrief sheet (Appendix 19) contained contact details for additional support for participants to contact in the unlikely event that the questionnaires had raised any personal issues they wished to discuss further.

4.06 PARTICIPANTS

An opportunity sample consisting of 18 members of the general public were recruited from two cafes in a medium-sized town in North-West England. Both marketed themselves as paranormal service locations by advertising tarot readings, mediumship events and supporting New Age practices. In all, 20 individuals were asked to participate, of which 16 provided useable feedback, a response rate of 80.0%. The participants were predominantly female (87.5%), aged 20-47years ($M = 29.2$, $SD = 8.1$), of a white ethnicity (100%), and employed (56.3%). Most were qualified to an A-level standard (81.3%) with fewer attaining this qualification in maths/statistics and/or psychology (31.3%). No other demographic details were taken.

4.07 PROCEDURE

Individuals were approached and asked if they would be interested in participating in a study examining the development of a questionnaire assessing the use of paranormal and New Age services. It was reiterated that participants should complete the questionnaire pack, and then provide feedback as to the comprehensibility of the instructions and time taken to finish. No time limits or financial incentives were given. Participants were given time to complete the questionnaires before discussing their views for approximately 10 minutes.

4.08 RESULTS AND DISCUSSION

Overall questionnaire completion time ranged from 30 to 50 minutes with an additional five minutes spent providing feedback to the researcher. Participants felt that there were too many different questionnaires included in the one study and suggested streamlining this for ease of completion. As such, the questionnaire pack was separated into three smaller studies. Participants made very few comments about the UPNAS, the Brief COPE, the RPBS, or the FAD-Plus, however around a quarter struggled to

understand NAOS items citing language complexity as the reason. Participants felt that some of the words used were unfamiliar to them and some of the sentences were too long. Despite this, participants supported its inclusion when questioned by the researcher due to measuring a remarkably different aspect of paranormal belief when compared to those assessed by the RPBS (e.g., asking about concepts such as spiritual development, alternative treatments, and universal connectedness)

4.09 MAIN STUDY

4.10 MATERIALS

Three separate questionnaire packs were created based on participant feedback in the pilot that the study was too lengthy. The first questionnaire pack contained a briefing sheet (Appendix 20), UPNAS Questionnaire (Appendix 13), RPBS (Appendix 15), NAOS (Appendix 16), standard demographics questionnaire (Appendix 3), and a debrief sheet (Appendix 21).

The second questionnaire pack comprised of a brief sheet (Appendix 22), UPNAS Questionnaire (Appendix 13), Brief COPE (Appendix 14), standard demographics questionnaire (Appendix 3), and a debrief sheet (Appendix 23).

The third questionnaire pack included a brief sheet (Appendix 24), UPNAS Questionnaire (Appendix 13), FAD-Plus (Appendix 17), standard demographics questionnaire Appendix 3), and a debrief sheet (Appendix 25). All measures were consistent with that described in the pilot study.

Two versions of each questionnaire pack were made to counter act any order effects. These materials were also replicated in online survey-based software (Survey Gizmo), to access a wider range of participants who may use paranormal coping. The presentation of questionnaires to participants online was also randomised to prevent potential order effects.

To recruit participants to the online study an advert (Appendix 10) was created which stated “*Interested in New Age or Paranormal Services? If you have visited a psychic, medium, crystal healer or other paranormal or New Age service at least three times you could take part in this exciting new research project. Please spare 15 minutes to complete the questionnaire online at {insert link} or for more information email {insert email}*” Similar wording was used to recruit additional participants to the study from a Mind, Body, Spirit event in North-West England.

4.11 PARTICIPANTS

In total, 400 individuals participated in the study, 357 of whom returned useable questionnaires (89.3%). In total, 267 participants were recruited online, with the majority participating from America, Australia, or Britain. A further 133 participants were recruited from a Mind, Body, Spirit event in North-West England. These responses were uploaded into Survey Gizmo for ease of data analysis. Overall, participants were typically women (85.3%), aged 18-78 years ($M = 47.7$, $SD = 13.1$), of a white ethnicity (94.1%), and employed (61.8%). Most were qualified to an A-level standard (55.8%) with fewer attaining this qualification in maths/statistics and/or psychology (26.3%). No other demographic details were taken.

4.12 PROCEDURE

To reach participants online, the study advert was placed in a variety of paranormal interest groups on Facebook and Twitter. Participants were then redirected to the online version of the questionnaire. Those recruited in person were asked in the café of a Mind, Body, Spirit event if they would like to participate in a study examining people’s use of paranormal services and either 1) types of belief 2) coping with stress or 3) belief in fate, science, and free will. Allocation to each questionnaire pack was random. Participants were informed that this study involved the completion of a

questionnaire and that they would be asked to what extent they agreed or disagreed with a range of statements by circling a response on the scale provided. It was made clear that participation was entirely voluntary and that they could withdraw at any point before returning/submitting the questionnaire. Participants were informed that their responses would be completely anonymous and that any information they provided would only be used for academic research purposes. No time limits were imposed and financial incentives were not offered. Individuals who provided their email address were sent a different questionnaire pack to complete in order to establish test-retest reliability.

4.13 RESULTS

4.14 PRELIMINARY SCREENING

The first questionnaire pack contained the Use of Paranormal and New Age Services (UPNAS) Questionnaire, the Revised Paranormal Belief Scale (RPBS; Tobayck, 2004) and the New Age Orientation Scale (NAOS; Granqvist & Hagekull, 2001). UPNAS (1-46) and RPBS items (1-26) were scored on a scale of 1-7. The NAOS variables were scored on a scale of 1-6. The data from 109 participants was subject to preliminary screening to ensure suitability for Confirmatory Factor Analysis. The frequency tables for each individual variable were examined to ensure there were no incorrect values entered as a result of human error. There were no values entered outside of each scale's specified range. All missing values were coded as 99. A Missing Variables Analysis (MVA) was conducted to examine the percentage and pattern of missing data. All subscales had <5% missing data. Table 7 presents the percentage of missing data from each subscale.

Table 7: Percentage of Missing Data

Scale	Count	Percentage
UPNAS – Authenticity	2	1.8
UPNAS - Approach-Orientated Coping	3	2.8
UPNAS - Avoidance-Orientated Coping	2	1.8
UPNAS - Lack of Support/Control	2	1.8
UPNAS - Practitioner Abilities	1	0.9
NAOS Total Scale	3	2.8
RPBS Total Scale	1	2.8

Little’s MCAR test revealed that data values were missing at random. ($X^2 (37) = 47.233, p = .12$). Therefore, Estimation Maximisation (EM) was used to estimate missing scores based on the case’s pattern of scoring on all subscales to provide a complete data set.

Descriptive statistics were explored to examine patterns of distribution in the data. Histograms for each scale were visually examined. Each produced a normal distribution curve. To examine this further, skewness and kurtosis values for each scale were inspected. Table 8 presents skewness and kurtosis values for each scale.

Table 8: Skewness and Kurtosis Values

Scale	Skewness Value	Std. Error	Z Score	Kurtosis Values	Std. Error	Z Score
UPNAS - Authenticity	-.36	.22	-1.56	-.58	.46	-1.27
UPNAS - Approach-Orientated	-.44	.22	-1.90	.43	.46	.94
UPNAS - Avoidance Orientated	.23	.22	.98	-.31	.46	-.67
UPNAS - Lack of Support/Control	-.35	.22	-1.51	-.52	.46	-1.14
UPNAS - Practitioner Abilities	-.21	.22	-.91	-.50	.46	-1.08
RPBS Total	-.54	.22	-2.32	-.28	.46	-.60
NAOS Total	-.01	.22	-.06	-.58	.46	-1.26

Z scores were calculated to provide statistical certainty that data was normally distributed. Skewness and kurtosis scores were <3.29 , as suggested for a medium-sized sample (Kim, 2013). This suggests data was normally distributed and suitable for further analysis.

However, three univariate outliers were found for the Approach-Orientated Coping subscale. A regression analysis was computed to check for multivariate outliers. Examination of a critical chi-squared values table gave a value of 24.32 ($p < .001$). There were no participants with a Mahalanobis distance score greater than this value. Therefore, all univariate outliers were retained.

The second questionnaire pack was completed by 127 participants and utilised the Use of Paranormal and New Age Services (UPNAS) Questionnaire and the Brief COPE (Carver, Scheier, & Weintraub, 1997). UPNAS variables (1-46) were scored on a scale of 1-7. The Brief COPE (1-28) variables were scored on a scale of 1-4. The frequency tables for each individual variable were examined to ensure there were no incorrect values entered as a result of human error. There were no values entered outside of each scale's specified range. All missing values were coded as 99. A Missing Variables Analysis (MVA) was conducted to examine the percentage and pattern of missing data. All subscales had <5% missing data. Table 9 presents the percentage of missing data from each subscale.

Table 9: Percentage of Missing Data

Scale	Count	Percentage
UPNAS – Authenticity	2	1.6
UPNAS - Approach-Orientated	4	3.2
UPNAS - Avoidance-Orientated	2	1.6
UPNAS - Lack of Support/Control	3	2.4
UPNAS - Practitioner Abilities	0	0.0
Brief COPE - Self Distraction	0	0.0
Brief COPE - Active Coping	0	0.0
Brief COPE – Denial	1	0.8
Brief COPE - Substance Use	1	0.8
Brief COPE - Emotional Support	0	0.0
Brief COPE - Instrumental Support	0	0.0
Brief COPE - Behavioural Disengagement	0	0.0
Brief COPE – Venting	0	0.0
Brief COPE - Positive Reframing	0	0.0
Brief COPE – Planning	0	0.0
Brief COPE – Humour	0	0.0
Brief COPE – Acceptance	0	0.0
Brief COPE – Religion	0	0.0
Brief COPE - Self Blame	0	0.0

Little's MCAR test revealed that data values were missing at random. ($X^2 (120) = 127.86, p = .30$). Therefore, Estimation Maximisation (EM) was used to estimate missing scores based on the case's pattern of scoring on all subscales to provide a complete data set.

Descriptive statistics were explored to examine patterns of distribution in the data. Histograms for each scale were visually examined. Most produced a normal distribution curve. To examine this further skewness and kurtosis values for each scale were inspected. Table 10 presents skewness and kurtosis values for each scale.

Table 10: Skewness and Kurtosis Values

Scale	Skewness Value	Std. Error	Z Score	Kurtosis Value	Std. Error	Z Score
UPNAS - Authenticity	-.35	.22	1.59	-.12	.43	.28
UPNAS - Approach-Orientated	-.26	.22	1.18	-.51	.43	1.18
UPNAS - Avoidance-Orientated	.08	.22	.39	.32	.43	.74
UPNAS - Lack of Support/Control	-.45	.22	2.09	-.31	.43	2.25
UPNAS - Practitioner Abilities	-.29	.22	1.32	-.37	.43	.85
Brief COPE - Self Distraction	-.33	.22	1.52	-.76	.43	1.76
Brief COPE - Active Coping	-.64	.22	2.96	-.54	.43	1.24
Brief COPE - Denial	1.12	.22	5.14	.22	.43	2.32
Brief COPE - Substance Use	1.29	.22	5.94	.34	.43	.79
Brief COPE - Emotional Support	-.12	.22	.55	-1.27	.43	2.95
Brief COPE - Instrumental Support	-.224	.22	1.03	-1.20	.43	2.79
Brief COPE - Behavioural Dis.	1.05	.22	4.83	.08	.43	.19
Brief COPE - Venting	.35	.22	1.63	-.78	.43	1.82
Brief COPE - Positive Reframing	.52	.22	2.39	-1.10	.43	2.55
Brief COPE - Planning	-.54	.22	2.50	-.80	.43	1.86
Brief COPE - Humour	-.01	.22	.02	-.89	.43	2.06
Brief COPE - Acceptance	-.35	.22	1.60	-.49	.43	1.15
Brief COPE - Religion	-.67	.22	3.06	-.69	.43	1.61
Brief COPE - Self Blame	-.01	.22	.06	-1.34	.43	3.11

Z scores were calculated to provide statistical certainty that data was normally distributed. Skewness and kurtosis scores were <3.29 , as suggested for a medium-sized sample. The Brief COPE scales of Denial (3), Substance Use (4) and Behavioural Disengagement (7) were skewed significantly to the left indicating there were a higher number of low scoring participants. As only 3/38 of the above scores need to be interpreted with caution the decision was made not to transform the data. The distribution of the rest of the sample was normal and parametric assumptions about the

data could be made in future analyses (Kim, 2013). There were no outliers present within the data.

The third questionnaire pack was completed by 124 participants and utilised the Use of Paranormal and New Age Beliefs Scale (UPNAS) and the Free Will and Determinism Questionnaire (FAD-Plus; Paulhus & Carey, 2011). UPNAS variables (1-46) were scored on a scale of 1-7 and FAD-Plus variables (1-27) were scored on a scale of 1-5. The frequency tables for each individual variable were examined to ensure there were no incorrect values entered as a result of human error. There were no values entered outside of each scales specified range. All missing values were coded as 99. A Missing Variables Analysis (MVA) was conducted to examine the percentage and pattern of missing data. All subscales had <5% missing data. Table 11 presents the percentage of missing data from each subscale.

Table 11: Percentage of Missing Data

Scale	Count	Percentage
UPNAS – Authenticity	2	1.8
UPNAS - Approach-Orientated	3	2.8
UPNAS - Avoidance-Orientated	2	1.8
UPNAS - Lack of Support/Control	2	1.8
UPNAS - Practitioner Abilities	1	0.9
FAD-Plus - Free Will	2	1.6
FAD-Plus - Scientific Determinism	3	2.4
FAD-Plus - Fatalistic Determinism	4	3.2
FAD-Plus – Unpredictability	4	3.2

Little’s MCAR test revealed that data values were missing at random. ($X^2(90) = 91.02, p = .45$). Therefore, Estimation Maximisation (EM) was used to estimate missing scores based on the case’s pattern of scoring on all subscales to provide a complete data set.

Descriptive Statistics were explored to examine patterns of distribution in the data. Histograms for each scale were visually examined. Most produced a normal

distribution curve. To examine this further skewness and kurtosis values for each scale were inspected. Table 12 presents skewness and kurtosis values for each scale.

Table 12: Skewness and Kurtosis Values

Scale	Skewness Value	Std. Error	Z Score	Kurtosis Value	Std. Error	Z Score
UPNAS: Authenticity	-.34	.22	1.55	.21	.43	.48
UPNAS: Approach-Orientated	-.39	.22	1.80	.16	.43	.37
UPNAS: Avoidance-Orientated	.36	.22	1.64	.26	.43	.60
UPNAS: Lack of Support/Control	.05	.22	.25	-.14	.43	.32
UPNAS: Practitioner Abilities	-.44	.22	2.05	-.24	.43	.55
FAD-Plus: Free Will	.36	.22	1.64	-.59	.43	1.38
FAD-Plus: Scientific Determinism	-.26	.22	1.18	-.18	.43	.41
FAD-Plus: Fatalistic Determinism	.15	.22	.71	-.30	.43	.70
FAD-Plus: Unpredictability	.17	.22	.76	-.50	.43	1.16

Z scores were calculated to provide statistical certainty that data was normally distributed. Skewness and kurtosis scores are <3.29, as suggested for a medium-sized sample (Kim, 2013). This suggests data was normally distributed and suitable for further analysis.

However, five univariate outliers were found across three UPNAS subscales. A regression analysis was computed to check for multivariate outliers. Examination of a critical chi-squared values table gave a value of 27.88 ($p < .001$). There were no participants with a Mahalanobis distance score greater than this value. Therefore, all univariate outliers were retained.

The data from the UPNAS questionnaire was compiled into one large dataset, in order to perform Confirmatory Factor Analysis. This would confirm the five-factor model of paranormal coping before comparison to the RPBS, NAOS, BCOPE, and FAD-Plus to establish concurrent validity.

4.15 CONFIRMATORY FACTOR ANALYSIS

Confirmatory Factor Analysis (CFA) is a statistical technique used to verify the factor structure of a set of data. It is important within psychometric evaluation to estimate scale reliability (Raykov, 2001). A model is built using a predetermined factor structure. CFA examines how well the model can account for correlations within the data set. If the major correlations are representative of the data (with regards to the variables set out by the model) the model is judged to be a good fit. This would suggest that the factor structure is similar for both the original and new data, which verifies the number and composite of the factors identified. However, if there is a discrepancy between the correlations proposed by the model and those observed in the data, the model is judged to be of poor fit. This would imply that the underlying factor structure is different for the two sets of data. Assuming the participant samples for each study were similar, this suggests an unstable factor structure.

To create the model, the five-factor model structure identified in Chapter 2 was utilised. The five factors (Authenticity, Approach-Orientated Coping, Avoidance-Orientated Coping, Lack of Support/Control, and Practitioner Abilities) were modelled as latent variables. Co-variances were drawn to account for inter-correlations between the latent variables. The individual questionnaire items that constructed each latent variable were added as observed variables. Residual delta scores were noted on each of the observed variables to account for measurement error. The model was subjected to first order CFA using AMOS Graphics statistical analysis software. A visual examination of the factor loadings revealed six under the recommended cut-off of .70 (Appendix 26).

In line with standard guidelines (Byrne, 2016; Hu & Bentler, 1999; Hooper, Coughlan, & Mullen, 2008; Meyers, Garnst, & Guarino, 2017; Paswan, 2009), a “good” model fit is defined by a *Chi-Square to df Ratio (CMIN/df)* 2-5, *Goodness-of-Fit Index*

(GFI) and Comparative Fit Index (CFI) >.95, an Adjusted Goodness-of-Fit Index (AGFI) >.90, Incremental Fit Index (IFI) >.90, and Root-Mean-Square Error Approximation (RMSEA) figures <.06. Table 13 provides an assessment of the models' goodness of fit.

Table 13: Assessment of Model Goodness of Fit

Type of Construct	AMOS Output	Recommended Cut-Off
Probability (P)	<.001	>.05
Chi-Square to df Ratio CMIN/df	5.44	≤2-5
Goodness of fit index (GFI)	.61	≥.95
Adjusted goodness of fit index (AGFI)	.57	≥.90
Comparative fit index (CFI)	.59	≥.95
Incremental fit index (IFI)	.59	≥.90
Root mean squared error of approximation (RMSEA)	.11	≤.10

An examination of the model fit statistics suggests that the model was not a good fit to the data. To improve the model fit the six items with unacceptable factor loadings were removed. Examination of modification indices suggested eleven residual errors were correlated. These all had scores above 20, and were located on the same latent variable (Gaskin, 2011). These were co-varied and model fit re-examined. Table 14 presents all adjustments made to the original model (Appendix 27). Whilst this improved model fit statistics, these did not reach acceptable values (Table 15).

Table 14: Modifications to Model

Variable	Issue	Action
UPNAS 2	Factor loading .49	Observed variable removed
UPNAS 4	Factor loading .52	Observed variable removed
UPNAS 13	Factor loading .43	Observed variable removed
UPNAS 33	Factor loading .65	Observed variable removed
UPNAS 43	Factor loading .61	Observed variable removed
UPNAS 46	Factor loading .68	Observed variable removed
E40 – E41	Modification Indices – 142.43	Co-varied
E35 – E36	Modification Indices – 21.20	Co-varied
E26 – E28	Modification Indices -23.54	Co-varied
E24 – E25	Modification Indices – 42.40	Co-varied
E20 – E21	Modification Indices – 21.42	Co-varied
E15 – E20	Modification Indices – 30.57	Co-varied
E9 – E11	Modification Indices – 96.69	Co-varied

E2 – E11	Modification Indices – 31.71	Co-varied
E1 – E11	Modification Indices – 20.31	Co-varied
E1 – E9	Modification Indices – 24.36	Co-varied
E1 – E6	Modification Indices – 37.84	Co-varied

Table 15: Re-assessment of Model Goodness of Fit

Type of Construct	AMOS Output	Recommended Cut-Off
Probability (P)	<.001	>.05
CMIN/df	4.77	≤2-5
Goodness of fit index (GFI)	.68	≥.95
Adjusted goodness of fit index (AGFI)	.63	≥.90
Comparative fit index (CFI)	.70	≥.95
Incremental fit index (IFI)	.70	≥.90
Root mean squared error of approximation (RMSEA)	.10	≤.10

4.16 EXPLORATORY FACTOR ANALYSIS

Despite modifications made to the model, it remained a poor fit to the data. To evaluate the model further, Exploratory Factor Analysis (EFA) was conducted to examine the underlying factor structure. The 46 items of the Use of Paranormal and New Age Services (UPNAS) Questionnaire were subjected to a comparable Principle Components Analysis (PCA) with direct oblimin rotation using IBM SPSS Statistics version 22. Inspection of the correlation matrix revealed the presence of many coefficients above .3, the Kaiser-Meyer-Olkin value was .872 and Bartlett’s Test of Sphericity was also highly statistically significant at $p < .001$, all of which surpass acceptable values suggesting data was suitable for factor analysis. PCA revealed 12 components with eigenvalues exceeding 1 explaining a total of 72.13% of the variance. With no clear break in the associated scree plot, Horn’s Parallel Analysis (HPA; Pallant, 2013) was utilised. HPA suggested six components should be retained which together explained 57.50% of total item variance (Table 16).

Table 16: Results from Principal Components Analysis and Horn's Parallel Analyses

Component Number	PCA Eigenvalue	HPA Criterion	Decision
1	13.78	1.76	Accept
2	4.68	1.69	Accept
3	2.78	1.62	Accept
4	2.11	1.56	Accept
5	1.56	1.52	Accept
6	1.51	1.48	Accept
7	1.36	1.44	Reject

The cut-off for factor loadings was set at .55, in line with the stringent cut-offs proposed previously. In total, 15 items did not load onto any factor (<.55) and three factors were removed as they contained an insufficient number of items (<4). Table 17 presents the final PCA solution for three remaining factors which explained 46.19% of the total item variance.

Table 17: Factor Loadings from the Principle Components Analysis

Factors & Items	F1	F2	F3
Factor 1: "Practitioner-Influenced Cognitive-Orientated Coping"			
Variance = 29.97%; Internal Reliability (α) = .95.			
21. Practitioner truthful	.86		
23. Practitioner expert	.83		
18. Practitioner honest	.82		
28. Practitioner understood they were unique	.79		
35. Given accurate information	.76		
39. Help to develop goals	.76		
44. Practitioner professional	.76		
38. Personalised to their needs	.76		
20. Practitioner objective	.73		
30. Past information given made them believe more	.72		
31. To feel more in control of life	.70		
37. Think about future steps	.69		
41. Look at a situation to understand it better	.67		
25. Given positive feedback	.66		
17. Practitioner can contact spirits	.65		
16. Given information they knew to be true	.65		
29. Outcome of current/future relationship	.63		
45. Help understand desires	.62		
Factor 2: "Avoidance-Orientated Coping"			
Variance = 10.17%; Internal Reliability (α) = .79			
42. Don't want to deal directly with a problem		.73	
46. As a last resort		.70	
40. Told what they wanted to hear at the time		.66	
15. Felt rejected by other people		.64	
36. Previously given false information		.61	
22. Less trustworthy than family/friends		.61	
26. Don't trust own decision making		.60	
Factor 3: "Lack of Control"			
Variance = 6.05%; Internal Reliability (α) = .79			
3. Negative event has occurred			.75

1. Experienced emotional distress	.73
5. Life is chaotic	.69
4. Change something so things turn out better	.64
14. Help to make important decisions	.62
6. Take direct action to address a problem	.62

The PCA suggested that paranormal coping consists of three internally reliable subscales. However, there are clear similarities when examining the underlying factor structures from the two data sets. Factor 1 consists of 18 items concerned with the extent to which participants viewed the feedback they received as personal, positive, and accurate. This factor also relays participants' perception of paranormal practitioners as being honest, objective, and professional. These items originally loaded on to the "Authenticity" factor. Additional items are cognitive reappraisal strategies used to aid understanding (e.g., reconsidering own desires) which originally comprised part of the "Approach-Orientated Coping" factor. Factor 1 was labelled "Practitioner-Influenced Cognitive-Orientated Coping."

Factor 2 consists of seven items which reflect participants' efforts to disengage from difficult issues through avoidance or denial. This factor is similar to the original factor labelled "Avoidance-Orientated Coping." This label was retained as an accurate representation of this factor.

Factor 3 consists of six items which reflect triggers of paranormal coping. It represents negative events, experiences of diminished control, and emotional distress experienced prior to participants' paranormal service use. Additional items represent behavioural actions (e.g., visiting a paranormal practitioner) taken to overcome such events appraised as stressful. Originally these items loaded on to the "Lack of Support/Control" and "Approach-Orientated Coping." Factor 3 was labelled "Lack of Control."

4.17 CONFIRMATORY FACTOR ANALYSIS

As the underlying factor structure for both sets of data was conceptually similar, the second factor structure proposed was used to create a new CFA model. The data collected in Chapter 3 was used to test the new model, to confirm a new factor structure. The model used the three new factors (Practitioner-Influenced Cognitive-Orientated Coping, Avoidance-Orientated Coping, and Lack of Control) as latent variables. Covariances were drawn to account for inter-correlations between them. Individual questionnaire items that constructed each latent variable were added as observed variables. Residual delta scores were noted on each of the observed variables to account for measurement error. The model was subjected to first order CFA. A visual examination of the factor loadings revealed one under the recommended cut-off of .70 (Appendix 28). Table 18 presents goodness of fit statistics.

Table 18: Assessment of Model Goodness of Fit

Type of Construct	AMOS Output	Recommended Cut-Off
Probability (P)	<.001	>.05
CMIN/df	3.28	≤2-5
Goodness of fit index (GFI)	.64	≥.95
Adjusted goodness of fit index (AGFI)	.59	≥.90
Comparative fit index (CFI)	.69	≥.95
Incremental fit index (IFI)	.69	≥.90
Root mean squared error of approximation (RMSEA)	.11	≤.10

An examination of the model fit statistics suggests the model was a poor fit to the data. To improve this, one item with an unacceptable factor loading was removed. Modification indices suggested 10 residual errors were correlated. These all had scores above 20 and were located on the same latent variable (Gaskin, 2011). These were co-varied and model fit re-examined. Table 19 presents all model adjustments (Appendix 29). Despite this, model fit remained poor (Table 20).

Table 19: Modifications to Model

Variable	Issue	Action
UPNAS 27	Factor loading .49	Observed variable removed

E30 – E31	Modification Indices – 22.56	Co-varied
E26 – E29	Modification Indices – 21.61	Co-varied
E26 – E28	Modification Indices - 47.78	Co-varied
E26 – E27	Modification Indices – 30.11	Co-varied
E20 – E21	Modification Indices – 34.13	Co-varied
E7 – E28	Modification Indices – 33.88	Co-varied
E7 – E27	Modification Indices – 41.53	Co-varied
E7 – E26	Modification Indices – 23.59	Co-varied
E6 – E27	Modification Indices – 34.91	Co-varied
E6 – E7	Modification Indices – 77.06	Co-varied
E1 – E6	Modification Indices – 25.23	Co-varied

Table 20: Re-assessment of model goodness of fit

Type of Construct	AMOS Output	Recommended Cut-Off
Probability (P)	<.001	>.05
CMIN/df	2.47	≤2-5
Goodness of fit index (GFI)	.75	≥.95
Adjusted goodness of fit index (AGFI)	.70	≥.90
Comparative fit index (CFI)	.81	≥.95
Incremental fit index (IFI)	.81	≥.90
Root mean squared error of approximation (RMSEA)	.09	≤.10

4.18 DISCUSSION

The current study aimed to ensure that the Use of Paranormal and New Age Service (UPNAS) Questionnaire was a valid and reliable measure of paranormal coping. The research sought to confirm the five-factor model of paranormal coping and establish concurrent and discriminant validity. The five-factor model of paranormal coping was not supported. A subsequent three-factor model was proposed as an alternative, and successively rejected. Modifications to both models improved goodness of fit statistics, however these remained below the acceptable values for the majority of reported assessments. Nevertheless, both models are conceptually similar and appear to represent, at least in part, participants' experiences of paranormal coping. Authenticity, Avoidance-Orientated Coping, Lack of Support/Control remained relatively consistent with Approach-Orientated Coping items divided across them. Items loading on to the

Practitioner Abilities subscale were either removed or incorporated into the Authenticity subscale. As such the three new factors were labelled Practitioner-Influenced Cognitive-Orientated Coping, Avoidance-Orientated Coping, and Lack of Control. Due to the similarities between the underlying factor structures, it seemed warranted to collect additional data to determine which model was more representative of paranormal coping. As the initial five-factor model was drawn from a larger pool of items it is possible that these may have influenced the structure that was found. A further discussion of the study findings, strengths, and limitations are provided following the analysis of the additional data.

CHAPTER 5: VALIDATION OF THE THREE OR FIVE FACTOR MODEL

The previous chapter aimed to validate the Use of Paranormal and New Age Services (UPNAS) Questionnaire. However, Confirmatory Factor Analysis (CFA) did not support the five-factor model of paranormal coping identified in Chapter 3. Model fit was poor, which suggested there was a discrepancy between the correlations proposed by the model and those observed in the data. To examine this further, the data collected to confirm the original model was subject to an Exploratory Factor Analysis (EFA). This revealed a three-factor model of paranormal coping. As the two models appeared comparable, a second CFA was conducted. This examined whether the three-factor model would provide an acceptable fit for the original data. The second modified model improved goodness of fit statistics, however these remained below acceptable levels.

To further assess and confirm the factor structure underlying paranormal coping it was deemed necessary to collect additional data. As the two models were conceptually similar it was important to confirm the factors which appeared relevant. Given that the five-factor model was drawn from a larger pool of items it is possible these may have influenced participants' responses on the retained items. This study aimed to collect enough useable data to reliably run a confirmatory factor analysis, and if necessary, an exploratory factor analysis to examine the underlying factor structure of the data ($n > 200$) to provide a robust factor solution from which to examine paranormal coping in line with Irwin's (2009) Psychodynamic Functions Hypothesis.

5.01 MATERIALS

Participants were presented with the Use of Paranormal and New Age Services (UPNAS) Questionnaire (Appendix 13), standardised demographic questionnaire (Appendix 3). A brief sheet from the pilot study (Appendix 18) with the sentence, "*You*

will be asked for feedback about the statements. Did they make sense? Was anything missed out?" removed and the completion time altered from 25 minutes to ten minutes. The debrief sheet (Appendix 19) from the pilot was also utilised. These materials were presented to participants via an online survey-based software (Survey Gizmo) to access a similar participant sample as the two previous studies. The same online advert was also used (Appendix 10).

5.02 PARTICIPANTS

In total, 365 individuals participated in the study, 294 of which returned useable questionnaires (80.6%). All participants were recruited online, with the majority participating from America, Australia, or Britain. Overall, participants were typically women (95.9%), aged 17-74 years ($M = 41.4$, $SD = 13.0$), of a white ethnicity (82.0%), and employed (41.8%). Most were qualified to an A-level (50.0%) standard with fewer attaining this qualification in maths/statistics and/or psychology (27.6%). No other demographic details were taken.

5.03 PROCEDURE

To reach participants online, the study advert was placed in a variety of paranormal interest groups on Facebook and Twitter. Participants were then redirected to the online version of the questionnaire. Participants were asked if they would like to take part in a study examining people's use of paranormal and New Age services. Participants were informed that this study involved the completion of a questionnaire and that they would be asked to what extent they agreed or disagreed with a range of statements by circling a response on a scale of 1-7. It was made clear that participation was entirely voluntary and that they could withdraw at any point before returning/submitting the questionnaire. Participants were informed that their responses would be completely anonymous and that any information they provided would only be

used for academic research purposes. No time limits were imposed and financial incentives were not offered.

5.04 RESULTS

Data was subject to preliminary screening. The online questionnaire requirements were set to require an answer to every item therefore no missing data or values entered as a result of human error were expected. This was confirmed through an examination of the frequency tables for each individual variable. There were no values entered outside of each items specified range.

5.05 FIVE-FACTOR MODEL

The first model was created using the five-factor structure. Each of the five factors (Authenticity, Approach-Orientated Coping, Avoidance-Orientated Coping, Lack of Support/Control, and Practitioner Abilities) were used as latent variables. Covariances were drawn to account for inter-correlations between them. The individual questionnaire items that constructed each latent variable were added as observed variables. Residual delta scores were noted on each of the observed variables to account for measurement error. The model was subjected to first order CFA using AMOS Graphics statistical analysis software. A visual examination of the factor loadings revealed 15 under the recommended cut-off of .70 (Appendix 30). Table 21 presents goodness of fit statistics.

Table 21: Assessment of Model Goodness of Fit

Type of Construct	AMOS Output	Recommended Cut-Off
Probability (P)	<.001	>.05
CMIN/df	5.87	≤2-5
Goodness of fit index (GFI)	.56	≥.95
Adjusted goodness of fit index (AGFI)	.52	≥.90
Comparative fit index (CFI)	.42	≥.95
Incremental fit index (IFI)	.43	≥.90
Root mean squared error of approximation (RMSEA)	.13	≤.10

Model fit statistics suggest that the model was a poor fit to the data. To improve the model fit, the 13 items with unacceptable factor loadings were removed. This resulted in the removal of Factor 5: Practitioner Abilities with only one remaining observed variable. Modification indices suggested nine residual errors were correlated. These all had scores above 20 and were located on the same latent variable. These were co-varied and model fit re-examined. Table 22 presents all modifications made to the model (Appendix 31). Despite this, model fit remained poor (Table 23).

Table 22: Modifications to Model

Variable	Issue	Action
UPNAS 30	Factor loading .68	Observed variable removed
UPNAS 25	Factor loading .49	Observed variable removed
UPNAS 16	Factor loading .42	Observed variable removed
UPNAS 27	Factor loading -.48	Observed variable removed
UPNAS 32	Factor loading .40	Observed variable removed
UPNAS 1	Factor loading .56	Observed variable removed
UPNAS 3	Factor loading .62	Observed variable removed
UPNAS 9	Factor loading .49	Observed variable removed
UPNAS 26	Factor loading .53	Observed variable removed
UPNAS 46	Factor loading .54	Observed variable removed
UPNAS 17	Factor loading .45	Observed variable removed
UPNAS 24	Factor loading .60	Observed variable removed
UPNAS 29	Factor loading .58	Observed variable removed
UPNAS 13	Only observed variable left	Factor removed from model
E23 – E24	Modification Indices – 29.62	Co-varied
E21 – E22	Modification Indices – 24.64	Co-varied
E19 – E11	Modification Indices – 20.43	Co-varied
E19 – E20	Modification Indices – 33.40	Co-varied
E17 – E22	Modification Indices – 38.60	Co-varied
E13 – E23	Modification Indices – 20.84	Co-varied
E10 – E12	Modification Indices – 76.76	Co-varied
E3 – E10	Modification Indices – 35.72	Co-varied
E1 – E3	Modification Indices – 21.75	Co-varied

Table 23: Re-assessment of Model Goodness of Fit

Type of Construct	AMOS Output	Recommended Cut-Off
Probability (P)	<.001	>.05
CMIN/df	4.98	≤2-5
Goodness of fit index (GFI)	.70	≥.95
Adjusted goodness of fit index (AGFI)	.64	≥.90
Comparative fit index (CFI)	.63	≥.95
Incremental fit index (IFI)	.64	≥.90
Root mean squared error of approximation (RMSEA)	.12	≤.10

5.06 THREE-FACTOR MODEL

The second model was created using the three-factor structure. Each of the three factors (Practitioner-Influenced Cognitive-Orientated Coping, Avoidance-Orientated Coping, and Lack of Control) were used as latent variables. Co-variances were drawn to account for inter-correlations between them. The individual questionnaire items that constructed each latent variable were added as observed variables. Residual delta scores were noted on each of the observed variables to account for measurement error. The model was subjected to first order CFA using AMOS Graphics statistical analysis software. Initially, a visual exploration suggested there may be some issues with the model with six factor loadings under the recommended cut-off of .70 (Appendix 32). Table 24 presents goodness of fit statistics.

Table 24: Assessment of Model Goodness of Fit

Type of Construct	AMOS Output	Recommended Cut-Off
Probability (P)	<.001	>.05
CMIN/df	6.09	≤2-5
Goodness of fit index (GFI)	.63	≥.95
Adjusted goodness of fit index (AGFI)	.58	≥.90
Comparative fit index (CFI)	.51	≥.95
Incremental fit index (IFI)	.51	≥.90
Root mean squared error of approximation (RMSEA)	.13	≤.10

Model fit statistics suggest that the model was a poor fit to the data. To improve the model fit the six items with unacceptable factor loadings were removed. Modification indices suggested 14 residual errors were correlated. These all had scores above 20 and were located on the same latent variable. These were co-varied and model fit re-examined. Table 25 presents all modifications made to the model (Appendix 33). Despite this, model fit remained poor (Table 26).

Table 25: Modifications to Model

Variable	Issue	Action
UPNAS 30	Factor loading .60	Observed variable removed
UPNAS 31	Factor loading .57	Observed variable removed
UPNAS 25	Factor loading .38	Observed variable removed
UPNAS 17	Factor loading .57	Observed variable removed
UPNAS 16	Factor loading .36	Observed variable removed
UPNAS 29	Factor loading .65	Observed variable removed
E30 – E31	Modification Indices – 110.25	Co-varied
E26 – E31	Modification Indices – 25.49	Co-varied
E16 – E18	Modification Indices – 80.07	Co-varied
E15 – E18	Modification Indices – 36.43	Co-varied
E13 – E17	Modification Indices – 24.03	Co-varied
E10 – E18	Modification Indices – 42.93	Co-varied
E7 – E16	Modification Indices – 22.78	Co-varied
E6 – E18	Modification Indices – 41.16	Co-varied
E6 – E16	Modification Indices – 28.38	Co-varied
E6 – E7	Modification Indices – 34.07	Co-varied
E3 – E18	Modification Indices – 24.95	Co-varied
E2 – E9	Modification Indices – 36.12	Co-varied
E1 – E14	Modification Indices – 26.33	Co-varied
E1 – E13	Modification Indices – 49.05	Co-varied

Table 26: Re-assessment of Model Goodness of Fit

Type of Construct	AMOS Output	Recommended Cut-Off
Probability (P)	<.001	>.05
CMIN/df	4.96	≤2-5
Goodness of fit index (GFI)	.70	≥.95
Adjusted goodness of fit index (AGFI)	.65	≥.90
Comparative fit index (CFI)	.63	≥.95
Incremental fit index (IFI)	.63	≥.90
Root mean squared error of approximation (RMSEA)	.12	≤.10

The five-factor model and the three-factor model both produced poor goodness of fit statistics, as such both models were rejected. The third set of data collected for Chapter 5 was subject to Exploratory Factor Analysis (EFA) to examine the underlying factor structure to provide a further understanding of why both models produced an unacceptable model fit.

5.07 EXPLORATORY FACTOR ANALYSIS

The 46 items of the Use of Paranormal and New Age Services (UPNAS) questionnaire from Chapter 5 were subjected to a comparable Principle Components Analysis (PCA) with direct oblimin rotation using IBM SPSS Statistics version 22.

Inspection of the correlation matrix revealed the presence of many coefficients above .3, the Kaiser-Meyer-Olkin value was .733 and Bartlett's Test of Sphericity was also highly statistically significant at $p < .001$, all of which surpass acceptable values. This suggested data was suitable for factor analysis. PCA revealed 12 components with eigenvalues exceeding 1 explaining a total of 71.34% of the variance. An inspection of the scree plot did not reveal a clear break in the graph although the graph curved between factors three and nine. Horn's Parallel Analysis was utilised to determine the correct number of factors to retain. Table 27 presents the eigenvalues from the PCA and the HPA.

Table 27: Results from Principal Components Analysis and Horn's Parallel Analyses

Component No.	PCA Eigenvalue	HPA Criterion	Decision
1	10.48	1.86	Accept
2	5.50	1.76	Accept
3	2.68	1.69	Accept
4	2.27	1.63	Accept
5	2.00	1.58	Accept
6	1.80	1.53	Accept
7	1.63	1.49	Accept
8	1.50	1.45	Accept
9	1.42	1.41	Accept
10	1.25	1.38	Reject

Horn's Parallel Analysis highlighted nine components with eigenvalues exceeding the corresponding criterion values for a randomly generated data matrix of the same size (46 variables X 294 responses). The nine component solution explained 63.68% of the variance. Components one to nine explained 22.78%, 11.96%, 5.83%, 4.95%, 4.35%, 3.55%, 3.26%, and 3.10% of the contribution. The factor loading threshold was set at 0.55 in line with the stringent cut-offs proposed in the previous studies. In total 26 variables did not load onto any factor and there were no latent variables. Five factors were removed for having fewer than four items. One item was removed as it did not make conceptual sense. Table 28 presents the final PCA solution for the four remaining factors which explained 44.92% of the item variance.

Table 28: Factor Loadings from the Principle Components Analysis

Factor and Item	F1	F2	F3	F4
Factor 1: “Cognitive-Oriented Coping”				
Variance = 22.78%; Internal Reliability (α) = .84				
45. Help understand desires	.80			
28. Practitioner understood they were unique	.77			
39. Help to develop goals	.76			
41. Look at a situation to understand it better	.71			
37. Think about future steps	.66			
44. Practitioner professional	.59			
43. Distance self from negativity	.58			
Factor 2: “Avoidance-Oriented Coping”				
Variance = 11.96%; Internal Reliability (α) = .75				
42. Don’t have to deal directly with a problem		.79		
40. Told what they wanted to hear at the time		.76		
46. As a last resort		.66		
19. Friends and family couldn’t help		.62		
Factor 3: “Lack of Control”				
Variance = 5.83%; Internal Reliability (α) = .79				
14. Help to make important decisions			.77	
5. Life is chaotic			.74	
4. Change something so things turn out better			.71	
6. Take direct action to address a problem			.70	
7. Struggle to believe things have happened			.58	
Factor 4: “Practitioner Authenticity”				
Variance = 4.35%; Internal Reliability (α) = .84				
20. Practitioner objective				.78
35. Given accurate information				.75
18. Practitioner honest				.75
23. Practitioner expert				.71
21. Practitioner truthful				.69
38. Personalised to their needs				.61

The PCA suggested that paranormal coping consists of four internally reliable subscales. However, there were clear similarities when examining the underlying factor structures for the three data sets. Factor 1 consists of seven items which reflect cognitive reappraisal strategies used by participants visiting paranormal services. These include reevaluating one’s own goals and desires, and understanding more about oneself and situations. This consists of the cognitive-orientated coping items which comprised Factor 2 of the five-factor model (Approach-Orientated Coping) and Factor 1 of the three-factor model (Practitioner-Influenced Cognitive-Orientated Coping). As such this factor was named “Cognitive-Orientated Coping.”

Factor 2 consists of four items which reflect participants' efforts to disengage from a stressor using paranormal services as a form of avoidance or denial. This includes avoiding the problem, and gaining positive rather than constructive information about a specific issue. Paranormal services are used as a last resort, or when other social support networks are deemed unhelpful. This factor is consistent with avoidance-orientated coping items present in both the five-factor model and three-factor model. This factor retained the label "Avoidance-Orientated Coping."

Factor 3 is comprised of five items which reflect negative, uncontrollable, and stressful events experienced by participants prior to using paranormal services. Additionally, items reflect behavioural action taken to overcome a stressor. This factor is similar to Factor 3 of the three-factor model (Lack of Control), which comprised of items taken from two factors from the five-factor model (Factor 2: Approach-Orientated Coping and Lack of Support/Control). For consistency, this factor was labelled "Lack of Control".

Factor 4 consists of items which reflect participants' perceptions of the paranormal practitioner as honest, truthful, objective, and able to supply accurate and personalised information. This factor consists of items which comprised Factor 1 of the five-factor model (Authenticity) and Factor 1 of the three-factor model (Practitioner-Influenced Cognitive-Orientated Coping). This factor was labelled "Practitioner Authenticity."

5.08 FOUR-FACTOR MODEL

The four-factor model was reflective of both the five-factor and three-factor models of paranormal coping. The four-factor model was used to create a new model in AMOS Graphics statistical analysis software. The data which produced the two previous models was used to test for goodness of fit. Each of the four factors (Cognitive-Orientated Coping, Avoidance-Orientated Coping, Lack of Control, and

Practitioner Authenticity) were used as latent variables. Co-variances were drawn to account for inter-correlations between them. The individual questionnaire items that constructed each latent variable were added as observed variables. Residual delta scores were noted on each of the observed variables to account for measurement error. The first model (utilising data which originally suggested a five-factor structure) was subjected to first order Confirmatory Factor Analysis. A visual exploration revealed four factor loadings under the recommended cut-off of .70 (Appendix 34). Table 29 presents the goodness of fit statistics.

Table 29: Assessment of Model Goodness of Fit

Type of Construct	AMOS Output	Recommended Cut-Off
Probability (P)	<.001	>.05
CMIN/df	3.37	≤2-5
Goodness of fit index (GFI)	.76	≥.95
Adjusted goodness of fit index (AGFI)	.69	≥.90
Comparative fit index (CFI)	.77	≥.95
Incremental fit index (IFI)	.78	≥.90
Root mean squared error of approximation (RMSEA)	.11	≤.10

Model fit statistics suggest that the model was a poor fit to the data. To improve the model fit the two items with unacceptable factor loadings were removed. Modification indices suggested four residual errors were correlated. These all had scores above 20 and were located on the same latent variable. These were co-varied and model fit re-examined. Table 30 presents all modifications made to the model. Model fit statistics (Table 31) suggest that the new model (Appendix 35) may be an acceptable fit to the data.

Table 30: Modifications to Model

Variable	Issue	Action
UPNAS 42	Factor loading .57	Observed variable removed
UPNAS 40	Factor loading .57	Observed variable removed
E12 – E14	Modification Indices – 20.99	Co-varied
E3 – E4	Modification Indices – 40.24	Co-varied
E2 – E6	Modification Indices – 27.70	Co-varied
E2 – E3	Modification Indices – 26.50	Co-varied

Table 31: Re-assessment of Model Goodness of Fit

Type of Construct	AMOS Output	Recommended Cut-Off
Probability (P)	<.001	>.05
CMIN/df	2.91	≤2-5
Goodness of fit index (GFI)	.82	≥.95
Adjusted goodness of fit index (AGFI)	.77	≥.90
Comparative fit index (CFI)	.85	≥.95
Incremental fit index (IFI)	.85	≥.90
Root mean squared error of approximation (RMSEA)	.10	≤.10

An examination of the model statistics suggested the model was not a “good” fit to the data. However, it was approaching an acceptable level. Some researchers have argued that for an exploratory study these statistics may be acceptable as they represent a developing concept. To illustrate, Bollen (1989) suggested that in a field in which previous models generate CFI values of .70 only, a CFI value of .85 represents progress and thus should be acceptable. As there are no other models of paranormal coping this data does represent advancement in the field.

The four-factor model was subject to a second Confirmatory Factor Analysis (CFA) using the data gathered in Chapter 4 which created the three-factor model, to provide further evidence of potential model acceptability. As previously, each of the four factors (Cognitive-Orientated Coping, Avoidance-Orientated Coping, Lack of Control, and Practitioner Authenticity) were utilised as latent variables. Co-variances were drawn to account for inter-correlations between them. The individual questionnaire items that constructed each latent variable were added as observed variables. Residual delta scores were noted on each of the observed variables to account for measurement error. The model was subjected to first order Confirmatory Factor Analysis. A visual exploration revealed three factor loadings under the recommended cut-off of 0.70 (Appendix 36). Table 32 presents the goodness of fit statistics.

Table 32: Assessment of Model Goodness of Fit

Type of Construct	AMOS Output	Recommended Cut-Off
Probability (P)	<.001	>.05
CMIN/df	6.85	≤2-5
Goodness of fit index (GFI)	.72	≥.95
Adjusted goodness of fit index (AGFI)	.65	≥.90
Comparative fit index (CFI)	.74	≥.95
Incremental fit index (IFI)	.74	≥.90
Root mean squared error of approximation (RMSEA)	.13	≤.10

Model fit statistics suggest that the model was a poor fit to the data. To improve the model fit the three factors with unacceptable factor loadings were removed. These were all removed from the “Avoidance-Orientated Coping” latent variable. Two of the three variables were also removed from the previous model. It appears that this factor may not be stable. Modification indices suggested four residual errors were correlated. These all had scores above 20 and were located on the same latent variable. These were co-varied and model fit re-examined. Table 33 presents all modifications made to the model. Model fit statistics suggest that the new model (Appendix 37), may be an acceptable fit to the data (Table 34).

Table 33: Modifications to the Model

Variable	Issue	Action
UPNAS 42	Factor loading .34	Observed variable removed
UPNAS 40	Factor loading .45	Observed variable removed
UPNAS 46	Factor Loading .34	Observed variable removed
UPNAS 19	Only observed variable left	Factor removed from model
E18 – E20	Modification Indices – 52.01	Co-varied
E17 – E20	Modification Indices – 37.77	Co-varied
E17 – E18	Modification Indices – 23.48	Co-varied
E12 – E15	Modification Indices – 32.42	Co-varied
E12 – E13	Modification Indices – 23.04	Co-varied
E4 – E7	Modification Indices – 26.53	Co-varied
E3 – E6	Modification Indices – 30.03	Co-varied
E3 – E4	Modification Indices – 37.07	Co-varied
E2 – E6	Modification Indices – 38.05	Co-varied

Table 34: Re-assessment of Model Goodness of Fit

Type of Construct	AMOS Output	Recommended Cut-Off
Probability (P)	<.001	>.05
CMIN/df	4.48	≤2-5
Goodness of fit index (GFI)	.86	≥.95
Adjusted goodness of fit index (AGFI)	.81	≥.90
Comparative fit index (CFI)	.89	≥.95
Incremental fit index (IFI)	.89	≥.90
Root mean squared error of approximation (RMSEA)	.10	≤.10

The final four-factor model was within an acceptable range of model statistics for a new concept. The underlying factor structures demonstrate factors which overlapped and were conceptually viable. This implies that the Use of Paranormal and New Age Services (UPNAS) Questionnaire could be a valid measure of paranormal coping providing a solid base for future research.

However, to improve model fit statistics the “Avoidance-Orientated Coping” factor was either edited or removed from the four-factor model. Participant demographics and paranormal service use (Table 35) were examined to explore any differences between the samples which may have caused the removal of this factor from the model.

Table 35: Participant Demographics and Paranormal Service Use

		Chapter 3 (%)	Chapter 4 (%)	Chapter 5 (%)
Gender	Males	20.1	14.7	4.1
	Females	75.9	85.3	95.9
Age	Under 20years	5.2	1.1	1.0
	21-30years	19.4	8.0	24.9
	31-40years	20.9	23.1	24.8
	41-50years	23.1	25.3	19.7
	51-60years	20.4	26.1	22.1
	61-70years	10.5	13.8	6.5
	71+years	0.5	2.6	1.0
Ethnicity	Caucasian	82.7	94.1	82.0
	Non-Caucasian	17.3	5.9	8.0
Occupation	Employed	54.7	61.8	41.8
	Unemployed	5.5	4.8	14.3
	Student	8.5	2.8	5.1
	Retired	9.0	13.3	10.2
	Homemaker	12.1	9.3	18.4
Qualifications	None	9.5	9.1	13.3
	GCSE/O-Level	16.6	22.8	14.3
	A-level/Access	20.6	25.9	19.4
	Undergraduate degree	21.1	16.0	17.3
	Postgraduate degree	18.6	14.8	13.3
	Other	8.0	11.4	22.4
Lifetime Use	0-3 times	1.0	4.5	0.0
	4-7 times	15.1	9.5	26.5
	8-11 times	8.0	11.8	12.2
	12-15 times	6.0	13.4	8.2
	16-19 times	2.0	9.2	5.1
	20-23 times	3.5	5.9	6.1
	24+ times	64.3	45.4	41.8
Yearly Use	0-3 times	25.6	31.4	34.7
	4-7 times	18.6	13.2	15.3
	8-11 times	7.5	11.2	13.3
	12-15 times	9.5	10.4	11.2
	16-19 times	2.5	5.9	5.1
	20-23 times	4.0	3.9	1.0
	24+ times	32.2	23.0	19.4
Often Use	Less than yearly	10.6	0.3	0.0
	Yearly	8.0	15.1	17.3
	2-3 times per year	16.6	27.5	22.4
	Monthly	13.1	12.9	24.5
	2-3 times per month	19.1	13.4	12.2
	2-3 times per week	13.6	13.4	8.2
	Daily	19.1	15.7	15.3
Money Spent	£0-£49	63.8	57.7	71.4
	£50-£99	16.1	22.4	14.3
	£100-£149	7.0	8.2	9.2
	£150-£199	4.0	1.7	3.1
	£200-£249	3.0	0.9	1.0
	£250-£299	2.5	1.7	1.0
	£300+	3.5	7.4	0.0

Whilst participant samples were relatively similar when reviewing demographic variables, the first two samples had higher rates of paranormal service use across all three categories (Lifetime, Yearly, and Often) than the third sample used to create the four-factor model. The third participant sample was recruited online, in contrast to the

first two studies which utilised two recruitment strategies (online and face-to-face at Mind, Body, Spirit events in the North West). As this may have affected model fit, it was explored further. To examine the impact of use on the four-factor model, yearly use was selected as it demonstrated the highest correlations with both lifetime and often use categories (Table 36). This was correlated with each of the factors presented in the four-factor model (Table 37).

Table 36: Frequency of Paranormal Service Use Correlations

Frequency		Chapter 3	Chapter 4	Chapter 5
Lifetime	Yearly	.61**	.66**	.72**
Lifetime	Often	.58**	.55**	.56**
Yearly	Often	.73**	.72**	.74**

Table 37: Mean Factor Scores and Yearly Use Correlations

Chapter 3 Data		(1)	(2)	(3)	(4)	(5)
(1)	Yearly Usage	1				
(2)	Factor 1: Cognitive-Orientated Coping	.33**	1			
(3)	Factor 2: Avoidance-Orientated Coping	-.00	.31**	1		
(4)	Factor 3: Lack of Control	.19**	.64**	.57**	1	
(5)	Factor 4: Practitioner Authenticity	.28**	.69**	.38**	.48**	1
Chapter 4 Data		(1)	(2)	(3)	(4)	(5)
(1)	Yearly Usage	1				
(2)	Factor 1: Cognitive-Orientated Coping	.23**	1			
(3)	Factor 2: Avoidance-Orientated Coping	-.11*	.27**	1		
(4)	Factor 3: Lack of Control	.19**	.40**	.34**	1	
(5)	Factor 4: Practitioner Authenticity	.22**	.81**	.28**	.30**	1
Chapter 5 Data		(1)	(2)	(3)	(4)	(5)
(1)	Yearly Usage	1				
(2)	Factor 1: Cognitive-Orientated Coping	-.00	1			
(3)	Factor 2: Avoidance-Orientated Coping	-.22**	-.02	1		
(4)	Factor 3: Lack of Control	.03	.41**	.32**	1	
(5)	Factor 4: Practitioner Authenticity	.13*	.53**	-.02	.27**	1

As expected, Avoidance-Orientated Coping had a negative relationship with yearly use when considering the data used to create the four-factor model. As the yearly use figures decrease across data used in Chapter 3 and 4 so does the negative relationship with Avoidance-Orientated Coping. It is possible that individuals who use paranormal coping less frequently, may use it as a last resort when other coping resources have already been considered. Alternatively, these participants may be using paranormal services as a precursor to dealing directly with stressful events. To further

assess the inclusion of the Avoidance-Orientated Coping factor, internal reliability was calculated for the four factors using data from all three studies separately (Table 38).

Table 38: Internal Reliability (α)

	Study 2	Study 3	Study 4
Factor 1: Cognitive-Orientated Coping	.84	.86	.84
Factor 2: Avoidance-Orientated Coping	.66	.68	.75
Factor 3: Lack of Control	.77	.74	.79
Factor 4: Practitioner Authenticity	.89	.91	.84

The four factors demonstrated acceptable internal reliability across all three data sets. Lower alpha values were found for Avoidance-Orientated Coping however, this is still above the acceptable .6/.7 level, comparable to that of reliabilities reported for other coping subscales. The decision was made to retain the factor, as this may be an important element of paranormal coping particularly for those who use services less frequently.

5.09 DISCUSSION

Three models of paranormal coping were described in the previous two chapters. Each model demonstrated a complex interplay of interpersonal, behavioural, and cognitive features. The three models were conceptually similar, however the four-factor model, overall, provided the most acceptable fit to the data, although, this still remained below what is considered “good” model fit across a variety of assessments. Nevertheless, these findings remain important, with researchers suggesting model fit statistics are guidelines rather than “golden rules” (Marsh, Hau, & Wen, 2004) especially for new concepts or exploratory work (Bollen, 1989).

There are several other explanations for the current findings. Initially, the Use of Paranormal and New Age Services (UPNAS) Questionnaire was intended as a dispositional coping measurement, allowing it to be generalised to many situations appraised as stressful. As a result, this measure does not currently take into account

variance between samples or differing stressors. The questionnaire required multiple rounds of data collection in order to gain an acceptable factor structure through Confirmatory Factor Analysis. As there is a prolific body of research recording challenges to conceptualise and factor-analyse inductive collections of single coping responses into dispositional coping dimensions, this was not unexpected. Indeed, the resulting measures often result in unstable solutions where it can be difficult to replicate factor structures (Schwarzer & Schwarzer, 1996).

For instance, Folkman and Lazarus' (1980, 1985, 1988) Ways of Coping Questionnaire (WCQ) often produces different factor structures, with researchers finding between five and eight factors rather than the two factors (problem-focused coping and emotion-focused coping) originally proposed (Aldwin & Revenson, 1987, Vitaliano, Russo, Carr, Maiuro, & Becker, 1985). Similarly, researchers utilising the Brief COPE (Carver, 1997; Carver, Scheier, & Weintraub, 1997) across a range of situations and participant samples report anything from two to twelve factors (see Krageloh, 2011, for a review). Whilst not ideal, the UPNAS Questionnaire further demonstrates the difficulties beset by other dispositional coping measures, and outlines the difficulties of measuring coping as a dynamic process. Future research may continue to refine this coping measurement and perhaps, much like the Brief COPE, adapt the UPNAS to measure a variety of situational coping responses, each with conceptually similar, but distinct factor structures.

Regardless, the inclusion of the Avoidance-Orientated Coping factor presented several difficulties within this study. Despite demonstrating good internal reliability across the three data sets, once removed, model fit statistics increased to near acceptable levels. However, participants' use of paranormal services for coping correlated significantly and negatively with Avoidance-Orientated Coping. It is possible that those using paranormal services less frequently are using paranormal coping in order to

disengage from a stressor through avoidance or denial, a pattern of coping distinctly different to those engaging with paranormal services more frequently. This factor may explain other research findings which also link paranormal belief to an avoidance-orientated coping style (Berkowski & Macdonald 2014; Callaghan & Irwin, 2003) or associated strategies (Rogers et al., 2006).

Similarly, it is possible that the Avoidance-Orientated Coping factor is highly dependent upon the context of the situation. In some situations avoidant coping may be protective allowing an individual to distance themselves from a situation for a short time in order to fully understand the event, or reduce their emotional response (Bedi & Brown, 2005; Heckman et al., 2004; Suls & Fletcher, 1985). In other situations, avoidant coping may have been utilised so that an event did not have to be addressed directly; a maladaptive coping response (Monat & Lazarus, 1991; Slade & Gilchrist, 2005). It also may depend on the length of the coping episode, with avoidance coping often more adaptive in the short-term (Levine, Warrenburg, Kern, & Schwartz, 1987; Parker & Endler, 1992; Suls & Fletcher, 1985). Likewise, avoidance-orientated coping may be more effective in uncontrollable or unchangeable situations (Aldwin, 1999; Lazarus & Folkman, 1984; Zeidner, & Saklofske, 1996). This may provide an explanation for the factor's instability in this study.

However, the inclusion of the Avoidance-Orientated Coping factor does support Irwin's (2009) Psychodynamic Functions Hypothesis, which as previously stated, suggests paranormal beliefs develop as a means of coping with a diminished sense of control experienced in childhood. In adulthood, during stressful situations when individual control is again undermined, through heightened fantasising paranormal believers are able to withdraw into a make-believe world to escape stress and cope with their perceived loss of personal control (Rogers et al., 2006; Watt et al., 2007). It is possible that some individuals activate these beliefs, in a similar manner to their

childhood selves, whilst others, over time, have developed more approach-orientated and/or adaptive coping mechanisms. Paranormal services become a method through which individuals can utilise their ideal coping styles/strategies. This may account for the variance in the data. For these reasons, the Avoidance-Orientated Coping subscale was retained pending further examination. Future research is needed to examine paranormal coping in the context of individual differences (e.g., personality, culture, family circumstances) which based on previous coping research are likely to affect the development of, and type of, coping used.

5.10 STUDY STRENGTHS AND LIMITATIONS

One main limitation of this study potentially includes methods used to improve model fit within AMOS. All Modification indices >20 were co-varied in line with Gaskin (2011). However, some statisticians suggest a more appropriate (less stringent cut-off value) of >10 (Byrne, 2016). Others argue that modification indices should not be co-varied unless the modification makes theoretical sense (Bentler, 2007), not simply to improve model fit, which increases the likelihood of a Type 1 error (Schreiber, Nora, Stage, Barlow, & King, 2006). Similarly, there is controversy about the accuracy of different fit indices as an assessment of model fit. Some researchers (Barrett, 2007), argue that fit indices do not contribute significantly to an analysis, and only chi-squared values should be utilised. Whilst chi-squared tests are seen to be a reasonable measure of it in smaller sample sizes (<200), in larger samples they are almost always significant, indicating poor model fit (Kenny, 2015). Chi-squared was therefore not examined in the current research. Although Confirmatory Factor Analysis is one of the main multivariate analyses used within psychology research there is a need for a standardised set of guidelines for researchers (Hurley et al., 1997) as there are clear disagreements which call in to questions its appropriateness. The dismissal or

acceptance of theoretical models such as the current model of paranormal coping, should therefore be done with caution.

Despite several limitations, strengths of the study include the use of a diverse internet sample of participants from around the world. This suggests that findings are largely generalisable to individuals utilising paranormal services in the Western world. Secondly, this is the first study to conceptualise and test a factor structure for paranormal coping. This provides a substantial basis on which future research can build.

5.11 CONCLUSION

Overall the UPNAS questionnaire provides a greater insight into the possibility of paranormal coping. As a new concept, data gleaned from iterative rounds of confirmatory factor analyses across multiple data sets is promising and provides a foundation for future research. However further research to refine the model may be necessary as more is learnt about the concept. Chapter 6 returns to examine the concurrent validity of the UPNAS using the standardised measures collected during Chapter 4.

CHAPTER 6: VALIDATION OF THE FOUR FACTOR MODEL

In order to establish concurrent validity, data was collected as described in Chapter 4 using the Use of Paranormal and New Age Services (UPNAS) Questionnaire, alongside various other standardised measures; the Revised Paranormal Belief Scale (RPBS), New Age Orientation Scale (NAOS), Brief COPE, and the Free Will and Determinism Questionnaire (FAD-Plus). Preliminary data screening suggested that the data was suitable for Confirmatory Factor Analysis (CFA), which failed to support the original five-factor model of paranormal coping. This data was subject to Exploratory Factor Analysis (EFA) to examine the underlying factor structure, hence the development of a new three-factor model. However, when the original data (Chapter 3) was subject to CFA, the three-factor model was also unsupported.

An additional set of data (Chapter 5) was collected, to establish whether the three-factor or five-factor model should be retained. Neither model was supported. The data collected in Chapter 5 was subject to EFA, to understand the underlying factor structure, which suggested a four-factor model of paranormal coping was more appropriate. The data from Chapters 3 and 5 was subject to CFA. Findings approached acceptable model fit for a new structure. However, the avoidance-orientated subscale remained problematic. Each model removed a number of items, else the subscale entirely. To explore this further, the participant samples, frequency of use, and expenditure data were examined across the three datasets. Yearly frequency of use was considerably lower in the data used to construct the four-factor model. As such, the avoidance-orientated subscale was retained as it may be an important element of paranormal coping for those who use services less frequently. To establish concurrent validity, data collected in Chapter 4, was revisited as this was the data collected alongside the established measures of paranormal belief and coping. This was examined

to provide a further assessment of the reliability of the new four-factor model of paranormal coping.

6.01 MATERIALS

The materials used in this study were described in Chapter 4.05. All of these were used to collect the data originally. However, following the results of the confirmatory factor analysis a new four-factor model of paranormal coping was created. Several items of the Use of Paranormal and New Age Services (UPNAS) Questionnaire were subsequently not included in the analysis. In the second section of the UPNAS questionnaire only 22 of the original 46 items which comprise the four subscales (Cognitive-Orientated Coping, Avoidance-Orientated Coping, Lack of Control, and Practitioner Authenticity) were utilised. All other materials remained unchanged.

6.02 PARANORMAL COPING, PARANORMAL BELIEF, AND NEW AGE ORIENTATION

The aim of this study was to examine correlations between the Use of Paranormal and New Age Services (UPNAS) Questionnaire, the New Age Orientation Scale (NAOS; Granqvist & Hagekull, 2001), and the Revised Paranormal Belief Scale (RPBS; Tobayck, 2004) to establish questionnaire validity. It was hypothesised that the RPBS New Age Philosophies (NAPs) subscale would correlate significantly and positively with each of the UPNAS subscales. The RPBS Traditional Paranormal Beliefs (TPBs) subscale would correlate significantly and positively with each of the UPNAS subscales. The NAOS would correlate significantly and positively with each of the UPNAS subscales. As each type of paranormal belief increases so should an individual's use of paranormal coping.

6.03 RESULTS

Pearson's Correlation Coefficients were calculated to examine the relationship between the UPNAS, RPBS, and NAOS. Table 39 presents the correlation coefficients

Table 39: UPNAS, RPBS, and NAOS Correlation Coefficients

UPNAS Subscale	RPBS: NAP	RPBS: TPB	NAOS
UPNAS: Cognitive-Orientated Coping	.473**	.492**	.167
UPNAS: Avoidance-Orientated Coping	.371**	.360**	-.176
UPNAS: Lack of Control	.426**	.445**	-.222*
UPNAS: Practitioner Authenticity	.421**	.315**	.309**
NAOS	.413**	.240*	-
RPBS: TPB	.654*	-	-
RPBS: NAP	-	-	-

** $p < .01$

* $p < .05$

All of the UPNAS subscales Cognitive-Orientated Coping ($r = .473, p < .01$), Avoidance-Orientated Coping ($r = .371, p < .01$), Lack of Support/Control ($r = .426, p < .01$), and Practitioner Authenticity ($r = .421, p < .01$) correlated positively and significantly with the RPBS: NAPs subscale.

All of the UPNAS subscales; Cognitive-Orientated Coping ($r = .492, p < .01$), Avoidance-Orientated Coping ($r = .360, p < .01$), Lack of Support/Control ($r = .445, p < .01$), and Practitioner Authenticity ($r = .315, p < .01$) correlated positively and significantly with the RPBS: TPBs subscale.

The UPNAS subscales were differentially related to the NAOS. Practitioner Authenticity correlated significantly and positively with the NAOS ($r = .309, p < .01$). Lack of Support/Control was significantly and negatively correlated with the NAOS ($r = -.222, p < .05$). Cognitive-Orientated Coping approached significance ($r = .167, p = .08$) and was positively related to the NAOS. Avoidance-Orientated Coping ($r = -.176, p = .07$) again approached significance and was negatively associated with the NAOS.

6.04 DISCUSSION

This study sought to examine correlation coefficients between the Use of Paranormal and New Age Services (UPNAS) Questionnaire subscales and that of the New Age Orientation Scale (NAOS; Granqvist & Hagekull, 2001) and the Revised Paranormal Belief Scale (RPBS; Tobayck, 2004) in order to establish questionnaire validity. The results from this study lend support to the validity of the UPNAS Questionnaire. Both RPBS subscales correlated positively and significantly with the four UPNAS subscales. This suggests that as endorsement of TPBs (e.g., belief in heaven/hell, witchcraft) and NAPs (e.g., astrology, psychokinesis) increases so does the likelihood of paranormal coping. However, the NAOS showed a considerably different relationship with the UPNAS subscales. Lack of Support/Control and Avoidance-Orientated Coping (albeit not significantly) were both negatively associated with NAOS scores. This suggests that individuals who have a greater New Age orientation do not use paranormal services to avoid a stressful event or regain a sense of perceived control. Practitioner Authenticity and Cognitive-Orientated Coping (though not significantly) had a positive relationship with NAOS scores. This suggests those with a greater New Age orientation utilise paranormal services as they perceive practitioners as trustful and honest individuals who may help them to understand situations in their lives.

These findings suggest that those who encompass a New Age worldview may use paranormal services for coping in a substantially different manner to those endorsing paranormal beliefs. Despite the RPBS containing a subscale assessing NAPs, this includes items substantially different to the NAOS. It is possible that these two similarly named scales are measuring remarkably different constructs, evidenced by the smaller than expected correlation between the two scales. The RPBS subscale of NAPs contains items which refer to the veracity of such beliefs. For example, using terms such as “does exist”, or, “is possible.” Whilst some items on the NAOS also reflect the

veracity of such beliefs (e.g., belief in clairvoyance, mediumship, and astrology), they also examine the use of New Age beliefs/behaviour in everyday life. This includes, reading books about spiritual development, practicing techniques (e.g., massage, yoga, meditation), engaging in alternative treatments (e.g., crystal healing, chakra therapy). This suggests that those who score highly on the NAOS incorporate their beliefs into their everyday or weekly practice. It is possible that these beliefs allow individuals to feel in control upon the occurrence of adverse events. This would explain the negative relationship between Lack of Support/Control and Avoidance-Orientated Coping.

It is possible that those individuals with a strong New Age orientation are using paranormal coping in a more positive manner than those endorsing TPBs or NAPs. Other coping measures which assess belief and coping have positive and negative coping subscales. As previously discussed, the Brief RCOPE (Pargament, Feuille, & Burdzy, 2011) measures religious coping. This determines the extent to which individuals engaged in positive or negative religious coping. It is likely that paranormal coping may function in a similar manner, which may be predicted by specific belief endorsement or a regular belief-behaviour orientation. A further examination of this concept appears warranted in future research.

Overall the correlation coefficients between the RPBS, NAOS, and the UPNAS support the hypotheses and lend support to the validity of the UPNAS Questionnaire. This study has also highlighted the importance of considering the development of different types of paranormal belief and how these affect the motivations behind paranormal service use, a topic which requires a more thorough examination in future research.

6.05 PARANORMAL COPING AND COPING STYLE

The aim of this study was to examine correlations between the Use of Paranormal and New Age Services (UPNAS) Questionnaire, and the Brief COPE (Carver, Scheier, & Weintraub, 1997) subscales to establish questionnaire validity. It was suggested that the UPNAS Cognitive-Orientated Coping subscale is comprised of items which reflect reevaluating goals and understanding more about oneself and situations. This should correlate significantly and positively with approach-orientated coping subscales (e.g., Active Coping, Instrumental Support, Positive Reframing, Planning, and Acceptance). The UPNAS Avoidance-Orientated Coping subscale includes items which reflect efforts to disengage from a stressor through avoidance or denial. This should correlate significantly and positively with equivalent avoidance-orientated subscales (e.g., Denial, Behavioural Disengagement, Self-Distraction, and Self-Blame). The UPNAS Lack of Control subscale is characterised by the occurrence of negative, uncontrollable events which require an individual to seek support for making decisions and changes to improve their situation. There were no hypotheses made for this subscale as it is possible that these behaviours may function as an approach or avoidance-orientated method of coping. The UPNAS Practitioner Authenticity subscale reflects individuals' perceptions of practitioners as truthful, honest, and objective sources of support. This should be correlated significantly and positively with support-orientated subscales (e.g., Emotional and Instrumental Support).

6.06 RESULTS

Pearson's Correlation Coefficients were calculated to examine the relationship between the UPNAS and Brief COPE. Table 40 presents the correlation coefficients.

Table 40: UPNAS and Brief COPE Correlation Coefficients

Brief COPE	Cognitive-Orientated	Avoidance-Orientated	Lack of Control	Practitioner Authenticity
Self-Distraction	.404**	.113	.412**	.292**
Active Coping	.191*	.011	.074	.112
Denial	.050	.424**	.096	.074
Substance Use	.088	.124	.147	.222*
Emotional Support	.252**	.192*	.256**	.201*
Instrumental Support	.277**	.277**	.299**	.203*
Behavioural Disengagement	.119	.366**	.260**	.149
Venting	.208*	.286**	.136	.271**
Positive Reframing	.112	.078	.003	.011
Planning	.230*	-.039	.084	.106
Humour	.143	-.084	.115	.073
Acceptance	.271**	.134	.069	.179*
Religion	.155	.082	.102	.181*
Self-Blame	.022	.280**	.082	.069

** $p < .01$

* $p < .05$

The Cognitive-Orientated Coping subscale correlated significantly and positively with the Self-Distraction ($r = .404, p < .01$), Active Coping ($r = .191, p < .05$), Emotional Support ($r = .252, p < .01$), Instrumental Support ($r = .277, p < .01$), Venting ($r = .208, p < .05$), Planning ($r = .230, p < .05$), and Acceptance ($r = .271, p < .01$) subscales of the Brief COPE.

The Avoidance-Orientated Coping Subscale correlated significantly and positively with the Denial ($r = .424, p < .01$), Emotional Support ($r = .192, p < .05$), Instrumental Support ($r = .277, p < .01$), Behavioural Disengagement ($r = .366, p < .01$), Venting ($r = .286, p < .01$), and Self-Blame ($r = .280, p < .01$) subscales of the Brief COPE.

The Lack of Control subscale correlated significantly and positively with the Self-Distraction ($r = .412, p < .01$), Emotional Support ($r = .256, p < .01$), Instrumental Support ($r = .299, p < .01$), and Behavioural Disengagement ($r = .260, p < .01$) subscales of the Brief COPE.

The Practitioner Authenticity subscale correlated significantly and positively with the Self-Distraction ($r = .191, p < .05$), Substance Use ($r = .191, p < .05$), Emotional Support ($r = .191, p < .05$), Instrumental Support ($r = .191, p < .05$), Venting

($r = .191, p < .05$), Acceptance ($r = .191, p < .05$), and Religion ($r = .191, p < .05$) subscales of the Brief COPE.

6.07 DISCUSSION

This study sought to examine correlation coefficients between the Use of Paranormal and New Age Services (UPNAS) Questionnaire subscales and those of the Brief COPE (Carver, Scheier, & Weintraub, 1997) in order to establish questionnaire validity. The results from this study lend support to the validity of the UPNAS Questionnaire.

The correlations between the Cognitive-Orientated Coping subscale and the Brief COPE subscales partly support the original hypotheses. Active Coping, Planning, and Acceptance are usually considered approach-orientated and all encompass cognitive coping behaviours. They focus upon recognising problems, finding logical solutions to solve them, and accepting that stressful events do happen. There were also significant positive correlations with Self-Distraction and Venting. It could be suggested that individuals can compartmentalise stressful or difficult situations until such time they are able to take time to think clearly, and process their emotional distress through venting. Visiting a paranormal service appears to allow certain individuals time to reflect and develop positive coping behaviours whilst allowing them space to express negative emotions. Overall this supports the validity of the Cognitive-Orientated Coping subscale of the UPNAS questionnaire.

The correlations between the Avoidance-Orientated Coping subscale and the Brief COPE subscales support the original hypotheses and lend support to the validity of the UPNAS Questionnaire. Denial, Behavioural Disengagement, Venting, and Self-Blame are usually considered avoidance-orientated. These focus upon disengaging with a stressor through avoidance or denial, feelings of being unable to cope or losing the

motivation to try and cope. These are concepts reflected in the Avoidance-Orientated Coping subscale which supports the validity of the UPNAS questionnaire.

The correlations between the Lack of Control subscale and the Brief COPE subscales suggests that upon the occurrence of negative, stressful events individuals use paranormal services to distract themselves from a specific issue. There were positive and significant correlations between the Lack of Control subscale and Self-Distraction and Behavioural Disengagement subscales. It is possible that use of paranormal services allow individuals to withdraw into a make-believe world, escape stress, and cope with their perceived loss of personal control. By relying on paranormal services to make important decisions and direct behaviours they may be reducing personal accountability for the failure of any resulting action. The implication is that some participants' belief in, and need to, receive paranormally sourced advice does not appear to serve as an approach-orientated form of coping in times of uncertainty and/or emotional distress. The Lack of Control subscale supports previous research linking increased paranormal belief with illusory control and the validity of the UPNAS Questionnaire.

The Practitioner Authenticity subscale had a number of positive and significant correlations with the Brief COPE subscales. As expected, both Emotional Support and Instrumental Support were significantly and positively correlated with Practitioner Authenticity. This suggests that individuals use paranormal services as they are able to seek advice, help, support, and comfort from the practitioner. Emotional Support and Instrumental Support have a similar relationship with all four of the UPNAS subscales. This supports the notion that practitioners are an essential component of paranormal coping for those who have accessed paranormal services. Practitioner Authenticity was also correlated with Venting and Acceptance. Individuals may view practitioners as a safe, supportive person to whom they can express their emotional distress. It is possible

that by venting, individuals feel listened to and understood which in turn allows them to accept and move forward from negative events.

Surprisingly, there was also a relationship between Practitioner Authenticity and Substance Use. Previous research has linked substance use to the endorsement of paranormal belief and reports of paranormal experiences (Gallagher, Kumar, & Pekala, 1994; Houran & Williams, 1998; Kumar, Pekala, & Cummings, 1992; Pekala, Kumar, & Marcano, 1995; Simmonds & Roe, 2000; Thalbourne, 2001). There is no explanation why Substance Use would correlate with Practitioner Authenticity but not the remaining UPNAS subscales. A further examination of this relationship may be warranted in future research. Overall, the correlations coefficients between the UPNAS and the Brief COPE support the hypotheses and lend support to the validity of the UPNAS Questionnaire.

6.08 PARANORMAL COPING AND FREE WILL AND DETERMINISM

The aim of this study was to examine correlations between the Use of Paranormal and New Age Services (UPNAS) Questionnaire, and the FAD-Plus (Paulhus & Carey, 2011) subscales to establish questionnaire validity. It was hypothesised that the Free Will subscale would correlate negatively with the Lack of Control subscale as a low score on the Free Will scale would indicate that an individual does not feel they have full control over their decisions or outcomes. Scientific Determinism would correlate negatively with all UPNAS subscales as a belief in science (i.e., the influence of genes and biological constructs) is partly incompatible with many paranormal beliefs. The Fatalistic Determinism subscale would correlate positively with each of the UPNAS subscales as this is concerned with a belief in fate or destiny. Unpredictability would correlate negatively with Positive Authenticity and Practitioner Abilities as this is associated firstly with practitioner being able to provide otherwise unknown sometimes future information.

6.09 RESULTS

Pearson's Correlation Coefficients were calculated to examine the relationship between the UPNAS and FAD-Plus. Table 41 presents the correlation coefficients.

Table 41: UPNAS and FAD-Plus Correlation Coefficients

Brief COPE	Cognitive-Orientated	Avoidance-Orientated	Lack of Control	Practitioner Authenticity
Free Will	.123	.016	-.193*	.147
Scientific Determinism	.008	.218*	.115	.122
Fatalistic Determinism	.201*	.097	.238**	.285**
Unpredictability	-.209*	.138*	.112	-.152

** $p < .01$

* $p < .05$

The Free Will subscale correlated significantly and negatively with the Lack of Control subscale ($r = -.193, p < .05$) of the UPNAS. There were no other significant correlations between the UPNAS and FAD-Plus.

The Scientific Determinism subscale correlated significantly and positively with the Avoidance-Orientated Coping ($r = .218, p < .05$), subscale of the UPNAS. There were no other significant correlations between the UPNAS and FAD-Plus.

The Fatalistic Determinism subscale correlated significantly and positively with the Cognitive-Orientated Coping ($r = .201, p < .05$), Lack of Control ($r = .238, p < .01$), and Practitioner Authenticity ($r = .285, p < .01$) subscales of the UPNAS.

The Unpredictability subscale correlated significantly and negatively with the Cognitive-Orientated Coping ($r = .209, p < .05$), as well as significantly and positively with the Avoidance-Orientated Coping ($r = .138, p < .05$) subscales of the UPNAS.

6.10 DISCUSSION

This study sought to examine correlation coefficients between the Use of Paranormal and New Age Services (UPNAS) Questionnaire subscales and those of the FAD-Plus (Paulhus & Carey, 2011) in order to establish questionnaire validity. The results from this study lend support to the validity of the UPNAS Questionnaire.

The Free Will subscale correlated significantly and negatively with the Lack of Control subscale. Higher scores on the Free Will subscale imply that individuals are in control of and should take responsibility for their own decisions, behaviours, choices, and desires. This contrasts with the Lack of Control subscale, where higher scores indicate lives that feel chaotic and uncontrollable, with help required to take direct action and make decisions. Hence, the use of paranormal services to regain control in line with Irwin's (2009) Psychodynamic Functions Hypothesis (PDF). However, two of the remaining UPNAS subscales had a (marginally) positive relationship with Free Will. It is possible that individuals scoring highly on both the Cognitive-Orientated Coping and Practitioner Authenticity subscales have been able, through the continued use and support of paranormal services, to take control. This may be through increased understanding of negative situations, gaining seemingly accurate information, and feeling supported by the practitioner. Overall the correlation coefficients between the UPNAS subscales and the Free Will subscales support the validity of the former.

Contrary to expectations, the Scientific Determinism subscale correlated significantly and positively with Avoidance-Orientated Coping but had little relationship with the other UPNAS subscales. It was predicted that the Scientific Determinism subscale would have a significant and negative relationship with each of the UPNAS subscales. It is conceivable, given previous exploration of the Avoidance-Orientated Coping subscale, that individuals scoring highly on these items use paranormal services less frequently. When services are used it is primarily because individuals are attempting to disengage from a stressor, or that they have prioritised other methods of coping (e.g., friends and family). Paranormal services are used as a last resort, in what could be considered a negative form of coping. Given this, it is unsurprising that perhaps these individuals may be more supportive of scientific models such as the influence of the environments, genes, and parental personality traits.

The Fatalistic Determinism subscales correlated significantly and positively with Cognitive-Orientated Coping, Lack of Control, and Practitioner Authenticity. As scores on each of these three subscales increases so does an individual's belief in fate, destiny, and mysterious forces. Avoidance-Orientated Coping, did not correlate with this subscale. However, given its significant and positive correlation with Scientific Determinism, and less frequent paranormal service use this provides an insight into specific groups of users and remains unproblematic. Overall the Fatalistic Determinism subscale supports the validation of the UPNAS Questionnaire.

Finally, the Unpredictability subscale correlated significantly and negatively with the Cognitive-Orientated Coping subscale. Higher scores on the Unpredictability subscale imply that the world is unpredictable and that events are due to chance or luck. Those who score highly on the Cognitive-Orientated subscale believe events are predictable through increased understandings and self-development. A negative correlation between these subscales was anticipated. This (marginally) negative relationship was echoed with the Practitioner Authenticity subscale. Individuals who believe that practitioners are trustworthy, honest and able to provide otherwise unknown accurate information were unlikely to endorse Unpredictability subscale items. Avoidance-Orientated Coping also demonstrated a significant positive relationship with Unpredictability. Again, this supports the notion of this subscale identifying those individuals who endorse paranormal phenomena and utilise paranormal services to avoid engaging with a stressor or when other coping methods have either failed, else been dismissed completely.

Overall the FAD-Plus supports the validation of the UPNAS Questionnaire. This study highlighted differences between the individuals utilising the Avoidance-Orientated Coping subscale and the other UPNAS subscales, an inclination established in the previous chapter. Further research should consider the initial development of

paranormal coping and how this complies with Irwin's (2009) PFH, including how and why individuals use paranormal services in different manners.

6.11 STUDY STRENGTHS AND LIMITATIONS

The three studies examining the correlations between various measures of paranormal belief, coping style, and free will and deterministic beliefs, support the validation of the Use of Paranormal and New Age Services (UPNAS) Questionnaire. One limitation of this study is that these questionnaires were measures of beliefs and coping rather than specifically paranormal coping. However, as there are no other known measures of paranormal coping, the most appropriate alternatives were selected. Another limitation of the study was that despite some participants consenting to be re-contacted for a follow up study ($n = 67$), too few responded ($n = 22$) to allow for test-retest reliability to be conducted on the sample. Future research should seek to ensure that participant responses to the UPNAS Questionnaire are representative of paranormal coping, and to examine whether these coping responses are stable over time.

One strength of the current study was the use of a wide-reaching internet based participant sample. This study is likely representative of individuals who utilise paranormal services in the Western world. It is also the first known study to examine the relationship between a distinct paranormal coping style, beliefs, and traditional coping styles, providing a platform on which future studies can begin to build.

CHAPTER 7: THE FOUR FACTOR MODEL OF PARANORMAL AND THE PSYCHODYNAMIC FUNCTIONS HYPOTHESIS

This study aimed to understand the relationship between the four-factor model of paranormal coping, perceived control in childhood and thinking style preference. The four-factor model consists of Cognitive-Orientated Coping, Avoidance-Orientated Coping, Lack of Control, and Practitioner Authenticity. A summary of each factor and its subsequent validation using a range of standardised measures is provided as follows.

The Cognitive-Orientated Coping subscale consists of seven items. Each item is positively-framed and pertains to gaining a clearer understanding of desires, personality, goals, information, or specific situations. They also reflect an individual's attempts to change their perception of a situation or distance themselves from it. Cognitive-Orientated Coping correlated with several of the Brief COPE (Carver, Scheier, & Weintraub, 1997) subscales (Active Coping, Planning, Acceptance, and Self-Distraction) which represent similar constructs. Cognitive-Orientated Coping was correlated significantly and positively with both Revised Paranormal Beliefs Scale (RPBS; Tobayck, 2004) subscales; Traditional Paranormal Beliefs (TPBs) and New Age Philosophies (NAPs). However, there was no correlation with the New Age Orientation Scale (NAOS; Granqvist & Hagekull, 2001) which examines the practice of New Age behaviour in everyday life. As these beliefs are incorporated into everyday routines they may already provide a sense of control even when adverse circumstances occur, mitigating the need to activate a specific coping response. Cognitive-Orientated Coping also correlated negatively with the Unpredictability subscale of the FAD-Plus (Paulhus & Carey, 2011). This provides further support for the validity of the Cognitive-Orientated Coping subscale as individuals are likely to believe events are predictable through increased understanding and self-development.

The Avoidance-Orientated Coping subscale consists of four negatively-framed items. Two of these are efforts to disengage from an issue through avoidance or denial. The remaining items are concerned with using paranormal services for coping when other strategies have not been successful. In the short term, there is the potential for this style of coping to minimise distress (Briere, 2002; Dempsey, 2002; Sandler, Kim-Bae, & Mackinnon, 2000), however, ultimately they are ineffective in supporting wellbeing in the long term (Holahan et al., 2005; Ben-Zur, 2009). The validity of the Avoidance-Orientated Coping subscale was supported by its positive and significant correlations with several related subscales on the Brief COPE (Denial, Venting, Behavioural Disengagement, and Self-Blame). As with the Cognitive-Orientated Coping subscale both RPBS subscales (TPBs and NAPs) were positively and significantly correlated with Avoidance-Orientated Coping. There was also a near-significant negative correlation with the NAOS. As this scale represents beliefs that are incorporated into everyday life, efforts to disengage from a stressor using these common behaviours would be theoretically unlikely. This may provide an explanation for these findings. Avoidance-Orientated Coping also correlated significantly and positively with the Unpredictability and Scientific Determinism subscales on the FAD-Plus. This supports previous hypotheses that individuals utilising this style of coping may be less frequent paranormal service users, utilising such resources as a last resort when other methods of coping have been exhausted or discarded. Despite issues experienced with this subscale, its inclusion appears important and warranted pending future refinement.

The Lack of Control subscale consists of five items. These relate to either a negative situation which the individual found difficult or an action they wish to take to regain control over an event. This factor represents using paranormal services as a behavioural action to mitigate the psychological effects of a stressful event and increase illusory control. Although hypothesised as (potentially) an adaptive coping style, in that

paranormal believers may be actively seeking services in an approach-orientated and/or problem-focused manner to overcome feelings of diminished control, it appears this may not be the case. Lack of Control was significantly and positively correlated with traditionally avoidance-orientated subscales on the Brief COPE; Self-Distraction and Behavioural Disengagement. This indicates that through visiting paranormal services, individuals could be, in part, avoiding engaging in more appropriate activities. By visiting these services, it is possible that individuals are maintaining an illusion, namely that they are engaging in constructive behaviour to reduce and understand stressors. This supports Irwin's (2009) Psychodynamic Functions Hypothesis in that, through heightened fantasy proneness, individuals are able to withdraw in to a make-believe world in order to restore a semblance of order and meaning (Rogers et al., 2006; Watt et al., 2007). Further support for the validity of the Lack of Control subscale is provided by the significant and positive correlations with both RPBS subscales (TPBs and NAPs). There was also a significant negative correlation with the NAOS. Engaging in New Age behaviour as part of an individual's daily routine is at odds with engaging with such concepts in order to avoid more suitable activities. Finally, the Lack of Control subscale gains further support for its negative correlation with the FAD-Plus Free Will subscale (on which higher scores indicated a sense of personal control).

The Practitioner Authenticity subscale consists of six items. These refer to characteristics associated with practitioners of paranormal services. Whilst not specifically related to coping theory, this factor provides a clear explanation of why people continue to return to, and engage with, paranormal services. When practitioners provide seemingly accurate information, albeit generic profile-based information (Allum, 2011; Forer, 1949; Rogers & Soule, 2009), they are perceived as more honest. This, in turn, supports the impression that the practitioner is trustworthy, dependable, and likeable which results in an increased number of future interactions, reinforcing the

use of paranormal services as a successful coping style. As a component of paranormal service engagement, this factor was, as expected, associated with a range of coping subscales linked to the previous three subscales. Notably, all UPNAS subscales were associated with the Instrumental Support and Emotional Support subscales on the Brief COPE. This indicates that the practitioner element of paranormal coping is the underlying fundamental factor associated with recurrent paranormal service use. Further support for the validity of the Practitioner Authenticity subscale is its positive and significant correlations with both RPBS subscales (TPBs and NAPs), but also the NAOS. Similarly, Practitioner Authenticity is positively associated with the FAD-Plus subscale of Fatalistic Determinism. It is plausible that individuals believe in practitioners' paranormal capabilities which engender a belief in fate, destiny, and other mysterious forces.

The creation of the UPNAS Questionnaire and the four-factor model of paranormal coping was based on the Psychodynamic Functions Hypothesis (PFH; Irwin, 2009). To recap, the PFH suggests that paranormal belief develops as a means of coping with a diminished sense of control in childhood. In adulthood, these beliefs are "activated" in times of anxiety, uncertainty, and challenge to lessen the feelings of stress experienced and strengthen the illusion of control. The development, and subsequent activation, of paranormal belief is the result of several mediating and moderating factors (e.g., sociocultural factors, fantasy proneness, personality, thinking styles, and contextual stress). Whilst paranormal coping was conceptualised in the literature, to date it had received little empirical attention. Previous research suggested that paranormal coping was partially independent of more traditional cognitive and behavioural coping strategies (Rogers et al., 2006). The four-factor model supports this notion. The final study of this thesis sought to investigate the relationship between

paranormal coping via the newly developed and validated Use of Paranormal and New Age Services (UPNAS) Questionnaire and Irwin's (2009) PFH.

The first factor chosen was information processing or thinking style. Thinking style is proposed to act as a moderating or mediating variable for the endorsement of paranormal and New Age concepts within Irwin's PFH. According to the Dual Processing Theory (e.g., Epstein, 2003; Kahneman, 2011), individuals process information using two independent systems which interact to contribute to the decision making process. System 1 or "experiential" thinking is fast, preconscious, intuitive, emotion-orientated, driven by contextual factors, and resistant to change. System 2 or "rational" thinking is slow, conscious, non-holistic, analytical, reason-orientated, consistent, and open to change.

Although everyone uses both systems, individuals usually have a habitual preference for one over the other. Research suggests that individuals with a preference for experiential thinking are more inclined to endorse paranormal concepts and report more subjective paranormal experiences (e.g., Aarnio & Lindeman, 2005; Bouvet & Bonnefon, 2015; Irwin & Wilson, 2013; Irwin & Young, 2002). Others argue that both thinking styles are essential for the maintenance of paranormal and New Age beliefs, with intuitions "activated" after which an individual will either employ rational thought and reject it, or avoid rational thought entirely and accept the perceived reliability of the intuitive thought (e.g., Risen, 2016). In line with this, lower levels of rational thinking have been associated with the endorsement of paranormal explanations for anomalous experiences, but not the experiences themselves (Ross, Hartig, & McKay, 2017). Conversely, it has been suggested that stress lowers an individual's propensity for rational thinking, which increases belief in paranormal phenomena through more intuitive thinking (Lasikiewicz, 2016).

Thinking style was selected over other moderating and/or mediating factors included in the PFH (sociocultural factors, fantasy proneness, personality, and contextual stress) based on interview data collected in Study 1. Participants described activating anomalous beliefs which manifested in seeking paranormal services to help them cope with a contextual stressor (e.g., bereavement, relationship dissolution). They describe their coping experience as emotionally-orientated and intuitive; factors synonymous with an experiential thinking style. Individuals then spoke of rationalising the experience once the coping “episode” had passed and there was no longer a psychological need for belief activation. Those who employ a paranormal coping style are suggested to utilise experiential thinking during specific coping episodes. Whether this is the result of being unable to employ rational thought effectively under stressful circumstances else, avoid rational thought entirely, remains unexamined thus far.

The second factor selected was perceived childhood control. Whilst socio-cognitive individual difference factors (e.g., sociocultural factors, thinking styles, fantasy proneness, personality, and contextual stress) serve as moderators and/or mediators for the endorsement of paranormality in adulthood, it is an individual’s sense of diminished control in childhood that is the fundamental underlying factor in the development of a paranormal belief system (Irwin, 2009; Granqvist & Hagekull, 2001). Supporting evidence links the endorsement of paranormal concepts and subjective reported experiences to childhood abuse, particularly that which is linked to physical, sexual, and emotional abuse or neglect (e.g., Berkowski & MacDonald, 2014; Irwin, 1994a; Perkins & Allen, 2006; Rogers & Lowrie, 2016), although frequent house moves and insecure attachment style (as a result of poor infant-caregiver interactions) have also been associated with increased adult paranormality across a range of studies (Lawrence et al., 1995; Graqvist et al., 2001; 2005; 2009; 2014). These early experiences are proposed to leave individuals with a diminished sense of childhood control.

Consequently, individuals have an increased need for control in adulthood, leading to the activation of paranormal beliefs in times of contextual stress.

However, direct evidence for the relationship between experiences of perceived childhood control and the endorsement of paranormal concepts is mixed. Watt et al. (2007) found adults who felt that, as children, they had interpersonal control without parental interference had a lower endorsement of global paranormal concepts. However, more recent work (Hynam, 2012) failed to replicate these findings. Those who develop a paranormal coping style are proposed to use services to further strengthen the illusion of control under stressful circumstances, providing further support for Irwin's (2009) PFH.

Considering these two factors in association with paranormal coping is complex. Previous research suggests an increased recollection of diminished experiences of childhood control could be associated with each of the four factors of the UPNAS Questionnaire in line with Irwin's model, although empirical support for this notion is mixed. Additionally, thinking styles are proposed to play a moderating or mediating role on the relationship between perceived childhood control and paranormal belief. Individuals with a preference for experiential thinking would be expected to have a stronger proclivity for paranormal coping. It is expected that this would increase the relationship between perceived childhood control and paranormal coping. Alternatively, individuals with preference for rational thinking would be expected to report less paranormal coping. Rational thinking may decrease the association between perceived childhood control and paranormal coping. There were four hypotheses for the following study. Firstly, there will be a significant, negative relationship between perceived childhood control and the four UPNAS subscales. Secondly, there will be a significant, positive relationship between experiential thinking and the four UPNAS subscales. Thirdly, a preference for experiential thinking will increase the impact of perceived

childhood control on the four UPNAS subscales. Finally, a rational thinking style will decrease the impact of perceived childhood control on the four UPNAS subscales.

7.01 MATERIALS

The following measures were included within an online survey tool (Survey Gizmo) and counterbalanced to eliminate potential order effects. All Cronbach's alpha coefficients are those reported by the scale authors.

The Perceived Childhood Control Questionnaire (PCCQ; Watt et al., 2007) provides a measure of perceived childhood control within both personal and interpersonal domains. It is a single subscale measure ($\alpha = .83$) consisting of 30 items. These items are measured using a 5-point scale ranging from "1" strongly disagree to "5" strongly agree. Higher scores indicate a greater sense of control in childhood. An example item is, "*I had a lot of choice in deciding who my friends were.*" This measure has previously been used to demonstrate a significant negative relationship between childhood control and paranormal belief (Watt et al., 2007). The PCCQ can be viewed in Appendix 38.

The Rational-Experiential Inventory (REI-40; Pacini & Epstein, 1999) was designed to assess preferences for information processing. It consists of two subscales. A 20-item rational subscale ($\alpha = .79$) is an adapted Need for Cognition (NFC) scale (Cacioppo & Petty, 1982). An example item is, "*I am much better at figuring things out logically than most people.*" The 20-item experiential subscale ($\alpha = .88$) is an adapted Faith in Intuition (FI) scale. It is measured on a 5-point rating system ranging from "1" completely false to "5" completely true. Higher scores on each subscale represent an increased preference for rational or intuitive thinking. An example item is, "*I trust my initial feelings about people*" (Intuitive Subscale). This measure has previously been used to demonstrate a significant and positive relationship between intuitive thinking styles and paranormal belief (Aarnio & Lindeman, 2005; Lasikiewicz, 2016; Genovese,

2005; Wolfradt, Oubaid, Straube, Bischoff, & Mischo, 1999). The REI can be viewed in Appendix 39.

The Use of Paranormal and New Age Services (UPNAS) Questionnaire is a new measure of paranormal coping. The final version consists of 28 items. The first six items reflect the type, frequency, and cost of paranormal service use. The remaining 22 items comprise four subscales; Cognitive-Orientated Coping ($\alpha = .84$), Avoidance-Orientated Coping ($\alpha = .75$), Lack of Control ($\alpha = .78$), and Practitioner Authenticity ($\alpha = .84$). Each is measured on a 7-point scale ranging from “1” strongly disagree to “7” strongly agree. Higher scores on each subscale represent an increased use of different coping efforts. An example statement is, “*I mainly use paranormal and New Age services when I need help to make an important decision,*” (Lack of Control subscale). The UPNAS Questionnaire can be viewed in Appendix 40.

A standard demographics questionnaire was also included which requested participants’ gender, age, ethnicity, occupational status, and highest qualification both in general and specifically relating to mathematics, statistics, and/or psychology (Appendix 3). Each participant was also given a brief sheet (Appendix 41) and debrief sheet (Appendix 42). Institutional review board ethical approval (Appendix 43) was obtained and no time limit or financial incentives were provided. The same online advert (Appendix 10) was used to recruit participants to the study online.

7.02 PROCEDURE

To reach participants online, the study advert was placed in a variety of paranormal interest groups on Facebook and Twitter. Participants were then redirected to the online version of the questionnaire. Participants were asked if they would like to participate in a study examining beliefs, thinking styles and childhood memories. Participants were informed that this study involved the completion of a questionnaire and that they would be asked to what extent they agreed or disagreed with a range of

statements by circling a response on a scale of 1-7. It was made clear that participation was entirely voluntary and that they could withdraw at any point before returning/submitting the questionnaire. Participants were informed that their responses would be completely anonymous and that any information they provided would only be used for academic research purposes. No time limits were imposed and financial incentives were not offered.

7.03 PARTICIPANTS

In total, 164 individuals provided usable questionnaires, (91.1%). The sample had an unequal gender split (92.1 % female) with participants aged 17 to 72 years ($M = 37.8$ $SD = 12.0$). Most were white (80.5 %) and either employed (48.8%) or homemakers (20.1%). Approximately a third were qualified to A-level or above (30.0%) with fewer attaining this qualification in maths/statistics and/or psychology (16.5%). No other demographic details were taken.

7.04 RESULTS

As the online suite of questionnaires was set to require an answer to every question, there were no missing values within the data set. Frequency tables for each item (per questionnaire) were examined to ensure no incorrect values were entered as a result of human error during recoding. There were no values entered outside of the specified range.

Descriptive statistics were explored to gain an understanding of the patterns of distribution within the data. Histograms for each scale produced normal distribution curves. The skewness and kurtosis values were inspected and Z-scores calculated. These data are presented in Table 42.

Table 42: Skewness and Kurtosis Values

Scale	Skewness Value	Std. Error	Z Score	Kurtosis Value	Std. Error	Z Score
Cognitive-Orientated Coping	-.74	.19	3.89	.98	.38	2.60
Avoidance-Orientated Coping	.19	.19	.98	-.60	.38	1.59
Lack of Control	-.84	.19	4.44	1.01	.38	2.67
Practitioner Authenticity	-.55	.19	2.91	.19	.38	.50
Rational Thinking	-.07	.19	.36	-.35	.38	.93
Experiential Thinking	-.20	.19	1.06	1.47	.38	3.90
Perceived Childhood Control	.30	.19	1.55	-.14	.38	.36

As a medium sized sample ($50 < n < 300$) the absolute z-scores for either skewness or kurtosis should be less than 3.29. Cognitive-Orientated Coping and Lack of Control are skewed to the right indicating higher mean scores. This was expected due to the nature of the sample (individuals who strongly endorse paranormal services). Experiential thinking has a high kurtosis value, indicating scores are more clustered around the mean. To examine these data further, the data was examined for outliers. There were multiple univariate outliers for each subscale. These are presented in Table 43.

Table 43: Univariate Outliers

Subscale	Participant No.	Mean Score
Cognitive-Orientated Coping	18	2.14
	100	1.57
Lack of Control	59	2.00
	100	2.20
	150	2.00
Practitioner Authenticity	100	2.17
	11	1.65
Experiential Thinking	128	1.65
	148	4.95
	57	127.00
Perceived Childhood Control	148	134.00

Two participants (100 and 148) had outlier scores on more than one subscale (100 and 148) and were removed from subsequent analyses. A regression analysis was computed to check for additional multivariate outliers. A critical chi-squared values table gave a value of 24.32 at $p < .001$. There were no participants with a Mahalanobis Distance score exceeding this value. With no other systematic biases evident, all other

univariate outliers were retained. The final sample ($n = 162$) was adequate for predicting moderate-to-small regression effects.

Subsequent analyses revealed almost all measures had at least an acceptable internal reliability ($\alpha \geq .70$). The single exception was the Avoidance-Orientated Coping subscale which at .57 is not unexpected given previous research. However, this is still satisfactory when compared to data presented for other established coping scales. Inter-item correlations were examined, with no evidence of multicollinearity found ($< .80$). All items and subscales were considered suitable for inclusion within the study. Table 44 presents the Cronbach's Alpha reliability coefficients and descriptive data for each subscale.

Table 44: Cronbach's Alpha Reliability Coefficients

Measure	Cronbach's Alpha	Mean	Standard Deviation
Cognitive-Orientated Coping	.74	5.12	.88
Avoidance-Orientated Coping	.57	3.96	1.10
Lack of Control	.72	5.15	.92
Practitioner Authenticity	.75	4.94	.81
Rational Thinking	.82	3.37	.46
Experiential Thinking	.90	3.64	.52
Perceived Childhood Control	.87	84.87	15.83

Table 45 presents the correlations between the subscales to examine the relationship between paranormal coping, thinking styles, and childhood control.

Table 45: Correlations between Subscales

	1	2	3	4	5	6	7
Cognitive-Orientated Coping (1)	1						
Avoidance-Orientated Coping (2)	.03	1					
Lack of Control (3)	.50**	.36**	1				
Practitioner Authenticity (4)	.68**	.11	.42**	1			
Rational Thinking (5)	.10	-.32**	-.08	.07	1		
Experiential Thinking (6)	.20**	-.07	.03	.22**	.33**	1	
Perceived Childhood Control (7)	.16*	.07	.13	-.00	-.05	.09	1

$p < .05^*$

$p < .01^{**}$

Experiential Thinking was significantly and positively associated with two of the four UPNAS subscales; Cognitive-Orientated Coping ($r = .20$, $p < .01$), and

Practitioner Authenticity ($r = .22, p < .01$). There was no relationship with the Lack of Control or Avoidance-Orientated Coping subscales.

Rational Thinking showed a significant and negative correlation with Avoidance-Orientated Coping ($r = -.32, p < .01$). There was no relationship with the remaining three UPNAS subscales. Rational Thinking and Experiential Thinking demonstrated a significant and positive relationship ($r = .33, p < .01$).

Perceived Childhood Control correlated significantly and positively with Cognitive-Orientated Coping ($r = .16, p < .05$). There were no other significant relationships with either Rational or Experiential Thinking, nor the three remaining UPNAS subscales.

Additionally, Cognitive-Orientated Coping was significantly and positively associated with Lack of Control ($r = .50, p < .01$), and Practitioner Authenticity ($r = .68, p < .01$). The latter two subscales also demonstrated a similar relationship with each other ($r = .42, p < .01$). Finally, Avoidance-Orientated Coping and Lack of Control also correlated significantly and positively ($r = .36, p < .01$). There were no other significant relationships between the UPNAS subscales.

A series of multiple regression analyses were performed, with each of the four UPNAS subscales (Cognitive-Orientated Coping, Avoidance-Orientated Coping, Lack of Control and Practitioner Authenticity) serving as a separate criterion measures. For consistency, the same potential predictors were entered into each model, specifically, the two REI subscales (Rational Thinking and Experiential Thinking) and PCCQ scores. The correlations presented in Table 44 suggest that Perceived Childhood Control only had a one positive and significant relationship with Cognitive-Orientated Coping. Therefore, all predictors were entered into the model in the same step (rather than the PCCQ being entered first in one model only) to allow for uniformity across each analysis and subsequent reporting. Each predictor was subject to subsequent testing to

ensure the various assumptions of Multiple Regressions were met. Table 46 presents these findings.

Table 46: Data Screening for Multiple Regression Analyses

	VIF	Tolerance	Variances
Rational Thinking	.88	1.13	.21
Experiential Thinking	.88	1.14	.27
Perceived Childhood Control	.99	1.02	250.59

As shown in Table 45, all three measures had acceptable VIF vales (<10) and tolerance values (>1) indicating that multicollinearity was not an issue. Data also met the assumption of non-zero variances indicating it was appropriate to be used within Multiple Regression. Three of four regression models were significant with each model meeting the assumption of independent errors (Durbin-Watson values between one and three). Overall, these models explained 16-33% percent of variance in subscale scores (2-11% for adjusted models) with the most variance explained for Avoidance-Orientated Coping. Table 47 presents these findings.

Table 47: Model Summary Statistics for Four Multiple Regression Analyses

Model	R	R Square	Adj R Square	Durbin-Watson	df	F	p
Cognitive-Orientated Coping	.25	.06	.05	2.30	3	3.54	.016
Avoidance-Orientated Coping	.33	.11	.09	2.20	3	6.26	<.001
Lack of Control	.16	.02	.01	2.12	3	1.32	.269
Practitioner Authenticity	.22	.05	.03	2.16	3	2.10	.048

Multiple Regression analyses revealed that Rational Thinking, Experiential Thinking, and Perceived Childhood Control explained a significant amount of the variance for Cognitive-Orientated Coping ($F(3,153) = 3.54, p = .016$), Avoidance-Orientated Coping ($F(3,158) = 6.26, p < .001$), and Practitioner Authenticity ($F(3,158) = 2.10, p = .048$). Lack of Control was not explained by Rational Thinking, Experiential Thinking, or Perceived Childhood Control. Each model was examined to

understand which predictor variables contributed to the percentage variance explained. These results are presented in Table 48.

Table 48: Beta, t and Significance Values for Four Multiple Regression Models.

Outcome Measure	Predictor Variable	Beta	T	p
Cognitive-Orientated Coping	Experiential Thinking	.17	2.12	.035
	Rational Thinking	.05	.62	.537
	Perceived Childhood Control	.14	1.84	.068
Avoidance-Orientated Coping	Experiential Thinking	.03	.37	.710
	Rational Thinking	-.33	-4.08	<.001
	Perceived Childhood Control	.06	.73	.464
Lack of Control	Experiential Thinking	.05	.54	.593
	Rational Thinking	-.09	-1.08	.280
	Perceived Childhood Control	.12	1.54	.124
Practitioner Authenticity	Experiential Thinking	.224	2.71	.007
	Rational Thinking	-.01	-1.10	.918
	Perceived Childhood Control	-.02	-.29	.770

Increased Experiential Thinking scores significantly predicted higher use of Cognitive-Orientated Coping ($\beta = .17, t = 2.12, p = .035$), and belief in Practitioner Authenticity ($\beta = .224, t = 2.71, p = .007$). Lower Rational Thinking scores significantly predicted higher scores on the Avoidance-Orientated Coping ($\beta = .224, t = 2.71, p = .007$) subscale. Neither Rational nor Experiential Thinking were able to predict scores on the Lack of Control subscale. Finally, Perceived Childhood Control did not significantly predict any of the UPNAS subscale scores. Therefore, no further mediation or moderation analyses were performed.

7.05 DISCUSSION

The study aimed to explore the relationship between Irwin's (2009) Psychodynamic Functions Hypothesis (PFH) and a paranormal coping style. Experiential Thinking, Rational Thinking, and Perceived Childhood Control were selected for inclusion in the study as predictor variables. Perceived Childhood Control was chosen as a fundamental underlying factor in the development of a paranormal belief systems (Irwin, 2009; Granqvist & Hagekull, 2001). The first hypothesis

predicted a significant negative correlation between Perceived Childhood Control and all UPNAS subscales.

This hypothesis was unsupported. Contrary to expectations, the first predictor variable, Perceived Childhood Control had no relationship with Rational Thinking, Experiential Thinking, Lack of Control, or Practitioner Authenticity. However, there was a positive and significant correlation between Cognitive-Orientated Coping and Perceived Childhood Control, although once entered into the regression model this became non-significant. Unexpectedly, the initial correlation was, in fact in the opposite direction to that originally hypothesised, higher Perceived Childhood Control was associated with higher Cognitive-Orientated Coping. Similarly, when examining Table 44, Lack of Control had a (marginally) positive relationship with Perceived Childhood Control. Again, this contradicts the initial study predictions. These data contradict those of Watt et al. (2007) and support unpublished work by Hynam (2012). There are several possible explanations for these findings.

Firstly, the Perceived Childhood Control Questionnaire (PCCQ) measures arguably lesser experiences of diminished control in childhood, for example, feeling limited in terms of choices around one's own friends, food, and clothing. It is possible, the endorsement of paranormal concepts, and active engagement with paranormal services, is only used by individuals coping with more serious, long-term experiences of diminished control in childhood. For instance, individuals reporting sexual, physical, and emotional abuse and/or neglect (e.g., Berkowski & MacDonald, 2014; Irwin, 1994a; Perkins & Allen, 2006; Rogers & Lowrie, 2016). For those with arguably lesser experiences of diminished control in childhood, the activation of paranormal belief alone in adulthood is enough to lessen feelings of uncertainty and strengthen illusory control without engaging with paranormal services as measured by the UPNAS Questionnaire.

Secondly, involvement with paranormal services may be related to inappropriate parenting styles in a manner not assessed by the PCCQ. Previous research has linked paranormal belief to parental rejection and instrumental parentification (Rogers & Lowrie, 2016) and New Age belief to parental rejection and emotional parentification (Granqvist et al., 2007) and both with a variety of non-secure attachment styles and parental insensitivity (Granqvist et al., 2009; 2014; Main et al., 1993; Rogers, 2013). Currently, the impact that retrospective recollections of inappropriate parenting styles has on the endorsement of paranormal belief is relatively sparse. Further research in this area to determine how inappropriate parenting styles and illusory control in childhood interact, to facilitate the development of various facets of paranormal belief (e.g., psychokinesis, extrasensory perceptions, and life after death) appears warranted.

Thirdly, it is plausible that individuals who score highly on the Cognitive-Orientated Coping subscale are able to change their perception of a situation, or emotional reaction, as part of a successful coping response. They report fewer experiences with diminished control as a result of a more autonomous relationship with their parents. It is conceivable that other adverse childhood experiences such as bullying, bereavement, and illness, concepts which are equally associated with diminished control influenced the development of a paranormal worldview in these individuals. Rather than being the cause of diminished childhood control, parents support the development of psychological resilience in their children by demonstrating positive coping behaviours. Subsequent service engagement as a result of belief activation in adulthood utilises these coping behaviours as part of an adaptive and successful coping response.

However, a recent paper (Rogers & Lowrie, 2018) suggests that Watt et al.'s (2007) PCCQ is not reflective of general findings within child development literature as it rests on a fundamentally flawed theory about what type of childhood experiences

would lead to a lower sense of perceived control in adulthood. The PCCQ assumes that children who were raised by permissive-indulgent parents, for example, those who set fewer rules, boundaries and consequences for poor behaviour (Baumrind, 1996; Maccoby & Martin 1983), who have a stronger sense of perceived control in childhood, as adults engender a stronger sense of control over their world. Child development literature suggests the opposite. By failing to set and enforce rules around behaviour and societal standards, parents do not allow children to develop independent decision-making skills, self-regulatory abilities, and internalise control of their own behaviour (Baumrind, 1996; Patock-Peckham, Cheong, Balhorn, & Nagoshi, 2001). Ultimately, this prompts increased feelings of alienation, instability, and overall lower feelings of self-control in adulthood.

In contrast, more authoritative parenting consisting of higher support and appropriate control (Maccoby & Martin, 1983) hence, less perceived childhood control, is associated with feelings of self-worth, security, increased self-regulation and arguably a greater perceived control in adulthood (Bowers et al., 2011). Overall, a more authoritative parenting style is associated with greater psychological adjustment in adulthood (Piko & Balazs, 2012; Coplan, Hastings, Lagace-Seguin, & Moulton, 2002; Shucksmith, Hendry, & Glendinning, 1995; Steinberg, 2001). This study supports the developmental literature, in that higher perceived control in childhood is linked to lower perceived control in adulthood, hence greater paranormal belief endorsement. The implication for Irwin's (2009) PFH is that a lack of parental support/control in childhood, leads to the development of paranormal belief in adulthood.

Overall, the first hypothesis linking experiences of diminished childhood control to a paranormal coping style as conceptualised by Irwin's (2009) PFH was unsupported in this study. However, explanations for variability within the data have been presented. The second hypothesis considered the relationship between paranormal coping and

thinking styles. Thinking style was selected over other moderating and mediating variables due to its occurrence in participant interviews in Study 1. It was predicted that Experiential Thinking measured by the REI would have a significant and positive relationship with all UPNAS subscales measuring different aspects of a paranormal coping style. Several interesting findings emerged.

The second hypothesis was partly supported. As predicted, Cognitive-Orientated Coping and Practitioner Authenticity were significantly and positively correlated with Experiential Thinking. Two multiple regression models demonstrated that a significant proportion of the variance in Cognitive-Orientated Coping and Practitioner Authenticity subscale scores was explained by an Experiential Thinking style. This supports previous research stating individuals with a preference for Experiential Thinking are more inclined to endorse paranormal concepts and report more subjective paranormal experiences (e.g., Aarnio & Lindeman, 2005; Bouvet & Bonnefon, 2015; Irwin & Wilson, 2013; Irwin & Young, 2002). Contrary to expectations, Lack of Control and Avoidance-Orientated Coping had no relationship with experiential thinking.

However, Avoidance-Orientated Coping demonstrated a significant negative relationship with Rational Thinking. A regression model confirmed that a significant proportion of the variance in Avoidance-Orientated Coping scores was explained by a lack of Rational Thinking. It is possible that individuals have either tried to employ Rational Thinking prior to using paranormal coping and rejected them or have avoided their use entirely (Risen, 2016), due to focusing on attempts to disengage from and/or avoid a specific stressor. Findings suggest endorsement of a paranormal coping style through service engagement is, for some, due to a preference for Experiential Thinking and for others linked to an avoidance or rejection of Rational Thinking.

Overall, the second hypothesis was partly supported. However, results should be interpreted with caution as there is some uncertainty about whether individuals'

introspective perceptions of thinking style are accurate and reflective of actual reasoning (Hodgkinson & Sadler-Smith, 2014). Further analyses (for the final two hypotheses) using Rational Thinking and Experiential Thinking as moderators/mediators in the relationship between paranormal coping and Perceived Childhood Control could not be completed as there was no direct relationship between the latter two variables.

7.06 STRENGTHS AND LIMITATIONS

One strength of the present study was the use of online recruitment to specifically target those who endorse paranormal concepts. This resulted in a diverse sample of participants from across the globe. Given the impact socio-cultural factors have on paranormal belief (French & Stone, 2014), this sample is reasonably generalisable. Another strength is that this is the first study to conceptualise and test the theoretical concept of a paranormal coping style within Irwin's PFH leading the way for future work in the field.

The current study has four main limitations. Firstly, the study used the PCCQ as the primary measurement for Perceived Childhood Control. This retrospective measure is focused upon less severe experiences of reduced control in childhood as a result of parenting behaviour. Future research should consider different sources of diminished control, the severity of these experiences, and the role of parents as protective factors. Any significant direct correlations with a paranormal coping style can then be examined with thinking styles as moderating/mediating variables in line with Irwin's (2009) PFH. Secondly, the PFH contains several other mediating/moderating variables (sociocultural factors, fantasy proneness, and contextual stress), an investigation of these in relation to a paranormal coping style seems warranted. Thirdly, the PFH is a developmental model of paranormal belief. Though it is conceivable that for some individuals belief activation would lead to the use of services as part of a paranormal coping style, this

may only represent a smaller subset of individuals. More work to explore this notion appears justified. It should also be noted that the UPNAS questionnaire examines paranormal coping from a dispositional coping perspective. Whilst this allows the UPNAS to be used in relation to many situations appraised as stressful, equally, this does not take into account variance between differing stressors and the type of service used. For example, those who regularly visit a psychic practitioner do so for different reasons to another who visits a medium. Future work could develop this concept further.

7.07 CONCLUSION

Overall, this study is the first to examine the concept of a paranormal coping style using the newly designed UPNAS questionnaire in relation to Irwin's PFH. Such research provides a valuable insight into those who use paranormal services regularly. Once developed further this research can be used to understand and provide support to individuals who may endorse paranormal beliefs, but who may not be coping successfully with long-term or daily stressors.

CHAPTER 8: SUMMARY AND GENERAL DISCUSSION

The research described in this thesis aimed to explore the notion of paranormal belief as a unique form of coping. Previous research examining paranormal belief has alluded to the idea of its use as a form of coping. Irwin's (2009) Psychodynamic Functions Hypothesis (PFH) suggests that paranormal belief develops in childhood, as a means of coping with experiences of diminished control (Perkins & Allen 2006; Watt et al., 2007). More precisely, paranormal belief develops in children who experience maltreatment or trauma (Berkowski & MacDonald, 2014; French & Kerman, 1996; Irwin, 1992, 1994a; Lawrence et al., 1995; Perkins & Allen, 2006; Rabeyron & Watt, 2010; Rogers & Lowrie, 2016; Sar et al., 2014; Scimeca et al., 2015), poor parent-child attachment (Granqvist et al., 2009; 2014; Main et al., 1993; Rogers, 2013), and inappropriate parenting styles (Granqvist et al., 2007; Rogers & Lowrie, 2016, 2018) who withdraw into a fantasy world as a means of escape. In adulthood, paranormal belief is reactivated in stressful situations when life is viewed as unpredictable or uncontrollable (Dudley, 1999; Greenaway, Louis, & Hornsey, 2013; Lasikiewicz, 2016). a trend consistent in research across a diverse range of populations (Bersabe & Martinez Arias, 2000; Foster et al., 2006; Kramer & Block, 2011; Ofori et al., 2017). Adults are once again able to withdraw into a make-believe world, until a sense of personal control is restored (Rogers et al., 2006; Watt et al., 2007). The PFH allows much of the evidence surrounding paranormal belief to be amalgamated into a working model of paranormal coping, where other social and cognitive predictors of paranormal belief act as mediators and/or moderators to the relationship between a diminished sense of childhood control, illusory control in adulthood, and the various constructs of adult paranormality (Irwin, 2009).

Prior to this thesis, very little empirical research had directly examined the relationship between global paranormal belief and coping. Overall results from five

studies (Berkowski & Macdonald, 2014; Callaghan & Irwin, 2003; Irwin et al., 2015; Mathijssen, 2012; Rogers et al., 2006) produced inconsistent findings, perhaps due to the different conceptualisations of coping (dispositional vs. situational) and measurements of paranormal belief. However, it was indicated that paranormal belief may be a unique form of coping, distinct from more traditional coping styles/strategies, one which may be particularly important to understand for adults who have experienced childhood maltreatment, given that such events have been linked to an increased risk of mental health problems (Widom, Dumont, & Czaja, 2007), substance misuse, (Lansford, Dodge, Pettit, & Bates, 2010) and future child maltreatment perpetration (Berlin, Appleyard, & Dodge, 2011). Equally, given the prevalence of paranormal belief and experiences, perhaps due to inappropriate parenting styles or other traumatic experiences in childhood (e.g., bereavement and illness), this research has important implications for understanding coping in the general population.

Despite mixed findings when assessing global paranormal belief and coping, three prolific bodies of research supported the concept of paranormal coping. These were continuing bonds, religious coping, and spiritual coping. Continuing bonds, a phenomenon exclusively associated with life after death, is suggested to be a natural form of coping following a bereavement (Asai et al., 2010; Benore & Park, 2004; Suhail et al., 2011), one which has been linked to both positive adjustment (Nowatzki & Grant-Kalischuk, 2009) and distress in both the long and short term (Field & Friedrichs, 2004; Field, Gal-Oz, & Bonanno, 2003; Field, Nichols, Holen, & Horowitz, 1999) dependant on the individual's experience of death as a reality or an experience (Root & Exline, 2014).

Similarly, religious and spiritual belief have both been identified as distinct forms of coping. Religious coping focuses on the collaboration with God to solve problems, and overcome difficulties in times of stress (Pargament, 1997, Pargament et

al., 2009, 2011). It is suggested religion can help individuals to understand life events as well as offering guidance, hope, and support (Kirkpatrick, 2005; Pargament, 1997; Spilka, Shaver, & Kirkpatrick, 1985). Positive religious coping has been consistently linked with more beneficial outcomes (Ai et al., 2010; Falb & Pargament, 2013; Zwingmann et al., 2006) and vice versa for negative religious coping (Abu-Raiya et al., 2011; Carpenter, Laney, & Mezulis, 2012; Trevino et al., 2012). Likewise, spiritual coping is increasingly viewed as a multidimensional construct (Hill et al., 2000) which includes feelings of connectedness to oneself (via harmony, knowledge, and inner-peace), others and nature (through compassion and gratitude), and to the transcendent (the universe, a higher power, or God) (de Jager Meezenbroek et al., 2012). Spiritual coping has also been linked to improved psychological wellbeing (Puig et al., 2006; Wachholtz & Pargament, 2005).

The first study followed the theoretical perspective of Pargament et al. (2000). It aimed to understand how individuals use paranormal coping to deal with a stressor rather than simply understanding different forms of engagement within paranormal practices (e.g., the number of times a psychic was used) as this would vary dramatically by persons and situations. A qualitative research methodology, namely thematic analysis, was used to confirm the existence of paranormal coping. This supported the generation of items based on the themes and codes for a potential paranormal coping questionnaire. Five main themes were generated (Belief Justification, Triggers of Paranormal Coping, Seeking Positive Feedback and Advice, Practitioner Authenticity, and Comfort and Reassurance).

The first theme, Belief Justification, consisted of five codes; family influences, media influences, socio-cultural influences, differential thinking system activation, and convincing self. These codes were assimilated under this theme as they all were provided as an explanation or justification of why their paranormal belief should be

considered valid and reasonable. The second theme, Triggers of Paranormal Coping, consisted of 11 codes; bereavement, relationship dissolution, other negative event, seeking meaning/understanding, seeking security/control, sudden change, difficulty adjusting, fate as a means of control, negative emotions, residual relationship issues, and need to interact with deceased. These codes were integrated into this theme as they all represent reasons why paranormal coping was utilised. The third theme, Seeking Positive Feedback and Advice, was comprised of six codes; immediate answers, seeking guidance, receiving advice, positive feedback from practitioner, practitioner cannot give negative feedback, and re-framing. These codes were included under this theme as each related to the optimistic feedback provided by practitioners. The fourth theme was comprised of nine codes; practitioners honest/objective, friends and family biased/subjective, counsellors unhelpful, provide unique readings, confirmatory statements, support from additional source, disconfirmatory information rejected, recognition of “fakes,” and issue with religion/God. These codes were grouped together as they all represented features which made practitioners appear to be reliable and genuine. The fifth theme was comfort and reassurance which consisted of ten codes; reassurance, comfort, reduce physical pain, reduce psychological pain, last resort, positive emotions, protection from harm, hope, anxiety management, and reduce personal accountability. These codes were assimilated together as they all increase positive emotions and reduce negative emotions, providing a sense of comfort and reassurance. Taken together all themes confirmed the possibility of paranormal coping.

Support was also generated for the cognitive deficits hypothesis (Irwin, 2009) which suggests that those with high belief in the paranormal are irrational/uncritical thinkers, less intelligent, and unable to employ basic probability and reasoning skills. In this study interviewees appeared predisposed to using intuitive thinking which is rapid, emotional, and holistic, before using their rational-analytic thinking system to slowly

provide meaning to and explain their experiences (Epstein, 1990; Epstein, Pacini, Denes-Raj, & Heier, 1996; Pacini & Epstein, 1999; Stanovich, West, & Toplack, 2012). Interviewees also gave the impression that they were particularly susceptible to confirmation bias, in that they were more likely to recall positive information that was consistent with their own beliefs and reframe any negative information which they received (Gawronski, 2012; Nickerson, 1998; Ritchie et al., 2017). Likewise interviewees appeared susceptible to cold reading techniques, in which a practitioner uses a combination of good observation and knowledge of the statistical likelihood of problems generated by life transitions (e.g., puberty, marriage, divorce, children) to provide seemingly accurate assessment of an individual (Hyman, 1977). This aligns with research suggesting paranormal believers are poor at judging probabilities (Blagrove et al., 2006).

After the initial investigation into paranormal coping the decision was made to narrow the scope of the research to those visiting paranormal services and utilising paranormal practitioners as the majority of coping examples were gleaned from these recollected experiences. Whilst this refined the scope of the research, various beliefs and experiences which may also be utilised within a paranormal coping style were excluded. For example, it has been suggested that a belief in the veracity of out-of-body experiences gives order and meaning to the post-traumatic stress reactions of those who have suffered childhood sexual abuse (Bergstrom, 1999). Similarly, those who report contact with the deceased (e.g., auditory, visual contact, sensed presence) often report adaptive grief outcomes (Klugman, 2006; Parker, 2005), with the experiences viewed as comforting and psychologically therapeutic (Botkin, 2000; LaGrand, 2005). The removal of such concepts could lead one to argue the applicability of the UPNAS questionnaire to all potential forms of paranormal coping. These areas of paranormal

belief warrant further exploration with regards to their impact on the use of a paranormal coping style.

Another decision made following the qualitative interviews was to create a dispositional rather than situational measure of paranormal coping. This is an area of significant debate within the literature. A dispositional measure was selected to encompass the full range of experiences and situations disclosed by interviewees. This was deemed most appropriate for initial exploratory work into paranormal coping, the implication being that individuals react to stressful events in a relatively uniform manner across a variety of different contexts (Rutherford & Endler, 1999), in this case, through the reactivation and use of paranormal belief as a form of coping. Whilst there are several advantages to this approach for example, dispositional coping measures have the potential to assess coping over longer time periods (Ptacek, Pierce, & Thompson, 2006; Schwarzer & Schwarzer, 1996), it has also been argued that coping is contextually driven. Those endorsing a situational approach to coping emphasise the importance of examining actual coping strategies in response to specific situations, and suggest dispositional coping measures are not specific enough to predict explicit incidents of coping. They argue that coping behaviours are not generalisable across different situations and time-frames (Carver & Scheier, 1994).

The second study aimed to provide a comprehensive understanding of the factors which comprise paranormal coping. A total of 149 items were generated based on the themes and codes developed in the previous study. Following pilot testing this was subsequently reduced to 81 items. The first six items assessed the type, frequency, and cost of paranormal service use, with the remaining 75 items reflecting different elements of paranormal coping. All items which pertained to a dissatisfaction with religion and counselling services were removed at this point. However, it is possible that individuals may use paranormal coping as an alternative to religion as they can

select which beliefs, practices, and practitioners they choose to endorse. This is supported by previous research suggesting that the rising popularity of New Age practices is due to the absence of strict disciplinary systems (Luckmann, 1996). Individuals are free to construct their own identity and moral judgements, rejecting any direction from external tradition or authority (Heelas, 1996; Houtman & Mascini, 2002).

An exploratory factor analysis determined that paranormal coping was comprised of five internally reliable factors (Chapter 3); Authenticity, Approach-Oriented Coping, Avoidance-Oriented Coping, Lack of Support/Control, and Practitioner Abilities. Authenticity contained items which reflected participants' perceptions of paranormal practitioners as objective, professional, and trustworthy. Approach-Oriented Coping was comprised of items which reflected actions taken to directly address a stressor or reduce its impact as well as approaches designed to change individual perceptions of events, or reduce negative emotional reactions. Avoidance-Oriented Coping contained items which reflected a participant's efforts to disengage or distance themselves from a stressor. Lack of Support/Control consisted of items which highlighted participants' feelings of diminished control after the occurrence of a negative event. Items reflected participants' inability to make decisions due to emotional distress and a perceived lack of support from friends or family members. Practitioner Abilities included items which focused upon the apparent supernatural capabilities of paranormal practitioners (e.g., clairvoyance and mediumistic abilities).

To ensure that the new questionnaire of paranormal coping was valid and robust, four additional questionnaires were selected to establish concurrent validity. As there are no other known paranormal coping questionnaires, those selected assessed New Age orientation, paranormal belief, coping, and free will and determinism. Prior to their examination the data was subject to confirmatory factor analysis to provide additional

support to the validity of the questionnaire. However, the five-factor model was a poor fit for the new data. Another exploratory factor analysis was conducted, which revealed a conceptually similar three-factor model (Chapter 4). The three factors were named Practitioner-Influenced Cognitive-Orientated Coping, Avoidance-Orientated Coping, and Lack of Control. As the two models were conceptually similar it was important to confirm the factors which appeared relevant. Given that the five-factor model was drawn from a larger pool of items it is possible these may have influenced participants' responses on the retained items. In order to determine which factor structure was more representative of paranormal coping, additional data was collected.

The next set of data (Chapter 5) did not confirm the five-factor model or the three-factor model. Instead, an additional exploratory factor analysis revealed a four-factor model. These factors were named Cognitive-Orientated Coping, Avoidance-Orientated Coping, Lack of Control, and Practitioner Authenticity. Whilst the three models were conceptually similar, the four-factor model of paranormal coping was determined to have the most satisfactory factor structure across all three sets of data, though model goodness of fit statistics remained below acceptable values. Further attempts to evidence a stable factor structure were also unsuccessful. Despite some participants consenting to be re-contacted for a follow-up study, too few responded to allow for test-retest reliability (see Chapter 6) to be conducted on the sample.

However, other dispositional measures of coping have experienced similar difficulties with factor stability (Aldwin & Revenson, 1987; Krageloh, 2011; Schwarzer & Schwarzer, 1996; Vitaliano et al., 1985), with some researchers suggesting that model fit statistics can be viewed as guidelines rather than "golden rules" (Marsh, Hau, & Wen, 2004) especially for new concepts or exploratory work (Bollen, 1989), hence these findings still hold value and importance. Despite these issues, one strength of creating a dispositional measure was its inclusivity. It can be applied to a diverse

participant sample, experiencing and coping with a wide range of situations, which, pending further research, may provide an insight into the behaviour and psychological outcomes of individuals at a population level. Conversely, it cannot take into account variance between samples or differing stressors. Future research may continue to refine and adapt this measurement in a similar manner to other coping questionnaires (e.g., the COPE; Carver, 1997; Carver, Scheier, & Weintraub, 1997).

Irrespectively, the four-factor model of paranormal coping appears to be a reasonable reflection of the original interviewees' experiences which lends some validity to the final version of the UPNAS questionnaire. Cognitive-Orientated Coping represents interviewees' use of seeking guidance and advice from paranormal services or practitioners. These are used to aid individuals' understanding of stressful events, re-evaluating their perception of a situation, and redefining goals. Avoidance-Orientated Coping encompasses various elements of disengaging behaviour indicated by interviewees. For example, interviewees spoke of using paranormal services as a last resort after other methods of coping had been exhausted. This was particularly apparent for uncontrollable stressors (e.g., bereavement) where few other actions could be undertaken. Similarly, this factor alludes to the notion that interviewees engaged with paranormal services and practitioners as they knew that they would receive positive feedback about themselves, or the situation. Lack of Control consists primarily of triggers of paranormal coping, namely, the occurrence of paranormal service use soon after a negative event. There is a clear reflection of paranormal beliefs and services as providing interviewees with illusory order and meaning in times which seem uncontrollable or chaotic. Practitioner Authenticity reflects interviewees' perceptions of paranormal practitioners as compassionate, honest, and professional. Although not stated explicitly, this reflects participants' susceptibility to cold-reading techniques (e.g., practitioners' good observation skills, and knowledge of the statistical likelihood

of events at different life transitions) employed by practitioners to give the perception of paranormal abilities. Whilst Practitioner Authenticity may not reflect coping in the strictest sense, it is an important influence on the continued use of a paranormal coping style and engagement with paranormal services.

There were two themes apparent in the interviews which were not reflected in the final model; social support and emotion-focused coping. In the initial qualitative study, it appeared that paranormal coping may be used by those dissatisfied with the quality, or perceived objectivity of information from those within their social support network. Advice from friends and family members was viewed as subjective, based on individual life experiences and influenced by personal agendas. Although this can be loosely inferred from the perception of paranormal practitioners as honest and objective, future research could examine the quality of social support and its role in the use of paranormal coping in more detail.

Similarly, the role of specific emotions in the use of paranormal coping was underwhelming. Interviewees discussed how paranormal services supported the management of emotions following a negative experience. As such, paranormal coping was linked to feelings of comfort, hope, protection, reassurance, and happiness, echoing similar findings linking positive emotional gains to anomalous experiences (Drewry, 2003; Evenden et al., 2013). Many of the items examining the role of positive and negative emotions were removed from the initial UPNAS questionnaire to reduce the length of the questionnaire following pilot testing (Chapter 3). However, retained questionnaire items reflecting general emotional support also failed to load onto factors within the final model. Given that positive emotions play a crucial role in enhancing coping resources in the face of negative events (Tugade, Fredrickson, & Barrett, 2004) and impact significantly on physical and mental health (Aspinwall & Leaf, 2002; Carver

& Scheier, 2002; Fredrickson, 2001; King & Miner, 2000), a further exploration of their role within paranormal coping appears warranted.

Another consideration which must be made when reviewing the factors which comprise paranormal coping is their uniqueness. Lazarus and Folkman's (1984) transactional model of stress and coping contains two core elements, appraisal and coping. Once an event has been judged as stressful as opposed to irrelevant or positive (primary appraisal) an individual evaluates their own abilities and resources, assessing how they could cope with the perceived stressful event (Lazarus, 1991). When these are outweighed by the demands of the situation coping efforts are employed as part of a continuous interaction between the person and environment. The reappraisal process occurs to help the individual understand if coping efforts have been successful or if further coping efforts should be employed (Lazarus, 1999; Lazarus & Folkman, 1984).

In line with this theory, and Irwin's (2009) PFH, paranormal belief was postulated to be a unique form of coping, distinct from more traditional coping categorisations. It was proposed that paranormal coping is comprised of a distinct set of interactions utilising Cognitive-Orientated Coping and Avoidance-Orientated Coping. These are activated by feelings of uncontrollability (Lack of Control) due to negative life events and reinforced by the veracity of a paranormal practitioner (Practitioner Authenticity). Paranormal coping is then utilised upon the occurrence of subsequent negative events, as a successful coping style (or one perceived as such). Whilst these factors are not unlike others within the coping field, it is the combination of such aspects which encompass a distinct paranormal coping style.

Alternatively, it is plausible when considering Lazarus and Folkman's (1984) transactional model of stress and coping, that paranormal services are merely used as a resource to cope with a specific event rather than a unique coping style. For instance, people may be predisposed to a particular type of coping based on individual

differences. Indeed, coping has been linked to gender (Brougham et al., 2009; Craciun, 2013; Eaton & Bradley, 2008; Matud, 2004), socio-economic status (Feldman & Steptoe, 2003; Ouwehand, de Ridder, & Bensing, 2009), and personality (Carver & Connor-Smith, 2010; Connor-Smith & Flachsbart, 2007). An individual who uses cognitive reappraisal strategies such as thinking differently about difficult situations, attempting to better understand desires, and distancing oneself from negativity, may channel this into their use of paranormal services. Equally, an individual who tends to avoid, deny, or disengage from a stressor may use paranormal services in a similar way. Although the current research supports the former hypothesis, the latter must be given due recourse in future research.

Similarly, further consideration should be given to the use of a broad characterisation of paranormal belief. The term paranormal was used to encompass traditional paranormal beliefs and experiences, and New Age beliefs and practices consistently throughout the research. As previously discussed (see Chapter 1), it was difficult to fully define the scope of the research, as many concepts intertwined and overlapped when considering paranormal, New Age, spiritual, and religious belief. Whilst core religious concepts, for example use of prayer and connectedness with God, were not considered in this research, many others were included. For example, the Revised Paranormal Beliefs Scale (RPBS; Tobayck, 2004) used to validate the UPNAS includes a traditional religious belief subscale, which contains items such as, “*There is a heaven and hell,*” “*I believe in God,*” and “*There is a devil.*” The New Age Philosophy subscale included items such as, “*Some individuals are able to levitate (lift) objects through mental forces*” and, “*Psychokinesis, the movement of objects through psychic powers does exist.*”

Another questionnaire used to validate the UPNAS was the New Age Orientation Scale (NAOS; Granqvist & Hagekull, 2001). Whilst both questionnaires

claim to measure endorsement of New Age concepts, they appear significantly different. The NAOS contains items such as, “*There are many ‘alternative treatments’ (e.g., Reiki healing, Rosen, Zone, Aura, Primal, reincarnation, Crystal and Chakra therapy) that are at least as effective as the regular medical treatments for bringing about Human well-being and health,*” and “*Everything that happens in an individual’s life has an underlying meaning that is important to try to comprehend.*” The items on the NAOS appear more aligned with definitions of spiritual coping, than wider paranormal beliefs (de Jager Meezenbroek et al., 2012). When using these questionnaires to validate the UPNAS questionnaire, the RPBS (both subscales) and the NAOS showed a substantially different relationship with the four UPNAS subscales (Cognitive-Orientated Coping, Avoidance-Orientated Coping, Lack of Control, and Practitioner Authenticity). This suggests that using a broad definition of paranormal belief may not be as appropriate as one which is more defined. The research has highlighted the importance of considering the development of different facets of paranormal belief and how these affect the motivations behind paranormal service use for coping. This requires a more thorough examination in future research.

Despite promising findings exploring the concept of paranormal coping, the current research did not provide irrefutable support for Irwin’s (2009) PFH. In fact, upon review of the developmental literature it appears that a lower sense of control in childhood, through (authoritative) parents implementing appropriate boundaries and consequences for poor behaviour (Baumrind, 1996; Maccoby & Martin 1983), engenders feelings of security, increased self-regulation, and a stronger sense of control in adulthood. Conversely, those children who experience a more laissez faire parenting style (and by implication, a stronger sense of childhood control) grow up with increased feelings of alienation, instability, and overall lower feelings of self-control in adulthood, a hypothesis supported by this research.

The implication for Irwin's (2009) PFH is that rather than a perceived lack of control in childhood, inappropriate parental control - at both ends of the spectrum - may be in part responsible for the development of paranormal belief (alongside trauma and maltreatment), and as a result a paranormal coping style in adulthood. However, there are many other experiences for example, bullying, bereavement, and illness which may also influence the development of paranormal belief (Lawrence et al., 1995). It is plausible that parents may act as a protective factor upon the occurrence of some negative early experiences by promoting resilience in their offspring (Bradley, Davis, Wingo, Mercer, & Ressler, 2013; Zakeri, Jowkar, & Razmjoe, 2010). Further research is essential to understand the role of perceived childhood control, its role in the development of paranormal belief and a paranormal coping style in adulthood.

Overall, understanding paranormal belief as a coping process is of great importance when attempting to understand how those experiencing stressful or challenging life events can be supported. As discussed, paranormal belief often occurs after negative life events (Raberyon & Watt, 2010) and has been consistently linked to childhood trauma, poor parent-child attachment, and inappropriate parenting styles. The current research suggests that paranormal practitioners present themselves as objective, professional, and trustworthy, and as such are perceived as compassionate, skilled, and their paranormal capabilities genuine. Participants come to view these practitioners as providing a professional service, an alternative therapy similar to counselling, a finding consistent with previous claims (Evenden, Cooper, & Mitchell, 2013; Osborne & Bacon, 2015). In contrast, "official" counselling services had a social stigma attached to their attendance, again a finding echoed in previous research (Komiya, Good, & Sherrod, 2000; Vogel, Wade, & Hackler, 2007; Vogel, Wester, Wei, & Boysen, 2005). This opinion was focused upon a belief that counsellors could not give direct advice or answers, rather they sat, listened, and reflected.

It is possible that individuals who may require subsequent psycho-therapeutic treatments (e.g., counselling and cognitive-behavioural therapy) in adulthood due to unresolved trauma or maltreatment are using paranormal services as they are more acceptable and relevant to their needs. Indeed, research examining how therapists deal with disclosure of anomalous phenomena supports this theory. Roxburgh and Evenden (2016b) reported that participants were concerned about sharing their experiences of anomalous phenomena with counsellors due to a fear of being labelled, “odd, crazy, barmy or mad.” In instances where experiences were disclosed within a therapeutic setting, participants spoke of feeling dismissed or silenced or misunderstood. Similarly, therapists report that they felt clients were apprehensive to discuss such experiences, due to fear about how these may be interpreted (Roxburgh & Evenden, 2016c). Many reported that they did not know how to sufficiently work with clients reporting anomalous phenomena or beliefs, but recognised the importance of understanding such events as common human experiences within their practice (Roxburgh & Evenden, 2016a). The current research (including using the UPNAS questionnaire) may help counselling and therapeutic services better understand the role of paranormal and other anomalous experiences as part of the coping process in the lives of clients reporting such phenomena.

Whilst more is now understood about those factors which comprise a paranormal coping style, whether this leads to positive or negative outcomes is yet to be examined. It is likely (as suggested by literature examining religious and spiritual coping, and continuing bonds) that psychological, physical, and emotional outcomes will be affected by a range of individual differences. Similarly, future research may also examine the role of mental health and its relation to paranormal coping. A large body of literature has associated paranormal belief with higher levels of schizotypy (Dagnall, Munley, Parker, & Drinkwater, 2010; Hergovich et al., 2008), delusion and

hallucination-proneness (Cella, Vellante, & Preti, 2012), and delusion-like beliefs (Pechey & Halligan, 2011). Based on the prevalence of paranormal belief in the general population (Moore, 2005; Newport & Strausberg, 2001), it is hardly viable that all paranormal believers are suffering from a mental illness. Equally, the large majority of individuals high in self-reported schizotypy never experience a psychiatric episode or mental illness (Chapman, Chapman, Kwapil, Eckblad, & Zinser, 1994; Gooding, Tallent, & Matts, 2005). However, a minority of individuals reporting paranormal beliefs, phenomena and/or a paranormal coping style may need additional mental health support. Any individual (e.g., therapist, counsellor) using the UPNAS Questionnaire should consider this possibility in order to provide the most appropriate support.

Similarly, the UPNAS questionnaire was developed in line with participants' experiences of, and engagement with, paranormal services within a Western culture. Whilst the participant sample used for the initial qualitative interviews were based in the North-West of England, subsequent samples encompassed individuals primarily from America, Canada, Australia, and New Zealand. It is possible that the current questionnaire may not be as suitable for those from Eastern cultures. For example, supernatural theories of illness far outnumber natural theories of illness in many cultures. Murdock (1980) found that a large percentage of 189 societies (e.g., in Sub-Saharan Africa, Circum Mediterranean East Asia, and the Insular Specific) were more likely to report spirit aggression (70-100%), sorcery (23-57%), mystical retribution (8-48%), and witchcraft (0-62%) as predominant causes of illness. As culture and social context has such important implications for health, illness (MacLachlan, 2006), and coping (See & Essau, 2010), it would be surprising if paranormal coping was not influenced by such factors.

The current research mainly focused on the development of paranormal belief in line with Irwin's (2009) PFH, where paranormal beliefs develop in childhood as a form

of coping with experiences of diminished control. This research only partly supported this theory, partly due to limitations associated with the use of the Perceived Childhood Control Questionnaire (PCCQ; Watt et al., 2007). Irwin (2009) also suggests that other predictors of paranormal belief act as mediators or moderators of this relationship. However, when reviewing theories of paranormal belief (Chapter 1), the Cognitive Deficits Hypothesis also presented a convincing argument, that paranormal belief and experience is the result of precise cognitive deficits in areas of reasoning, thinking, and memory, a notion supported at least in part by the current research. During the initial qualitative research (Chapter 2), interviewees demonstrated a susceptibility to cold-reading techniques (probabilistic reasoning ability) and the confirmation bias (memory recall) and predisposition for intuitive thinking (reasoning style). Indeed, in the final study in this thesis thinking style, namely higher Intuitive Thinking, explained a significant amount of the variance in Cognitive-Orientated Coping and Practitioner Authenticity scores, with an even stronger negative relationship between Rational Thinking and Avoidance-Orientated Coping. Overall it is likely that use of paranormal coping is also influenced by a variety of cognitive abilities. A deeper understanding of the interplay of factors (e.g., childhood maltreatment, cognitive abilities, personality, resilience, family functioning) associated with the development and continued endorsement of paranormal belief appears necessary to fully explain the findings presented in this thesis.

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APPENDICES

APPENDIX 1: ETHICAL APPROVAL (PSYSOC102-PHASE 1)



16 September 2013

Mike Eslea / Emma Lowrie
School of Psychology
University of Central Lancashire

Dear Mike / Emma

Re: PSYSOC Ethics Committee Application
Unique Reference Number: PSYSOC 102

The PSYSOC ethics committee has granted approval of your proposal application '**Paranormal Belief as a Unique form of Coping**'.

Please note that approval is granted up to the end of project date or for 5 years, whichever is the longer. This is on the assumption that the project does not significantly change, in which case, you should check whether further ethical clearance is required

We shall e-mail you a copy of the end-of-project report form to complete within a month of the anticipated date of project completion you specified on your application form. This should be completed, within 3 months, to complete the ethics governance procedures or, alternatively, an amended end-of-project date forwarded to roffice@uclan.ac.uk quoting your unique reference number.

Yours sincerely

Cath Sullivan
Chair
PSYSOC Ethics Committee

NB - Ethical approval is contingent on any health and safety checklists having been completed, and necessary approvals as a result of gained.



School of Psychology

University of Central Lancashire

Preston

Paranormal Belief as a Unique form of Coping

My name is Emma Lowrie, I am a PhD student conducting research at the University of Central Lancashire and I thank you for your time and interest in this study,

This study is looking to investigate in more detail people who use the parapsychological to explain real-life situations. Participants will be asked to answer a brief set of 20 questions relating to this topic. This study aims to research the various different reasons why people visit psychics/mediums, who in particular visit them and most importantly how it helps them to deal with problems or unexplainable difficulties within their own lives. You will also be asked to complete a short demographics questionnaire. This is only included to ensure that a wide variety of people including both genders, all races and educational backgrounds are sampled. No personal or intimate details are required as this study is completely anonymous.

Participating in this study is voluntary and you can withdraw from this study at any point before leaving the interview. Any data regarding names, places or any other identifying information will be changed in any publications or further research to ensure confidentiality. Information will only be used for academic research purposes and will remain completely confidential.

It is estimated that this interview will last around 45 minutes. The brief sheet for this research which will be provided to you at the end of the interview includes contact details of various welfare agencies and other charitable organisations. This is only in case recalling a time when psychics/mediums etc. have been used causes you any upset, there are a list of people who can help and be spoken to.

If you have any questions about this study please contact me at ELLowrie@Uclan.ac.uk or senior lecturer at the University of Central Lancashire Mike Eslea at MJEslea@Uclan.ac.uk. Thank you for your time and interest once more, it is greatly appreciated.

APPENDIX 3: DEMOGRAPHICS QUESTIONNAIRE

Demographics Questionnaire

Finally, it would be helpful if you would complete the following questions to help us categorise this information. You are reminded that all information will be treated in the strictest confidence and used only for research purposes

- 01 What is your gender? (please circle)
- | | |
|--------------|---|
| male | 1 |
| female | 2 |
-
- 02 What is your age? _____ yrs
-
- 03 What is your ethnicity?
- | | | |
|---------------------------------|----|-------|
| White - British | 1 | |
| White - Irish | 2 | |
| White - Other (specify) | 3 | _____ |
| Black Caribbean | 4 | |
| Black - African | 5 | |
| Black - Other (specify) | 6 | |
| Asian - Indian | 7 | _____ |
| Asian - Pakistani | 8 | |
| Asian - Bangladeshi | 9 | |
| Asian - Other (specify) | 10 | _____ |
| Chinese | 11 | |
| Mixed - White & Black Carib.... | 12 | |
| Mixed - White & Black African. | 13 | |
| Mixed -White & Asian | 14 | |
| Mixed - Other (specify) | 15 | _____ |
| Other (specify) | 16 | _____ |
-
- 04 What is your current occupational status?
- | | | |
|-------------------------------------|----|-------|
| Professional/Executive | 1 | |
| Managerial | 2 | |
| Administrative | 3 | |
| Skilled/Trade/Craft | 4 | |
| Semi Skilled | 5 | |
| Unskilled | 6 | |
| Self-employed (specify) | 7 | _____ |
| Unemployed | 8 | |
| Student (FT) (specify course) | 9 | _____ |
| Retired | 10 | |
| Homemaker | 11 | |
| Other (specify) | 12 | _____ |
-
05. What is your highest level of qualification obtained to date?
*Please specify subject
- | | | |
|----------------------------------|---|-------|
| No Qualifications | 1 | |
| GCSE / O'level | 2 | |
| A'level / Access | 3 | |
| HND / Undergrad Degree* | 4 | _____ |
| Professnl / Postgrad Degree*.... | 5 | _____ |
| Other (specify) | 6 | _____ |
-
06. What is your highest level of qualification obtained in *maths statistics and/or psychology* to date
*Please specify subject
- | | | |
|----------------------------------|---|-------|
| No Qualifications | 1 | |
| GCSE / O'level | 2 | |
| A'level / Access | 3 | |
| HND / Undergrad Degree* | 4 | _____ |
| Professnl / Postgrad Degree*.... | 5 | _____ |
| Other (specify) | 6 | _____ |

APPENDIX 4: DEBRIEF SHEET

Paranormal Belief as a Unique form of Coping



Dear Participant,

School of Psychology
University of Central Lancashire
Preston
Lancashire PR1 2HE

Thank you for completing this interview,

The aim of this research is to investigate whether people use paranormal beliefs as a unique type of coping strategy. Surveys have found that the majority of people believe in at least one aspect of the paranormal, and many believe in more. Therefore it appears to be conceivable that belief in the paranormal plays an important part in people's lives. If paranormal belief is a type of coping mechanism it could be used by many individuals and thus will have important implications both for the understanding of paranormal belief and of coping theory.

You are reminded that all data collected for this study will be used for research purposes only and that your responses will remain strictly confidential and anonymous. If you have been affected by any of the issues raised in this study, the organisations listed below may be able to help.

The Samaritans (Preston) – 01772822022 – www.samaritans.org

(People talk to us anytime they like, in their own way, and off the record - about whatever's getting to them).

Cruse Bereavement – 08444779400 –

www.crusebereavementcare.org.uk *(Somewhere to turn when someone dies)*

Once again, thank you for your participation. Please return your completed questionnaire to the researcher in person. If you would like any more information about this study please contact me at

APPENDIX 5: UPNAS QUESTIONNAIRE (VERSION 1)

Use of Paranormal and New Age Services Questionnaire (UPNAS)

This questionnaire aims to examine people’s use of paranormal and new age services. This includes use of paranormal and new age practitioners for example psychics, clairvoyants, fortune tellers, spiritual healers, past-life regression therapists and mediums. It also includes use of paranormal and new age services such as the use of tarot cards, horoscopes, crystals etc. From this point, these will all be referred to as paranormal and new age services. This questionnaire does not ask about use of religious services such as church attendance.

Please only fill in the survey if you have used paranormal or new age service on more than three occasions, if you are fluent in the English language and are over the age of 16 years.

1. What type of paranormal or new age services do you use and which is your preferred service to use?

Please tick in the first column if you use the service and write the order in which you prefer to use them in the second column. In this example “1” is the preferred service down to “3” the least preferred but still used service. See below.

Medium	✓	3
Psychic	✗	✗
Alternative Medicine	✓	1
Palm Reader	✓	2

Please fill in for your own preferences as demonstrated above.

Medium		
Spiritual Cleanser		
Past Life Regression		
Psychic (Clairvoyants & Fortune Tellers)		
Card Reader (Angel, Tarot, Spirit)		
Rune Reader		
Palm Reader		
Crystal Gazer		
Horoscopes (e.g. Newspapers, Magazines, Online)		
Healing (Crystals, Reiki, Energy)		
Astrology		
Alternative Medicine		
Dream Interpretation		
Other (Please Specify)		

2. How many times have you used a paranormal or new age service in your *lifetime*? Please tick the most appropriate.

0-3 times	4-7times	8-11 times	12-15 times	16-19 times	20-23 times	24+ times
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3. How many times in the *last year* have you used a paranormal or new age service?
Please tick the most appropriate.

0-3 times	4-7 times	8-11 times	12-15 times	16-19 times	20-23 times	24+ times
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4. How *often* do you use paranormal or new age services? Please tick the most appropriate.

One or more times per day	2-3 times per week	2-3 times per month	Once a month	2-3 times per year	Once a year	Less than once a year
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5. How much money do you spend visiting paranormal and New Age services per year?
Please tick the most appropriate.

£0-£49	£50-£99	£100-£149	£150-£199	£200-£249	£250-£299	£300+
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Please consider each of the statements below and decide whether or not it applies to you. Indicate how much you agree or disagree with each statement by circling the appropriate number from 1 ‘strongly disagree’ to 7 ‘strongly agree’. If the statement is not applicable to you or you do not wish to answer please circle N/A. Please work quickly and do not dwell on any single item.

strongly disagree	disagree	slightly disagree	neither	slightly agree	agree	strongly agree
1	2	3	4	5	6	7

I originally used paranormal and New Age services because

001.	As it was the only resource available to me at the time	1	2	3	4	5	6	7	N/A
002.	My friends/family use paranormal services	1	2	3	4	5	6	7	N/A
003.	I was curious	1	2	3	4	5	6	7	N/A
004.	Information can be obtained in ways that would otherwise not be possible	1	2	3	4	5	6	7	N/A
005.	I had no-one else that I could talk to	1	2	3	4	5	6	7	N/A
006.	They were recommended by someone I trust	1	2	3	4	5	6	7	N/A
007.	I needed information that I could not access by myself	1	2	3	4	5	6	7	N/A
008.	It was a bit of fun	1	2	3	4	5	6	7	N/A

I mainly use paranormal and New Age services for help with

009.	Romantic relationships	1	2	3	4	5	6	7	N/A
010.	Bereavement	1	2	3	4	5	6	7	N/A
011.	Family/Friends	1	2	3	4	5	6	7	N/A
012.	Health	1	2	3	4	5	6	7	N/A
013.	Abuse	1	2	3	4	5	6	7	N/A
014.	Career	1	2	3	4	5	6	7	N/A
015.	Money	1	2	3	4	5	6	7	N/A
016.	Argument	1	2	3	4	5	6	7	N/A
017.	Criminal Activity	1	2	3	4	5	6	7	N/A
018.	Educational Performance	1	2	3	4	5	6	7	N/A

I mainly use paranormal and New Age Services when

		1	2	3	4	5	6	7	N/A
019.	A negative event such as a relationship breakdown, illness or a bereavement occurs in my life	1	2	3	4	5	6	7	N/A
020.	I feel my life has become chaotic	1	2	3	4	5	6	7	N/A
021.	I am experiencing emotional distress	1	2	3	4	5	6	7	N/A
022.	I feel I have no other means of support	1	2	3	4	5	6	7	N/A
023.	I struggle to believe certain events have happened	1	2	3	4	5	6	7	N/A
024.	A positive event such as a promotion, good health or a new relationship occurs in my life	1	2	3	4	5	6	7	N/A
025.	Some aspect of my life suddenly changes	1	2	3	4	5	6	7	N/A
026.	I need to seek advice from someone with special abilities	1	2	3	4	5	6	7	N/A
027.	I need to know why something bad has happened to me	1	2	3	4	5	6	7	N/A
028.	Counselling has been unable to help me	1	2	3	4	5	6	7	N/A
029.	I need help with non-emotional issues such as my money & career	1	2	3	4	5	6	7	N/A
030.	Modern medicine has not helped me	1	2	3	4	5	6	7	N/A
031.	I don't trust my own decision making	1	2	3	4	5	6	7	N/A
032.	There is nothing else I can do about a particular situation	1	2	3	4	5	6	7	N/A
033.	I need to discuss my feelings with someone	1	2	3	4	5	6	7	N/A
034.	Religion has been unable to help me	1	2	3	4	5	6	7	N/A
035.	Friends and family have been unable to help me	1	2	3	4	5	6	7	N/A
036.	I need guidance from someone who can "see" future events	1	2	3	4	5	6	7	N/A
037.	I feel rejected by other people	1	2	3	4	5	6	7	N/A

Paranormal and New Age services help me

038.	To make sense of events in my life	1	2	3	4	5	6	7	N/A
039.	By providing me with emotional support after a negative event	1	2	3	4	5	6	7	N/A
040.	Receive a message from a deceased family member or friend	1	2	3	4	5	6	7	N/A
041.	Make important decisions in my life	1	2	3	4	5	6	7	N/A
042.	As they often "know" more than my friends/family	1	2	3	4	5	6	7	N/A
043.	Even though it does not take me long to recover from a stressful event	1	2	3	4	5	6	7	N/A
044.	As they provide information that couldn't have been known via any non-paranormal means	1	2	3	4	5	6	7	N/A
045.	To anticipate difficult circumstances	1	2	3	4	5	6	7	N/A
046.	To find the positive in negative situations	1	2	3	4	5	6	7	N/A

047.	To motivate myself when facing difficulties in my life	1	2	3	4	5	6	7	N/A
048.	To deal with physical illnesses where doctors have failed	1	2	3	4	5	6	7	N/A
049.	Contact the spirits of people from my past	1	2	3	4	5	6	7	N/A
050.	To access otherwise “unknown” information about a situation	1	2	3	4	5	6	7	N/A
051.	Even though I usually come through difficult times with little trouble.	1	2	3	4	5	6	7	N/A
052.	As they offer me something else to rely on	1	2	3	4	5	6	7	N/A
053.	Grow as a person	1	2	3	4	5	6	7	N/A
054.	Solve my problems	1	2	3	4	5	6	7	N/A
055.	See a negative situation in a different light	1	2	3	4	5	6	7	N/A
056.	Get revenge on another person who has wronged me	1	2	3	4	5	6	7	N/A
057.	Get answers to my questions about future events	1	2	3	4	5	6	7	N/A
058.	Look at a situation in order to understand it better	1	2	3	4	5	6	7	N/A
059.	By “sensing” the outcome of personal relationships	1	2	3	4	5	6	7	N/A
060.	Express my feelings more easily	1	2	3	4	5	6	7	N/A
061.	Obtain specific information that nobody else could give me	1	2	3	4	5	6	7	N/A
062.	Get answers to my questions about past events	1	2	3	4	5	6	7	N/A
063.	Develop my goals	1	2	3	4	5	6	7	N/A
064.	Take direct action to get around a problem	1	2	3	4	5	6	7	N/A
065.	As otherwise I tend to take a long time to get over setbacks in my life.	1	2	3	4	5	6	7	N/A
066.	Achieve my dreams	1	2	3	4	5	6	7	N/A
067.	Think hard about what steps to take in the future	1	2	3	4	5	6	7	N/A
068.	Face up to my fears	1	2	3	4	5	6	7	N/A
069.	Even though they don’t have any extra information that I can’t access myself	1	2	3	4	5	6	7	N/A
070.	Avoid something bad happening in the future	1	2	3	4	5	6	7	N/A
071.	Understand situations I struggle to deal with	1	2	3	4	5	6	7	N/A
072.	Move forward after unexpected changes in my life	1	2	3	4	5	6	7	N/A
073.	Change something so things turn out for the better	1	2	3	4	5	6	7	N/A
074.	Put my plans into action	1	2	3	4	5	6	7	N/A
075.	Learn more about myself	1	2	3	4	5	6	7	N/A
076.	Gain a different perspective of my problems	1	2	3	4	5	6	7	N/A
077.	Concentrate my efforts on solving my problems	1	2	3	4	5	6	7	N/A
078.	Make sure I do not make matters worse by acting too soon	1	2	3	4	5	6	7	N/A
079.	As it’s hard for me to snap back when something bad happens.	1	2	3	4	5	6	7	N/A
080.	Understand my feelings	1	2	3	4	5	6	7	N/A
081.	Learn more about other people that I know	1	2	3	4	5	6	7	N/A

After using paranormal and New Age services I feel

082.	Comforted	1	2	3	4	5	6	7	N/A
083.	Optimistic	1	2	3	4	5	6	7	N/A
084.	Reassured	1	2	3	4	5	6	7	N/A
085.	Sad	1	2	3	4	5	6	7	N/A
086.	Upset	1	2	3	4	5	6	7	N/A
087.	Worried	1	2	3	4	5	6	7	N/A
088.	Calmer	1	2	3	4	5	6	7	N/A
089.	More positive	1	2	3	4	5	6	7	N/A
090.	Better	1	2	3	4	5	6	7	N/A
091.	Alone	1	2	3	4	5	6	7	N/A

092.	Angry	1	2	3	4	5	6	7	N/A
093.	Anxious	1	2	3	4	5	6	7	N/A
094.	Worried	1	2	3	4	5	6	7	N/A
095.	Pressured	1	2	3	4	5	6	7	N/A
096.	Happier	1	2	3	4	5	6	7	N/A
097.	Hopeful	1	2	3	4	5	6	7	N/A
098.	Protected (as though someone is looking after me)	1	2	3	4	5	6	7	N/A
099.	I have a better understanding of my desires	1	2	3	4	5	6	7	N/A
100.	Confused	1	2	3	4	5	6	7	N/A
101.	Afraid	1	2	3	4	5	6	7	N/A
102.	More in control of my life	1	2	3	4	5	6	7	N/A

I prefer to use paranormal and New Age services

103.	As I wouldn't go to a counsellor	1	2	3	4	5	6	7	N/A
104.	Despite the fact they are not recognised by any professional body	1	2	3	4	5	6	7	N/A
105.	As religion places too many controls over people	1	2	3	4	5	6	7	N/A
106.	As they are more objective than other forms of support	1	2	3	4	5	6	7	N/A
107.	As this way I don't have to deal directly with any problems I have	1	2	3	4	5	6	7	N/A
108.	As I receive immediate answers to my questions	1	2	3	4	5	6	7	N/A
109.	Even though they do not always understand my question	1	2	3	4	5	6	7	N/A
110.	As practitioners understand I am different to other people	1	2	3	4	5	6	7	N/A
111.	As I have previously been given information that impressed me	1	2	3	4	5	6	7	N/A
112.	Even though attending a religious ceremony is as good as visiting a paranormal/New Age practitioner	1	2	3	4	5	6	7	N/A
113.	As I am always given positive feedback	1	2	3	4	5	6	7	N/A
114.	As I have previously been given information that I knew was true at the time that I had not disclosed	1	2	3	4	5	6	7	N/A
115.	As it prevents other people from knowing how bad things are	1	2	3	4	5	6	7	N/A
116.	As I am told what I need to hear at the time	1	2	3	4	5	6	7	N/A
117.	As practitioners understand I am a unique person with individual problems	1	2	3	4	5	6	7	N/A
118.	As counselling is just a job someone has to do	1	2	3	4	5	6	7	N/A
119.	As practitioners provide expert help	1	2	3	4	5	6	7	N/A
120.	Even though I am sometimes given false information	1	2	3	4	5	6	7	N/A
121.	As I cannot look to a God for help	1	2	3	4	5	6	7	N/A
122.	As counsellors are paid to sit and listen	1	2	3	4	5	6	7	N/A
123.	Even though I am sometimes given negative feedback	1	2	3	4	5	6	7	N/A
124.	As I do not feel comfortable seeking help from a member of the clergy or priesthood	1	2	3	4	5	6	7	N/A
125.	Even though I trust their opinion less than those of my family/friends	1	2	3	4	5	6	7	N/A
126.	As I don't need to see a counsellor	1	2	3	4	5	6	7	N/A
127.	As sessions are personalised to my individual needs	1	2	3	4	5	6	7	N/A
128.	As religion is unrealistic	1	2	3	4	5	6	7	N/A
129.	Even though counselling is as effective	1	2	3	4	5	6	7	N/A
130.	As practitioners are always truthful	1	2	3	4	5	6	7	N/A
131.	As my friends/family "project" their own feelings on to my situations	1	2	3	4	5	6	7	N/A
132.	As I don't have to do anything else for the problem to go away	1	2	3	4	5	6	7	N/A

133.	As practitioners have previously given me information that turned out to be true at a later date	1	2	3	4	5	6	7	N/A
134.	As practitioners understand that every person is unique in some way	1	2	3	4	5	6	7	N/A
135.	As counselling does not give me the feedback I desire	1	2	3	4	5	6	7	N/A
136.	Even though my friends and family give advice that is as honest	1	2	3	4	5	6	7	N/A
137.	As too many things happen to good people for me to believe that religion could help me	1	2	3	4	5	6	7	N/A
138.	Even though talking to God is effective in helping me	1	2	3	4	5	6	7	N/A
139.	As they help me distance myself from negative people/situations/influences	1	2	3	4	5	6	7	N/A
140.	As I get indirect answers to my questions	1	2	3	4	5	6	7	N/A
141.	As God does not give me the immediate response I need	1	2	3	4	5	6	7	N/A
142.	As God can't watch over everyone at once	1	2	3	4	5	6	7	N/A
143.	As I see practitioners as professionals	1	2	3	4	5	6	7	N/A
144.	Practitioners know I am the same as everybody else	1	2	3	4	5	6	7	N/A

APPENDIX 6: ETHICAL APPROVAL PSYSOC102-PHASE 2)



20 October 2014

Gayle Brewer / Mike Eslea / Emma Lowrie
School of Psychology
University of Central Lancashire

Dear Gayle, Mike & Emma

Re: PSYSOC Ethics Committee Application
Unique Reference Number: PSYSOC 102_2nd phase

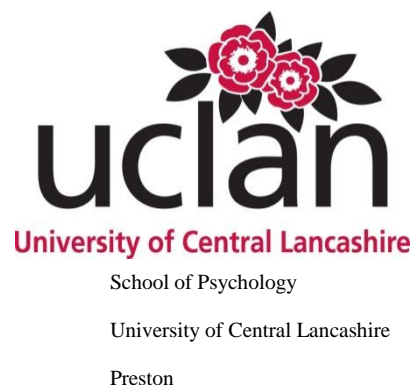
The PSYSOC ethics committee has granted approval of your proposal application '**Paranormal Belief as a Unique Form of Coping**'. Approval is granted up to the end of project date* or for 5 years from the date of this letter, whichever is the longer. It is your responsibility to ensure that

- the project is carried out in line with the information provided in the forms you have submitted
- you regularly re-consider the ethical issues that may be raised in generating and analysing your data
- any proposed amendments/changes to the project are raised with, and approved, by Committee
- you notify roffice@uclan.ac.uk if the end date changes or the project does not start
- serious adverse events that occur from the project are reported to Committee
- a closure report is submitted to complete the ethics governance procedures (Existing paperwork can be used for this purposes e.g. funder's end of grant report; abstract for student award or NRES final report. If none of these are available use [e-Ethics Closure Report Proforma](#)).

Yours sincerely

A handwritten signature in black ink, appearing to read 'C Larkins', written in a cursive style.

Cath Larkins
Deputy Vice-Chair
PSYSOC Ethics Committee



Use of Paranormal & New Age Services (UPNAS) Study

Thank you for your time and interest in this study.

My name is Emma Lowrie. I am currently a PhD student at the University of Central Lancashire (Preston) conducting research into peoples' use of paranormal and New Age "services" including those provided by, but not limited to, psychics, clairvoyants, fortune tellers, spiritual healers, past-life regression therapists and mediums. In particular the current research is exploring the various reasons why people use these paranormal services and how these help people to deal with problems or unexplainable difficulties within their own lives.

The current study involves completion of a questionnaire. Participation in this study is voluntary and if you decide to take part but later change your mind, you can withdraw from this study at any point before returning / submitting the questionnaire. Information will only be used for academic research purposes and will remain completely anonymous.

The questionnaire contains approximately 150 statements relating to paranormal and New Age Services. If you take part, you will be asked to indicate the extent to which you agree or disagree with each statement, using the 1-7 scale provided. For example if you strongly disagree with the first statement circle "1"; if you strongly agree with it circle "7" and if you neither agree nor disagree with it circle "4". Whilst we ask that those taking part rate as many statements as quickly as they can, if you are unsure of a statement's meaning or you do not wish to answer the question you may leave it blank. If a statement does not apply to you, there is a not applicable "N/A" option.

A short questionnaire seeking information about yourself is also included to ensure that a wide variety of people (both genders, a range of age groups, ethnicities and educational backgrounds) are sampled. A detachable "debrief sheet" giving details of various welfare organisations is supplied at the end of the questionnaire. Therefore if recalling a time when psychics/mediums etc. have been used causes you any upset, there is a list of people who can help. It is estimated that it will take around 25-30 minutes to complete both questionnaires.

Rest assured that no personally identifiable information (e.g., your name, telephone number) is required as this study is completely anonymous. Only myself and my supervisors will see the finished questionnaires and these will not be passed on to any

third party organisation. General findings will form part of my PhD thesis and, as is common practice, may be presented at academic conferences and/or submitted to academic journals for publication.

You will also be asked for feedback about the questionnaire such as how easy it was to complete, if there were any questions that were not clear and if you believe anything has been missed from the questionnaire. If possible any other comments you feel could improve the questionnaire would be much appreciated.

If you have any questions about this study please contact me at the above address or via email at ELLowrie@uclan.ac.uk. Alternatively, you may contact one of my PhD supervisors Dr Rachel Tarling, Dr Mike Elsea or Dr Gayle Brewer at the same address or via GBrewer@uclan.ac.uk. Please return you completed questionnaire to me at:

Emma Lowrie
UPNAS Study
School of Psychology
University of Central Lancashire
Preston
Lancashire PR1 2HE
UK

Thank you for your time and interest once more, it is greatly appreciated.

Emma Lowrie
PhD Student
School of Psychology
UCLan

If you are unhappy or have concerns about any aspect of the project at any time, you can contact the Dean of the School of Psychology, Professor Linden Ball, School of Psychology, University of Central Lancashire, Preston PR1 2HE; email LBall@uclan.ac.uk or telephone 01772 893421. He is entirely independent of the research and will respond to your concerns.

Use of Paranormal & New Age Services (UPNAS) Study



School of Psychology

University of Central Lancashire

Prenton

Thank you for completing this questionnaire,

The aim of this research is to investigate people's use of paranormal and New Age services. Previous surveys have found that the majority of people believe in at least one aspect of the paranormal and it is conceivable that such beliefs play an important part in peoples' everyday lives.

Evidence also suggest people are more likely to "activate" their paranormal beliefs during times of high stress such as following a job loss, implying these beliefs are used as a form of coping. If true, this may have important implications both for the understanding of both paranormal belief and coping theory.

You are reminded that all information collected for this study will be used for academic research purposes only and that your responses will remain strictly confidential and anonymous. If you have been affected by any of the issues raised in this study, the organisations listed below may be able to help.

Organisation	Telephone	Web
Samaritans	(01772) 822 022	www.samaritans.org
Cruse Bereavement	(08444) 779 400	www.crusebereavementcare.org.uk
Society for Psychical Research (SPR)	via website only	www.spr.ac.uk/contact

Please return your completed questionnaire to the researcher in person or via post at the address given below/overleaf. If you have any questions about this study or would like a summary of the overall results please contact me at the same address or via email at ELLowrie@uclan.ac.uk. Alternatively, you may contact my PhD supervisors Dr Gayle Brewer via GBrewer@uclan.ac.uk.

Emma Lowrie
UPNAS Study
School of Psychology
University of Central Lancashire
Preston
Lancashire PR1 2HE
UK

You may keep this final "debrief" page if you would like to.

Once again, thank you for your participation.

If you are unhappy or have concerns about any aspect of the project at any time, you can contact the Dean of the School of Psychology, Professor Linden Ball, School of Psychology, University of Central Lancashire, Preston PR1 2HE; email LBall@uclan.ac.uk or telephone 01772 893421. He is entirely independent of the research and will respond to your concerns.

APPENDIX 9: UPNAS QUESTIONNAIRE (VERSION 2)

Use of Paranormal and New Age Services Questionnaire (UPNAS)

This questionnaire aims to examine people’s use of paranormal and new age services. This includes use of paranormal and new age practitioners for example psychics, clairvoyants, fortune tellers, spiritual healers, past-life regression therapists and mediums. It also includes use of paranormal and new age services such as the use of tarot cards, horoscopes, crystals etc. From this point, these will all be referred to as paranormal and new age services

Please only fill in the survey if you have used paranormal or new age service on more than three occasions, are fluent in the English language and over 16 years old.

“You may feel that some of the questions do not apply to you, however you would be encouraged to attempt to answer these questions with your honest opinion as often as possible.”

1. Please select the paranormal or new age services that you have previously used

Medium	
Spiritual Cleanser	
Past Life Regression	
Psychic (Clairvoyants & Fortune Tellers)	
Card Reader (Angel, Tarot, Spirit)	
Rune Reader	
Palm Reader	
Crystal Gazer	
Horoscopes (e.g. Newspapers, Magazines, Online)	
Healing (Crystals, Reiki, Energy)	
Astrology	
Alternative Medicine	
Dream Interpretation	
Other (Please Specify)	

2. Which three paranormal and new age services from the list above do you prefer to use? (If you do not use three different services please just write in one or two).

1.
2.
3.

3. How many times have you used a paranormal or new age service in your *lifetime*?
Please tick the most appropriate.

0-3 times	4-7times	8-11 times	12-15 times	16-19 times	20-23 times	24+ times
-----------	----------	------------	-------------	-------------	-------------	-----------

4. How many times in the *last year* have you used a paranormal or new age service?
Please tick the most appropriate.

0-3 times	4-7 times	8-11 times	12-15 times	16-19 times	20-23 times	24+ times
-----------	-----------	------------	-------------	-------------	-------------	-----------

5. How *often* do you use paranormal or new age services? Please tick the most appropriate.

One or more times per day	2-3 times per week	2-3 times per month	Once a month	2-3 times per year	Once a year	Less than once a year
---------------------------	--------------------	---------------------	--------------	--------------------	-------------	-----------------------

6. How much money do you spend visiting paranormal and New Age services per year?
Please tick the most appropriate.

£0-£49	£50-£99	£100-£149	£150-£199	£200-£249	£250-£299	£300+
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Please consider each of the statements below and decide whether or not it applies to you. Indicate how much you agree or disagree with each statement by circling the appropriate number from 1 'strongly disagree' to 7 'strongly agree'. If the statement is not applicable to you or you do not wish to answer please circle N/A. Please work quickly and do not dwell on any single item.

strongly disagree	disagree	slightly disagree	neither	slightly agree	Agree	strongly agree
1	2	3	4	5	6	7

I originally used paranormal and New Age services

001. As I had no-one else that I could talk to 1 2 3 4 5 6 7 N/A
002. As I needed information that I could not access by myself 1 2 3 4 5 6 7 N/A

003.	My friends/family use paranormal services	1	2	3	4	5	6	7	N/A
004.	They were recommended by someone I trust	1	2	3	4	5	6	7	N/A
005.	I was curious	1	2	3	4	5	6	7	N/A
006.	As a last resort	1	2	3	4	5	6	7	N/A

I usually use paranormal and New Age services for help with

007.	Bereavement	1	2	3	4	5	6	7	N/A
008.	Romantic Relationships	1	2	3	4	5	6	7	N/A
009.	Family/Friends	1	2	3	4	5	6	7	N/A
010.	Health	1	2	3	4	5	6	7	N/A
011.	Career/Educational Performance	1	2	3	4	5	6	7	N/A
012.	Money	1	2	3	4	5	6	7	N/A

I mainly use paranormal and New Age services when

013.	A negative event has occurred in my life such as a relationship breakdown, illness or a family member/friend's death	1	2	3	4	5	6	7	N/A
014.	I feel my life has become chaotic	1	2	3	4	5	6	7	N/A
015.	I have experienced emotional distress	1	2	3	4	5	6	7	N/A
016.	I feel I have no other means of support	1	2	3	4	5	6	7	N/A
017.	I anticipate difficult circumstances	1	2	3	4	5	6	7	N/A
018.	I need to change something so that things would turn out alright	1	2	3	4	5	6	7	N/A
019.	I struggle to believe certain events have happened	1	2	3	4	5	6	7	N/A
020.	I need to seek advice from someone with special abilities on what to do	1	2	3	4	5	6	7	N/A
021.	A positive event has occurred in my life such as a promotion, good health or a new relationship	1	2	3	4	5	6	7	N/A
022.	Something has changed suddenly in my life	1	2	3	4	5	6	7	N/A
023.	I need help with non-emotional issues (e.g. money & career)	1	2	3	4	5	6	7	N/A
024.	Family or friends have been unable to help me	1	2	3	4	5	6	7	N/A
025.	I want to take direct action to address a problem	1	2	3	4	5	6	7	N/A
026.	I don't trust my own decision making	1	2	3	4	5	6	7	N/A
027.	I felt rejected by other people	1	2	3	4	5	6	7	N/A
028.	I need to access more "unknown" information about a situation	1	2	3	4	5	6	7	N/A
029.	I need help to solve my problems	1	2	3	4	5	6	7	N/A
030.	I need to view a negative situation in a different light	1	2	3	4	5	6	7	N/A
031.	Modern medicine has not helped me	1	2	3	4	5	6	7	N/A

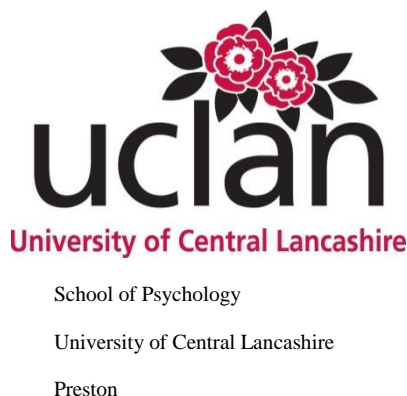
Paranormal and New Age services help me

032.	By providing me with support after a negative event	1	2	3	4	5	6	7	N/A
033.	Feel more in control of my life	1	2	3	4	5	6	7	N/A
034.	As they help me make sense of events in my life	1	2	3	4	5	6	7	N/A
035.	Make important decisions in my life	1	2	3	4	5	6	7	N/A
036.	Look at a situation in order to understand it better	1	2	3	4	5	6	7	N/A
037.	Think hard about what steps to take in the future	1	2	3	4	5	6	7	N/A
038.	As they give me something else to rely on	1	2	3	4	5	6	7	N/A

039.	To keep others from knowing how bad things are	1	2	3	4	5	6	7	N/A
040.	Avoid something bad happening	1	2	3	4	5	6	7	N/A
041.	When there is nothing else I can do about a negative situation	1	2	3	4	5	6	7	N/A
042.	As they can contact the spirits of people from my past	1	2	3	4	5	6	7	N/A
043.	As they can “sense” the outcome of a current/future personal relationship	1	2	3	4	5	6	7	N/A
044.	As it’s hard for me to snap back when something bad happens	1	2	3	4	5	6	7	N/A
045.	To get immediate answers to my questions	1	2	3	4	5	6	7	N/A
046.	To learn more about other people that I know	1	2	3	4	5	6	7	N/A
047.	To learn more about myself	1	2	3	4	5	6	7	N/A
048.	Have a better understanding of my desires	1	2	3	4	5	6	7	N/A
049.	By giving me accurate information	1	2	3	4	5	6	7	N/A
050.	By providing me with information I knew to be true	1	2	3	4	5	6	7	N/A

I like to use paranormal and New Age services

		1	2	3	4	5	6	7	N/A
051.	As they are objective	1	2	3	4	5	6	7	N/A
052.	As they are always truthful	1	2	3	4	5	6	7	N/A
053.	As they help me understand situations that I struggle to deal with	1	2	3	4	5	6	7	N/A
054.	As then I don’t have to deal directly with a problem	1	2	3	4	5	6	7	N/A
055.	To make sure that I do not make matters worse by acting too soon	1	2	3	4	5	6	7	N/A
056.	Even though I trust their opinion less than my family/friends	1	2	3	4	5	6	7	N/A
057.	As my friends/family project their own feelings on to my situations	1	2	3	4	5	6	7	N/A
058.	To receive guidance from someone who can “see” future events	1	2	3	4	5	6	7	N/A
059.	To receive a message from a deceased family member or friend	1	2	3	4	5	6	7	N/A
060.	As they are personalised to my needs	1	2	3	4	5	6	7	N/A
061.	As they understand I am a unique person with individual problems	1	2	3	4	5	6	7	N/A
062.	As they see that I am exactly the same as everyone else	1	2	3	4	5	6	7	N/A
063.	As they always give me negative feedback	1	2	3	4	5	6	7	N/A
064.	As they always give me positive feedback	1	2	3	4	5	6	7	N/A
065.	As they told me what I wanted to hear at the time	1	2	3	4	5	6	7	N/A
066.	To face up to my fears	1	2	3	4	5	6	7	N/A
067.	To develop my goals	1	2	3	4	5	6	7	N/A
068.	As they have previously given me information that made me believe them more	1	2	3	4	5	6	7	N/A
069.	To distance myself from negative people/influences	1	2	3	4	5	6	7	N/A
070.	To get even/revenge	1	2	3	4	5	6	7	N/A
071.	As they “know” more than my friends/family	1	2	3	4	5	6	7	N/A
072.	As they have a special gift for knowing things other do not	1	2	3	4	5	6	7	N/A
073.	As I see them as a professional source of information	1	2	3	4	5	6	7	N/A
074.	As they provide expert help	1	2	3	4	5	6	7	N/A
075.	Even though they have given me false information	1	2	3	4	5	6	7	N/A



Use of Paranormal & New Age Services (UPNAS) Study

Thank you for your time and interest in this study.

My name is Emma Lowrie. I am currently a PhD student at the University of Central Lancashire (Preston) conducting research into peoples' use of paranormal and New Age "services" including those provided by, but not limited to, psychics, clairvoyants, fortune tellers, spiritual healers, past-life regression therapists and mediums. In particular the current research is exploring the various reasons why people use these paranormal services and how these help people to deal with problems or unexplainable difficulties within their own lives.

The current study involves completion of a questionnaire. Participation in this study is voluntary and if you decide to take part but later change your mind, you can withdraw from this study at any point before returning / submitting the questionnaire. Information will only be used for academic research purposes and will remain completely anonymous.

The questionnaire contains approximately 100 statements relating to paranormal and New Age Services. If you take part, you will be asked to indicate the extent to which you agree or disagree with each statement, using the 1-7 scale provided. For example if you strongly disagree with the first statement circle "1"; if you strongly agree with it circle "7" and if you neither agree nor disagree with it circle "4". Whilst we ask that those taking part rate as many statements as quickly as they can, if you are unsure of a statement's meaning or you do not wish to answer the question you may leave it blank. If a statement does not apply to you, there is a not applicable "N/A" option.

A short questionnaire seeking information about yourself is also included to ensure that a wide variety of people (both genders, a range of age groups, ethnicities and educational backgrounds) are sampled. A "debrief sheet" giving details of various welfare organisations is supplied at the end of the questionnaire. Therefore if recalling a time when psychics/mediums etc. have been used causes you any upset, there is a list of people who can help. It is estimated that it will take around 25-30 minutes to complete both questionnaires.

Rest assured that no personally identifiable information (e.g., your name, telephone number) is required as this study is completely anonymous. Only myself and my

supervisors will see the finished questionnaires and these will not be passed on to any third party organisation. General findings will form part of my PhD thesis and, as is common practice, may be presented at academic conferences and/or submitted to academic journals for publication.

If you have any questions about this study please contact me at the below address or via email at ELLowrie@uclan.ac.uk. Alternatively, you may contact one of my PhD supervisors Dr Rachel Tarling, Dr Mike Elsea or Dr Gayle Brewer at the same address or via GBrewer@uclan.ac.uk. Please return you completed questionnaire to me at:

Emma Lowrie
UPNAS Study
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University of Central Lancashire
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Thank you for your time and interest once more, it is greatly appreciated.

Emma Lowrie
PhD Student
School of Psychology
UCLan

If you are unhappy or have concerns about any aspect of the project at any time, you can contact the Dean of the School of Psychology, Professor Linden Ball, School of Psychology, University of Central Lancashire, Preston PR1 2HE; email LBall@uclan.ac.uk or telephone 01772 893421. He is entirely independent of the research and will respond to your concerns.

**INTERESTED IN
NEW AGE OR PARANORMAL
SERVICES?**



IF YOU HAVE VISITED A PSYCHIC, MEDIUM, CRYSTAL HEALER OR OTHER PARANORMAL OR NEW AGE SERVICE AT LEAST THREE TIMES, YOU COULD TAKE PART IN THIS EXCITING RESEARCH PROJECT.

PLEASE SPARE 15 MINUTES TO COMPLETE THE ONLINE QUESTIONNAIRE AT <http://www.surveymonkey.com>

OR, FOR MORE INFORMATION, EMAIL ellowrie@uclan.ac.uk



APPENDIX 12: ETHICAL APPROVAL (PSYSOC102- PHASE 3)

22nd December 2015

Gayle Brewer / Mike Eslea / Emma Lowrie
School of Psychology
University of Central Lancashire



Dear Gayle, Mike & Emma

Re: PSYSOC Ethics Committee Application
Unique Reference Number: PSYSOC 102_3rd phase

The PSYSOC ethics committee has granted approval of your proposal application '**Paranormal Belief as a Unique Form of Coping**'. Approval is granted up to the end of project date* or for 5 years from the date of this letter, whichever is the longer. It is your responsibility to ensure that

- the project is carried out in line with the information provided in the forms you have submitted
- you regularly re-consider the ethical issues that may be raised in generating and analysing your data
- any proposed amendments/changes to the project are raised with, and approved, by Committee
- you notify roffice@uclan.ac.uk if the end date changes or the project does not start
- serious adverse events that occur from the project are reported to Committee
- a closure report is submitted to complete the ethics governance procedures (Existing paperwork can be used for this purposes e.g. funder's end of grant report; abstract for student award or NRES final report. If none of these are available use [e-Ethics Closure Report Proforma](#)).

Yours sincerely,

A handwritten signature in blue ink, appearing to read "C Larkins".

Cath Larkins
Deputy Vice-Chair
PSYSOC Ethics Committee

APPENDIX 13: UPNAS QUESTIONNAIRE (VERSION 3)

Use of Paranormal and New Age Services (UPNAS) Questionnaire

1. Please select the paranormal or new age services that you have previously used

Medium	
Spiritual Cleanser	
Past Life Regression	
Psychic (Clairvoyants & Fortune Tellers)	
Card Reader (Angel, Tarot, Spirit)	
Rune Reader	
Palm Reader	
Crystal Gazer	
Horoscopes (e.g. Newspapers, Magazines, Online)	
Healing (Crystals, Reiki, Energy)	
Astrology	
Alternative Medicine	
Dream Interpretation	
Other (Please Specify)	

2. Which three paranormal and new age services from the list above do you prefer to use? (If you do not use three different services please just write in one or two).

1.
2.
3.

3. How many times have you used a paranormal or new age service in your *lifetime*? Please select the most appropriate.

0-3 times	4-7times	8-11 times	12-15 times	16-19 times	20-23 times	24+ times

4. How many times in the *last year* have you used a paranormal or new age service? Please select the most appropriate.

0-3 times	4-7times	8-11 times	12-15 times	16-19 times	20-23 times	24+ times

5. How *often* do you use paranormal or new age services? Please select the most appropriate.

One or more times per day	2-3 times per week	2-3 times per month	Once a month	2-3 times per year	Once a year	Less than once a year

6. How much money do you spend visiting paranormal and New Age services per year? Please tick the most appropriate.

£0-£49	£50-£99	£100-£149	£150-£199	£200-£249	£250-£299	£300+

To complete this questionnaire please reflect upon the times that you have previously visited a paranormal or New Age service and the reasons why. Please consider each of the statements below and decide whether or not it applies to you. *Indicate how much you agree or disagree with each statement by circling the appropriate number from 1 'strongly disagree' to 7 'strongly agree'.*

<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Slightly Disagree</i>	<i>Neither</i>	<i>Slightly Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
1	2	3	4	5	6	7

I mainly use paranormal and New Age services when

- | | | | | | | | | |
|-----|----------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 01. | I have experienced emotional distress | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 02. | A positive event has occurred in my life such as a promotion, good health or a new relationship | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 03. | A negative event has occurred in my life such as a relationship breakdown, illness or a family member/friend's death | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 04. | I need to change something so things will turn out alright | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 05. | I feel my life has become chaotic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 06. | I want to take direct action to address a problem | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 07. | I struggle to believe certain events have happened | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 08. | I need help with non-emotional issues | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 09. | I anticipate difficult circumstances | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. | I need to learn more about myself | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

I like to use paranormal practitioners

- | | | | | | | | | |
|-----|-------------------------------------------------------------------|---|---|---|---|---|---|---|
| 11. | As they provide me with information I know to be true | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. | As they can contact the spirits of people from my past | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. | As they are honest | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. | When friends or family have been unable to help me | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. | As they are objective | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. | When I've felt rejected by other people | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. | As they are truthful | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. | Even though I trust their opinion less than my family and friends | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19. | As they provide expert help | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

- | | | | | | | | | |
|-----|-----------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 20. | To receive guidance from someone who can “see” future events | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 21. | As they give me positive feedback | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 22. | When I don’t trust my own decision making | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 23. | Even though they give me negative feedback | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 24. | As they understand I am a unique person with individual problems | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 25. | As they can “sense” the outcome of a current/future personal relationship | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 26. | As they have previously given me information that made me believe them more | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Paranormal and New Age services help me

- | | | | | | | | | |
|-----|------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 27. | Feel more in control of my life | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 28. | Avoid something bad happening | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 29. | Understand situations I struggle to deal with | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 30. | Make important decisions in my life | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 31. | Get even/vengeance on someone | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 32. | When I need to seek advice from someone with special abilities on what to do | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 33. | By giving me accurate information | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 34. | Even though they have given me false information | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 35. | Think hard about what steps to take in the future | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 36. | As they are personalised to my needs | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 37. | To develop my goals | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 38. | As I was told what I wanted to hear at the time | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 39. | Look at a situation in order to understand it better | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 40. | When I feel I have no other means of support | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 41. | As then I don’t have to deal directly with a problem | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 42. | To distance myself from negative people/influences | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 43. | To learn more about other people that I know | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 44. | As I see them as a professional source of information | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 45. | Have a better understanding of my desires | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 46. | As a last resort | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX 14: BRIEF COPE

Brief COPE (Carver, 1997)

We are interested in how people respond when they confront difficult or stressful events in their lives. There are lots of ways to try to deal with stress. This questionnaire asks you to indicate what you generally do and feel, when you experience stressful events. Obviously, different events bring out somewhat different responses, but think about what you usually do.

Then respond to each of the following items, using the response choices listed just below. Please try to respond to each item separately in your mind from each other item. Choose your answers thoughtfully, and make your answers as true for you as you can. Please answer every item. There are no "right" or "wrong" answers, so choose the most accurate answer for you - not what you think "most people" would say or do. Indicate what you usually do when you experience a stressful event.

I usually don't do this at all	I usually do this a little bit	I usually do this a medium amount	I usually do this a lot
1	2	3	4

- | | | | | | |
|-----|------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|
| 01. | I turn to work or other substitute activities to take my mind off things | 1 | 2 | 3 | 4 |
| 02. | I concentrate my efforts on doing something about the situation I'm in | 1 | 2 | 3 | 4 |
| 03. | I say to myself "this isn't real" | 1 | 2 | 3 | 4 |
| 04. | I use alcohol or drugs to make myself feel better | 1 | 2 | 3 | 4 |
| 05. | I get emotional support from others | 1 | 2 | 3 | 4 |
| 06. | I give up trying to deal with it | 1 | 2 | 3 | 4 |
| 07. | I try to take action to make the situation better | 1 | 2 | 3 | 4 |
| 08. | I refuse to believe that it has happened | 1 | 2 | 3 | 4 |
| 09. | I say things to let my unpleasant feelings escape | 1 | 2 | 3 | 4 |
| 10. | I get help and advice from other people | 1 | 2 | 3 | 4 |
| 11. | I use drugs or alcohol to get me through it | 1 | 2 | 3 | 4 |
| 12. | I try to see it in a different light, to make it seem more positive | 1 | 2 | 3 | 4 |
| 13. | I criticize myself | 1 | 2 | 3 | 4 |
| 14. | I try to come up with a strategy about what to do | 1 | 2 | 3 | 4 |
| 15. | I get comfort and understanding from someone | 1 | 2 | 3 | 4 |
| 16. | I give up the attempt to cope | 1 | 2 | 3 | 4 |
| 17. | I look for something good in what is happening | 1 | 2 | 3 | 4 |
| 18. | I make jokes about it | 1 | 2 | 3 | 4 |
| 19. | I do something else so I think about it less, such as going to the movies, watching TV, reading, daydreaming, sleeping or shopping | 1 | 2 | 3 | 4 |

20.	I accept the reality of the fact it has happened	1	2	3	4
21.	I express my negative feelings	1	2	3	4
22.	I try to find comfort in my religious or spiritual beliefs	1	2	3	4
23.	I try to get advice or help from other people about what to do	1	2	3	4
24.	I learn to live with it	1	2	3	4
25.	I think hard about what steps to take	1	2	3	4
26.	I blame myself for things that happen	1	2	3	4
27.	I pray or meditate	1	2	3	4
28.	I make fun of the situation	1	2	3	4

APPENDIX 15: REVISED PARANORMAL BELIEF SCALE

Revised Paranormal Belief Scale
(Tobacyk, 2004)

Please put a number next to each item to indicate how much you agree or disagree with that item. Use the numbers as indicated below. There are no right or wrong answers. This is a sample of your own beliefs and attitudes. Thank you.

Strongly Disagree 1	Moderately Disagree 2	Slightly Disagree 3	Uncertain 4	Slightly Agree 5	Moderately Agree 6	Strongly Agree 7
---------------------------	-----------------------------	---------------------------	----------------	------------------------	--------------------------	------------------------

- | | | | | | | | | |
|-----|----------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 01. | The soul continues to exist even though the body may die | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 02. | Some individuals are able to levitate (lift) objects through mental forces | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 03. | Black magic really exists | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 04. | Black cats can bring bad luck | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 05. | Your mind or soul can leave your body and travel (astral projection) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 06. | The abominable snowman of Tibet exists | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 07. | Astrology is a way to accurately predict the future | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 08. | There is a devil | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 09. | Psychokinesis, the movement of objects through psychic powers does exist | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. | Witches do exist | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. | If you break a mirror you will have bad luck | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. | During altered states, such as sleep or trances, the spirit can leave the body | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. | The Loch Ness monster of Scotland exists | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. | The horoscope accurately tells a person's future | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. | I believe in God | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. | A person's thoughts can influence the movement of a physical object | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. | Through the use of formulas and incantations, it is possible to cast spells on persons | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. | The number "13" is unlucky | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19. | Reincarnation does occur | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20. | There is life on other planets | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

- | | | | | | | | | |
|-----|--------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 21. | Some psychics can accurately predict the future | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 22. | There is a Heaven and a Hell | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 23. | Mind reading is not possible | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 24. | There are actual cases of witchcraft | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 25. | It is possible to communicate with the dead | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 26. | Some people have an unexplained ability to accurately predict the future | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX 16: NEW AGE ORIENTATION SCALE

New Age Orientation Scale (Granqvist & Hagekull 2001)

Below are listed a number of statements describing different ideas in relation to issues such as spirituality, philosophy of life, knowledge and mental capacities. Please mark each statement by indicating the extent to which it corresponds to your opinion.

	Strongly Disagree 1	Disagree 2	Partly Disagree 3	Partly Agree 4	Agree 5	Strongly Agree 6
01. I am convinced that thought transference and/or the ability to move things by mere thinking actually do work.	1	2	3	4	5	6
02. I've read some of the new, 'alternative' books that deal with how to reach spiritual or personal development (e.g., <i>The Celestine Prophecy</i> , <i>A Course in Miracles</i> , <i>The Sacred Self</i> , <i>Out on a Limb</i>).	1	2	3	4	5	6
03. The position of the stars at birth affects how one will live one's life or how one's personality will develop.	1	2	3	4	5	6
04. I think that we are now approaching an entirely new age, that will <i>radically</i> change our view of science, spiritual knowledge, or the true nature of man.	1	2	3	4	5	6
05. To reach one's potential, spiritual insight, every individual should combine or mix the truths that are hidden within different old traditions (e.g., Shamanism, the religions of native people, astrology, eastern wisdom, Kabbala).	1	2	3	4	5	6
06. There are some objects or places that have a special spiritual meaning, for instance by being surrounded by a certain type of energy.	1	2	3	4	5	6
07. I am convinced that at least two of the following phenomena occur: dreams reveal what will happen in the future, one receives premonitions of what is to occur, or there are people who can 'see' the future.	1	2	3	4	5	6
08. With the assistance of a 'medium', it is possible to get in touch with dead people or with life on other planets.	1	2	3	4	5	6
09. There are many 'alternative treatments' (e.g., Reiki healing, Rosen, Zone, Aura, Primal, reincarnation, Crystal and Chakra therapy) that are at least as effective as the regular medical treatments for bringing about Human well-being and health.	1	2	3	4	5	6
10. I regularly use some specific technique (e.g., yoga, re-birthing, meditation, massage) to become a more harmonious human being or to reach spiritual development (do not include prayer as a technique).	1	2	3	4	5	6
11. Everything that happens in an individual's life has an underlying meaning that is important to try to comprehend.	1	2	3	4	5	6

- | | | | | | | | |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|
| 12. | The whole cosmos is an unbroken, living whole, that the modern man has lost contact with. | 1 | 2 | 3 | 4 | 5 | 6 |
| 13. | Things that happen (e.g., divorce, death) in a house or room leave a certain 'atmosphere' that affects the people who subsequently move in. | 1 | 2 | 3 | 4 | 5 | 6 |
| 14. | A problem with the established health care system is that science has priority over intuition or old wisdom. | 1 | 2 | 3 | 4 | 5 | 6 |
| 15. | I believe that a person's deeds are stored in his or her 'Karma'. | 1 | 2 | 3 | 4 | 5 | 6 |
| 16. | People live more than one life, so that when they die they will be reborn after some time in another body ('reincarnation'). | 1 | 2 | 3 | 4 | 5 | 6 |
| 17. | Compared to most religious and non religious people. I am probably somewhat of a spiritual seeker with an unusually open mind. | 1 | 2 | 3 | 4 | 5 | 6 |
| 18. | One's world around is mainly a mirror image of one's inner world, so that outer processes above all reflect one's inner processes. | 1 | 2 | 3 | 4 | 5 | 6 |
| 19. | Tarot cards, horoscopes, or fortune telling can be good starting points from which to develop oneself and one's possibilities. | 1 | 2 | 3 | 4 | 5 | 6 |
| 20. | Spirituality to me is above all about realising my true nature or becoming one with cosmos. | 1 | 2 | 3 | 4 | 5 | 6 |
| 21. | I am a vegetarian/vegan for one/some of the following reasons: meat eating impedes the functioning of the astral plane, the individual's karma is impaired by meat eating, or all living creatures have a holy place in the cosmos. | 1 | 2 | 3 | 4 | 5 | 6 |
| 22. | Several phenomena that are usually subsumed under the 'new age' label are personally valuable to me. | 1 | 2 | 3 | 4 | 5 | 6 |

APPENDIX 17: FREE WILL AND DETERMINISM SCALE

FAD-Plus

(Paulhus & Carey, 2011)

For each statement below choose a number from 1 to 5 to indicate how much you agree or disagree

Totally Disagree	Disagree	Uncertain	Agree	Totally Agree
1	2	3	4	5

- | | | | | | | |
|-----|-----------------------------------------------------------------------------------------------|---|---|---|---|---|
| 01. | I believe that the future has already been determined by fate | 1 | 2 | 3 | 4 | 5 |
| 02. | Peoples biological makeup determines their talents and personality | 1 | 2 | 3 | 4 | 5 |
| 03. | Chance events seem to be the major cause of human history | 1 | 2 | 3 | 4 | 5 |
| 04. | People have complete control over the decisions they make | 1 | 2 | 3 | 4 | 5 |
| 05. | No matter how hard you try, you can't change your destiny | 1 | 2 | 3 | 4 | 5 |
| 06. | Psychologists and psychiatrists will eventually figure out all human behaviour | 1 | 2 | 3 | 4 | 5 |
| 07. | No one can predict what will happen in this world | 1 | 2 | 3 | 4 | 5 |
| 08. | People must take full responsibility for any bad choices they make | 1 | 2 | 3 | 4 | 5 |
| 09. | Fate already has a plan for everyone | 1 | 2 | 3 | 4 | 5 |
| 10. | Your genes determine your future | 1 | 2 | 3 | 4 | 5 |
| 11. | Life seems unpredictable – just like throwing a dice or flipping a coin | 1 | 2 | 3 | 4 | 5 |
| 12. | People can overcome obstacles if they truly want to | 1 | 2 | 3 | 4 | 5 |
| 13. | Whether people like it or not, mysterious forces seem to move their lives | 1 | 2 | 3 | 4 | 5 |
| 14. | Science has shown how your past environment created your current intelligence and personality | 1 | 2 | 3 | 4 | 5 |
| 15. | People are unpredictable | 1 | 2 | 3 | 4 | 5 |
| 16. | Criminals are totally responsible for the bad things they do | 1 | 2 | 3 | 4 | 5 |
| 17. | Whatever will be, will be – there's not much you can do about it. | 1 | 2 | 3 | 4 | 5 |
| 18. | As with other animals, human behaviour always follows the laws of nature | 1 | 2 | 3 | 4 | 5 |

- | | | | | | | |
|-----|-------------------------------------------------------------------|---|---|---|---|---|
| 19. | Luck plays a big role in people's lives | 1 | 2 | 3 | 4 | 5 |
| 20. | People have complete free will | 1 | 2 | 3 | 4 | 5 |
| 21. | Parent's character will determine the character of their children | 1 | 2 | 3 | 4 | 5 |
| 22. | What happens to people is a matter of chance | 1 | 2 | 3 | 4 | 5 |
| 23. | People are always at fault for their bad behaviour | 1 | 2 | 3 | 4 | 5 |
| 24. | Childhood environment will determine your success as an adult | 1 | 2 | 3 | 4 | 5 |
| 25. | Life is hard to predict because its always totally random | 1 | 2 | 3 | 4 | 5 |
| 26. | Strength of mind can always overcome the body's desires | 1 | 2 | 3 | 4 | 5 |
| 27. | People's futures cannot be predicted | 1 | 2 | 3 | 4 | 5 |

APPENDIX 18: BRIEF SHEET

Use of Paranormal and New Age Services (UPNAS) Study 3.0



Thank you for your time and interest in this study.

What is the purpose of the study?

This piece of research is interested in people's paranormal and New Age belief and the use of services surrounding these, including but not limited to psychics, clairvoyants, numerologists, palmists, spiritual/crystal healers, past-life regressions therapists and mediums.

Do I have to take part?

It is up to you if you want to participate. If you decide to take part and later change your mind you can withdraw at any point before returning/submitting the questionnaires. Please only take part if you are over the age of 16 years and have good English reading skills and have used a paranormal service more than three times in the past.

What will I have to do and how long will it take?

You will be asked to indicate the extent to which you agree or disagree with a number of statements. Whilst it is asked that you rate as many statements as you can if you are unsure of a statement's meaning or you do not wish to answer you can leave it blank. You will be asked for feedback about the statements. Did they make sense? Was anything missed out? This will only take around 25 minutes to complete depending on your reading speed.

Who looks at my answers?

Only the research team will see the finished questionnaires. No information is passed on to any third parties. Overall findings from the whole study will be used as PhD research and may be presented at conferences or written up in academic journals.

Will my answers be confidential?

Yes, no names, addresses or phone numbers are needed. The study is completely anonymous. A few short questions asking for your age, gender and ethnicity is included but this is only to make sure a wide variety of people take part. If you complete this study online you can also clear your internet browsing history so nobody else who uses that device can access your answers. If you enjoyed the study and wish to take part in one more you can leave your email address we will only use this to contact you once and link your questionnaires together.

What are the possible disadvantages of taking part?

There are no risks to taking part in this study. But if thinking about a time when you have used a paranormal service upsets you then there are people who can help. Support organisations are supplied at the end of the study.

What if I want more information first?

If you have any questions about study contact Emma at ELLowrie@uclan.ac.uk or project supervisor Gayle at GBrewer@uclan.ac.uk. If you are unhappy or have concerns about any aspect of the project please contact the University Office for Ethics at OfficerForEthics@uclan.ac.uk. They are entirely independent of the project and can respond to your concerns.

APPENDIX 19: DEBRIEF SHEET

Use of Paranormal & New Age Services (UPNAS) Study 3.0



Thank you for completing this questionnaire and providing feedback as part of this study

What was the aim of the study?

Previous surveys have found that the majority of people believe in at least one aspect of the paranormal and it is conceivable that such beliefs play an important part in peoples' everyday lives. Evidence also suggests people are more likely to "activate" these beliefs during times of high stress implying they are used as a form of coping.

Overall this research aims to link using paranormal and New Age beliefs as a method of coping with previous experiences childhood, coping strategies, and deterministic beliefs. It is expected that there will be a relationship between these concepts.

Are you sure no-one else will see my answers?

All the information collected for this study will be used for academic research purposes only and that your responses and feedback will remain strictly confidential and anonymous.

Completing this study made me think of something that upset me, who can I talk to?

If you have remembered something that upset you, the organisations listed below may be able to help.

Organisation	Telephone	Web
Samaritans	(01772) 822 022	www.samaritans.org
Cruse Bereavement	(08444) 779 400	www.crusebereavementcare.org.uk
Society for Psychical Research (SPR)	via website only	www.spr.ac.uk/contact

I have more questions about the study, can I contact you?

Of course! If you have any questions about this study or would like a summary of the overall results please contact me via email at ELLowrie@uclan.ac.uk. Alternatively, you may contact the project supervisor Dr Gayle Brewer via GBrewer@uclan.ac.uk. If you are unhappy or have concerns about any aspect of the project please contact the University Office for Ethics at OfficerForEthics@uclan.ac.uk. They are entirely independent of the project and can respond to your concerns.

APPENDIX 20: BRIEF SHEET

Use of Paranormal and New Age Services (UPNAS) Study 3.1



Thank you for your time and interest in this study.

What is the purpose of the study?

This piece of research is interested in people's paranormal and New Age belief and the use of services surrounding these, including but not limited to psychics, clairvoyants, numerologists, palmists, spiritual/crystal healers, past-life regressions therapists and mediums.

Do I have to take part?

It is up to you if you want to participate. If you decide to take part and later change your mind you can withdraw at any point before returning/submitted the questionnaires. Please only take part if you are over the age of 16 years and have good English reading skills and have used a paranormal service more than three times in the past.

What will I have to do and how long will it take?

The questionnaire pack contains approximately 135 statements. You will be asked to indicate the extent to which you agree or disagree with each. Whilst it is asked that you rate as many statements as you can if you are unsure of a statement's meaning or you do not wish to answer you can leave it blank. This will only take around 20 minutes to complete depending on your reading speed.

Who looks at my answers?

Only the research team will see the finished questionnaires. No information is passed on to any third parties. Overall findings from the whole study will be used as PhD research and may be presented at conferences or written up in academic journals.

Will my answers be confidential?

Yes, no names, addresses or phone numbers are needed. The study is completely anonymous. A few short questions asking for your age, gender and ethnicity is included but this is only to make sure a wide variety of people take part. If you complete this study online you can also clear your internet browsing history so nobody else who uses that device can access your answers. If you enjoyed the study and wish to take part in one more you can leave your email address we will only use this to contact you once and link your questionnaires together.

What are the possible disadvantages of taking part?

There are no risks to taking part in this study. But if thinking about a time when you have used a paranormal service upsets you then there are people who can help. Support organisations are supplied at the end of the study.

What if I want more information first?

If you have any questions about study contact Emma at ELLowrie@uclan.ac.uk or project supervisor Gayle at GBrewer@uclan.ac.uk. If you are unhappy or have concerns about any aspect of the project please contact the University Office for Ethics at OfficerForEthics@uclan.ac.uk. They are entirely independent of the project and can respond to your concerns.

APPENDIX 21: DEBRIEF SHEET

Use of Paranormal & New Age Services (UPNAS) Study 3.1



Thank you for completing this questionnaire pack,

What was the aim of the study?

Previous surveys have found that the majority of people believe in at least one aspect of the paranormal and it is conceivable that such beliefs play an important part in peoples' everyday lives. Evidence also suggests people are more likely to "activate" these beliefs during times of high stress implying they are used as a form of coping.

This study aims to link using paranormal and New Age beliefs as a method of coping with previous experiences of control and play in childhood. It is expected that there will be a relationship between the two.

Are you sure no-one else will see my answers?

All the information collected for this study will be used for academic research purposes only and that your responses will remain strictly confidential and anonymous. If you completed this study online you can also clear your internet browsing history so nobody else who uses that device can access your answers.

Completing this study made me think of something that upset me, who can I talk to?

If you have remembered something that upset you, the organisations listed below may be able to help.

Organisation	Telephone	Web
Samaritans	(01772) 822 022	www.samaritans.org
Cruse Bereavement	(08444) 779 400	www.crusebereavementcare.org.uk
Society for Psychical Research (SPR)	via website only	www.spr.ac.uk/contact

I have more questions about the study, can I contact you?

Of course! If you have any questions about this study or would like a summary of the overall results please contact me via email at ELLowrie@uclan.ac.uk. Alternatively, you may contact the project supervisor Dr Gayle Brewer via GBrewer@uclan.ac.uk. If you are unhappy or have concerns about any aspect of the project please contact the University Office for Ethics at OfficerForEthics@uclan.ac.uk. They are entirely independent of the project and can respond to your concerns.

APPENDIX 22: BRIEF SHEET

Use of Paranormal and New Age Services (UPNAS) Study 3.2



Thank you for your time and interest in this study.

What is the purpose of the study?

This piece of research is interested in people's use of paranormal and New Age services, including but not limited to psychics, clairvoyants, numerologists, palmists, spiritual/crystal healers, past-life regressions therapists and mediums. It will also ask you to recall a time in your life that you have felt under a significant amount of stress.

Do I have to take part?

It is up to you if you want to participate. If you decide to take part and later change your mind you can withdraw at any point before returning/submitted the questionnaires. Please only take part if you are over the age of 16 years and have good English reading skills and have used a paranormal service more than three times in the past.

What will I have to do and how long will it take?

The questionnaire pack contains approximately 120 statements. You will be asked to indicate the extent to which you agree or disagree with each. Whilst it is asked that you rate as many statements as you can if you are unsure of a statement's meaning or you do not wish to answer you can leave it blank. This will only take around 20 minutes to complete depending on your reading speed.

Who looks at my answers?

Only the research team will see the finished questionnaires. No information is passed on to any third parties. Overall findings from the whole study will be used as PhD research and may be presented at conferences or written up in academic journals.

Will my answers be confidential?

Yes, no names, addresses or phone numbers are needed. The study is completely anonymous. A few short questions asking for your age, gender and ethnicity is included but this is only to make sure a wide variety of people take part. If you complete this study online you can also clear your internet browsing history so nobody else who uses that device can access your answers. If you enjoyed the study and wish to take part in one more you can leave your email address we will only use this to contact you once and link your questionnaires together.

What are the possible disadvantages of taking part?

There are no risks to taking part in this study. But if thinking about a time when you have used a paranormal service upsets you then there are people who can help. Support organisations are supplied at the end of the study.

What if I want more information first?

If you have any questions about study contact Emma at ELLowrie@uclan.ac.uk or project supervisor Gayle at GBrewer@uclan.ac.uk. If you are unhappy or have concerns about any aspect of the project please contact the University Office for Ethics at OfficerForEthics@uclan.ac.uk. They are entirely independent of the project and can respond to your concerns.

APPENDIX 23: DEBRIEF SHEET

Use of Paranormal & New Age Services (UPNAS) Study 3.2

Thank you for completing this questionnaire pack,



What was the aim of the study?

Previous surveys have found that the majority of people believe in at least one aspect of the paranormal and it is conceivable that such beliefs play an important part in peoples' everyday lives. Evidence also suggests people are more likely to "activate" these beliefs during times of high stress implying they are used as a form of coping. Previous research has suggested that using paranormal and spiritual beliefs positively may have beneficial outcomes for those who believe

Are you sure no-one else will see my answers?

All the information collected for this study will be used for academic research purposes only and that your responses will remain strictly confidential and anonymous. If you completed this study online you can also clear your internet browsing history so nobody else who uses that device can access your answers. If you enjoyed the study and left your email address you are reminded we will only use this to contact you once and link your questionnaires together.

Completing this study made me think of something that upset me, who can I talk to?

If you have remembered something that upset you, the organisations listed below may be able to help.

Organisation	Telephone	Web
Samaritans	(01772) 822 022	www.samaritans.org
Cruse Bereavement	(08444) 779 400	www.crusebereavementcare.org.uk
Society for Psychical Research (SPR)	via website only	www.spr.ac.uk/contact

I have more questions about the study, can I contact you?

Of course! If you have any questions about this study or would like a summary of the overall results please contact me via email at ELLowrie@uclan.ac.uk. Alternatively, you may contact the project supervisor Dr Gayle Brewer via GBrewer@uclan.ac.uk. If you are unhappy or have concerns about any aspect of the project please contact the University Office for Ethics at OfficerForEthics@uclan.ac.uk. They are entirely independent of the project and can respond to your concerns.

APPENDIX 24: BRIEF SHEET

Use of Paranormal and New Age Services (UPNAS) Study 3.3



Thank you for your time and interest in this study.

What is the purpose of the study?

This piece of research is interested in people's use of paranormal and New Age services, including but not limited to psychics, clairvoyants, numerologists, palmists, spiritual/crystal healers, past-life regressions therapists and mediums. It will also ask about a variety of beliefs including free will/fate and science.

Do I have to take part?

It is up to you if you want to participate. If you decide to take part and later change your mind you can withdraw at any point before returning/submitting the questionnaires. Please only take part if you are over the age of 16 years and have good English reading skills and have used a paranormal service more than three times in the past.

What will I have to do and how long will it take?

The questionnaire pack contains approximately 100 statements. You will be asked to indicate the extent to which you agree or disagree with each. Whilst it is asked that you rate as many statements as you can if you are unsure of a statements meaning or you do not wish to answer you can leave it blank. This will only take around 10 minutes to complete depending on your reading speed.

Who looks at my answers?

Only the research team will see the finished questionnaires. No information is passed on to any third parties. Overall findings from the whole study will be used as PhD research and may be presented at conferences or written up in academic journals.

Will my answers be confidential?

Yes, no names, addresses or phone numbers are needed. The study is completely anonymous. A few short questions asking for your age, gender and ethnicity is included but this is only to make sure a wide variety of people take part. If you complete this study online you can also clear your internet browsing history so nobody else who uses that device can access your answers. If you enjoyed the study and wish to take part in one more you can leave your email address we will only use this to contact you once and link your questionnaires together.

What are the possible disadvantages of taking part?

There are no risks to taking part in this study. But if thinking about a time when you have used a paranormal service upsets you then there are people who can help. Support organisations are supplied at the end of the study

What if I want more information first?

If you have any questions about study contact Emma at ELLowrie@uclan.ac.uk or project supervisor Gayle at GBrewer@uclan.ac.uk. If you are unhappy or have concerns about any aspect of the project please contact the University Office for Ethics at OfficerForEthics@uclan.ac.uk. They are entirely independent of the project and can respond to your concerns.

APPENDIX 25: DEBRIEF SHEET

Use of Paranormal & New Age Services (UPNAS) Study 3.3



Thank you for completing this questionnaire pack,

What was the aim of the study?

Previous surveys have found that the majority of people believe in at least one aspect of the paranormal and it is conceivable that such beliefs play an important part in peoples' everyday lives. Evidence also suggests people are more likely to "activate" these beliefs during times of high stress implying they are used as a form of coping.

This study was looking to link a variety of beliefs including free will/fate and science to people's use of paranormal and New Age services. It is suggested that people who have a greater belief in concepts such as fate will use services for more than those people who believe in free will.

Are you sure no-one else will see my answers?

All the information collected for this study will be used for academic research purposes only and that your responses will remain strictly confidential and anonymous. If you completed this study online you can also clear your internet browsing history so nobody else who uses that device can access your answers. If you enjoyed the study and left your email address you are reminded we will only use this to contact you once and link your questionnaires together.

Completing this study made me think of something that upset me, who can I talk to?

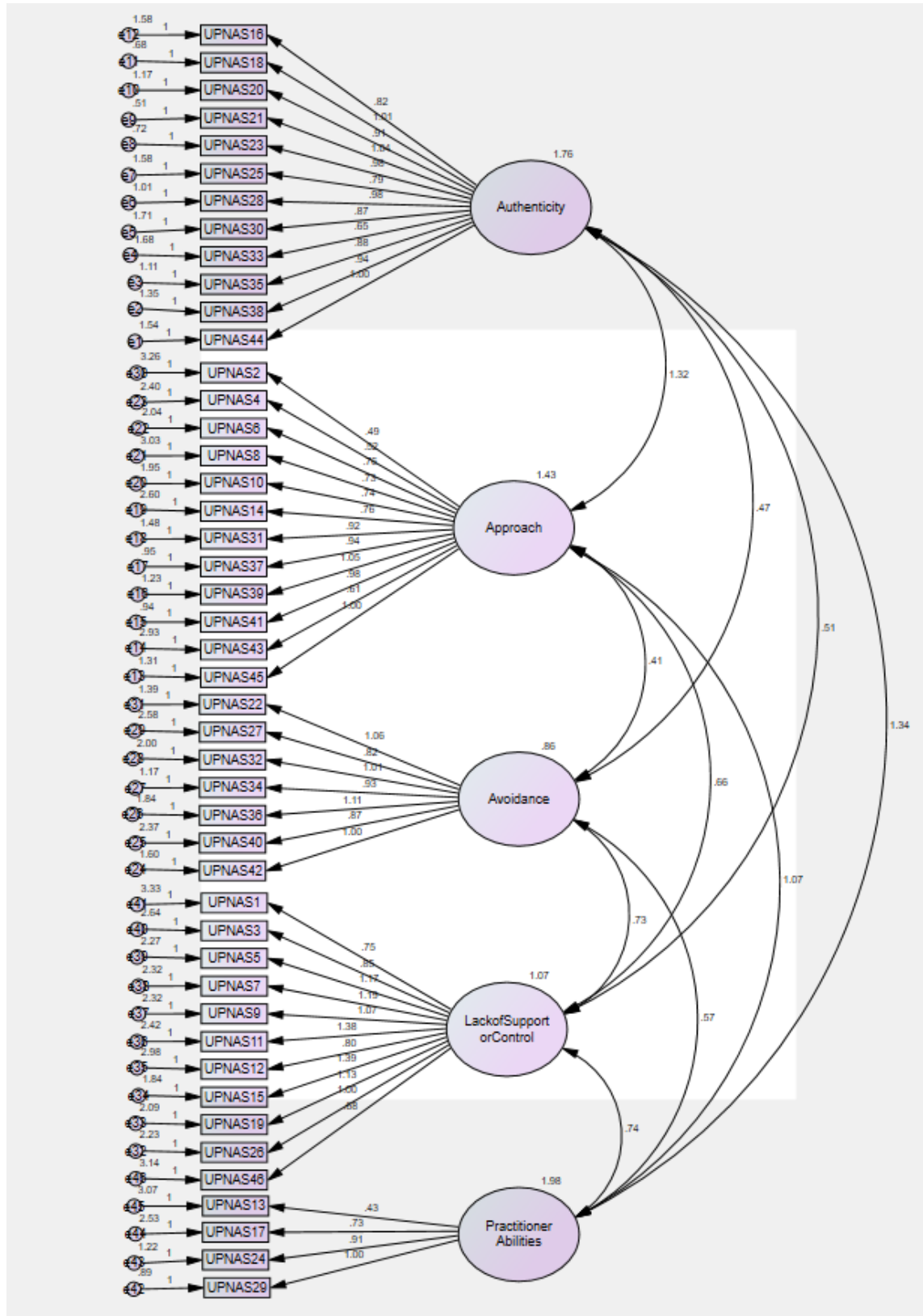
If you have remembered something that upset you, the organisations listed below may be able to help.

Organisation	Telephone	Web
Samaritans	(01772) 822 022	www.samaritans.org
Cruse Bereavement	(08444) 779 400	www.crusebereavementcare.org.uk
Society for Psychical Research (SPR)	via website only	www.spr.ac.uk/contact

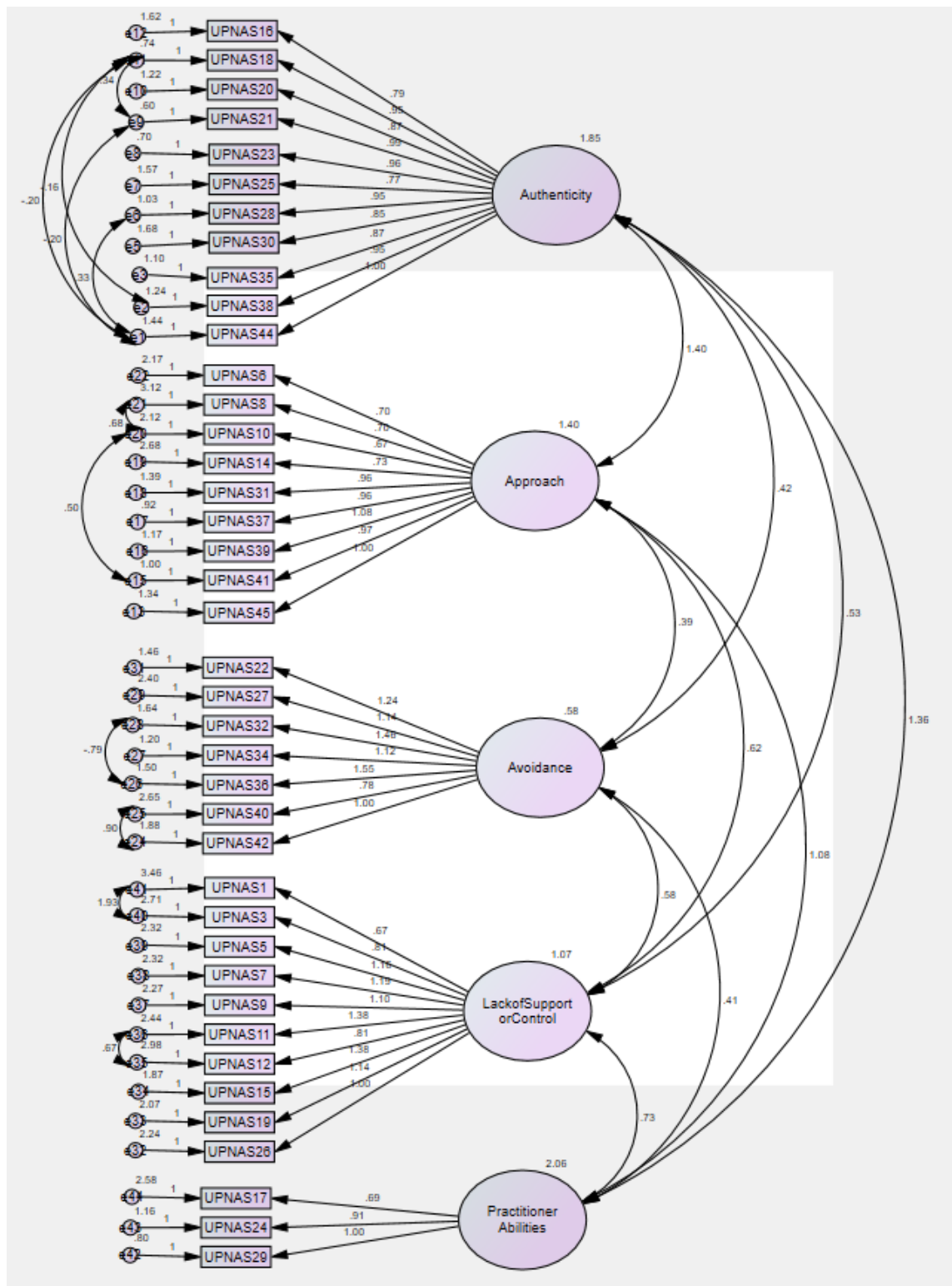
I have more questions about the study, can I contact you?

Of course! If you have any questions about this study or would like a summary of the overall results please contact me via email at ELLowrie@uclan.ac.uk. Alternatively, you may contact the project supervisor Dr Gayle Brewer via GBrewer@uclan.ac.uk. If you are unhappy or have concerns about any aspect of the project please contact the University Office for Ethics at OfficerForEthics@uclan.ac.uk. They are entirely independent of the project and can respond to your concerns.

APPENDIX 26: FIVE-FACTOR MODEL



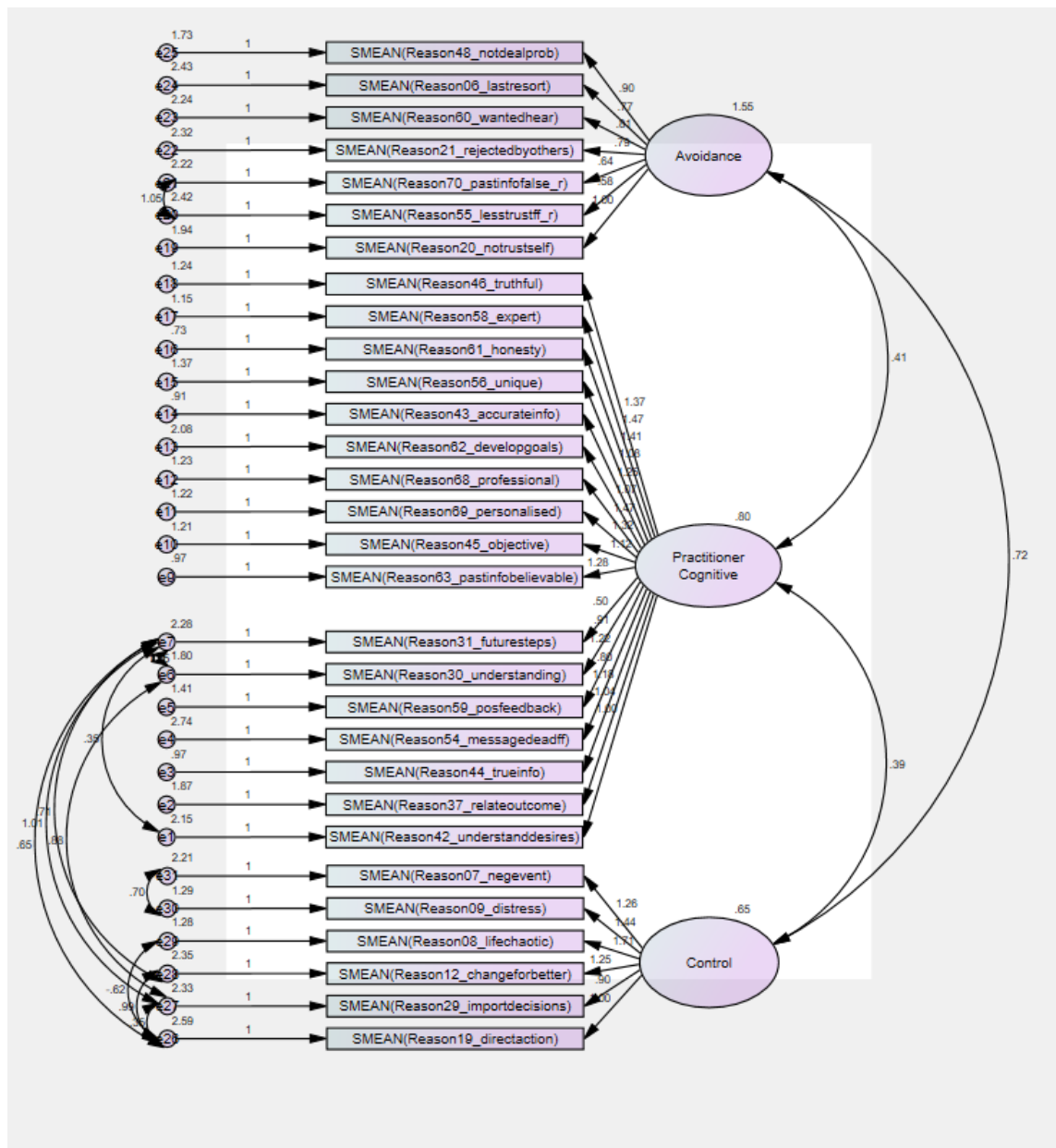
APPENDIX 27: FIVE-FACTOR MODEL (REVISED)



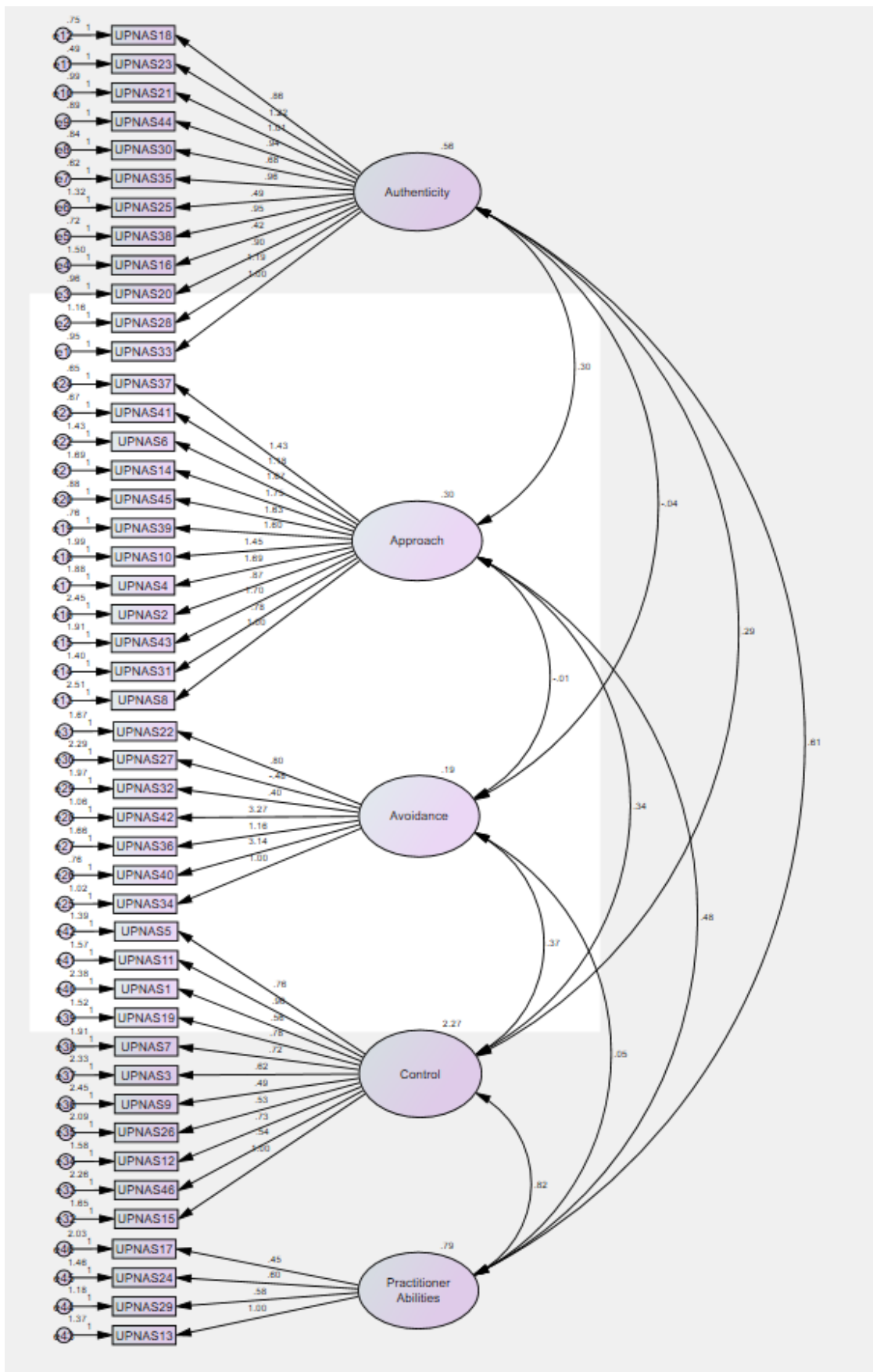
APPENDIX 28: THREE-FACTOR MODEL



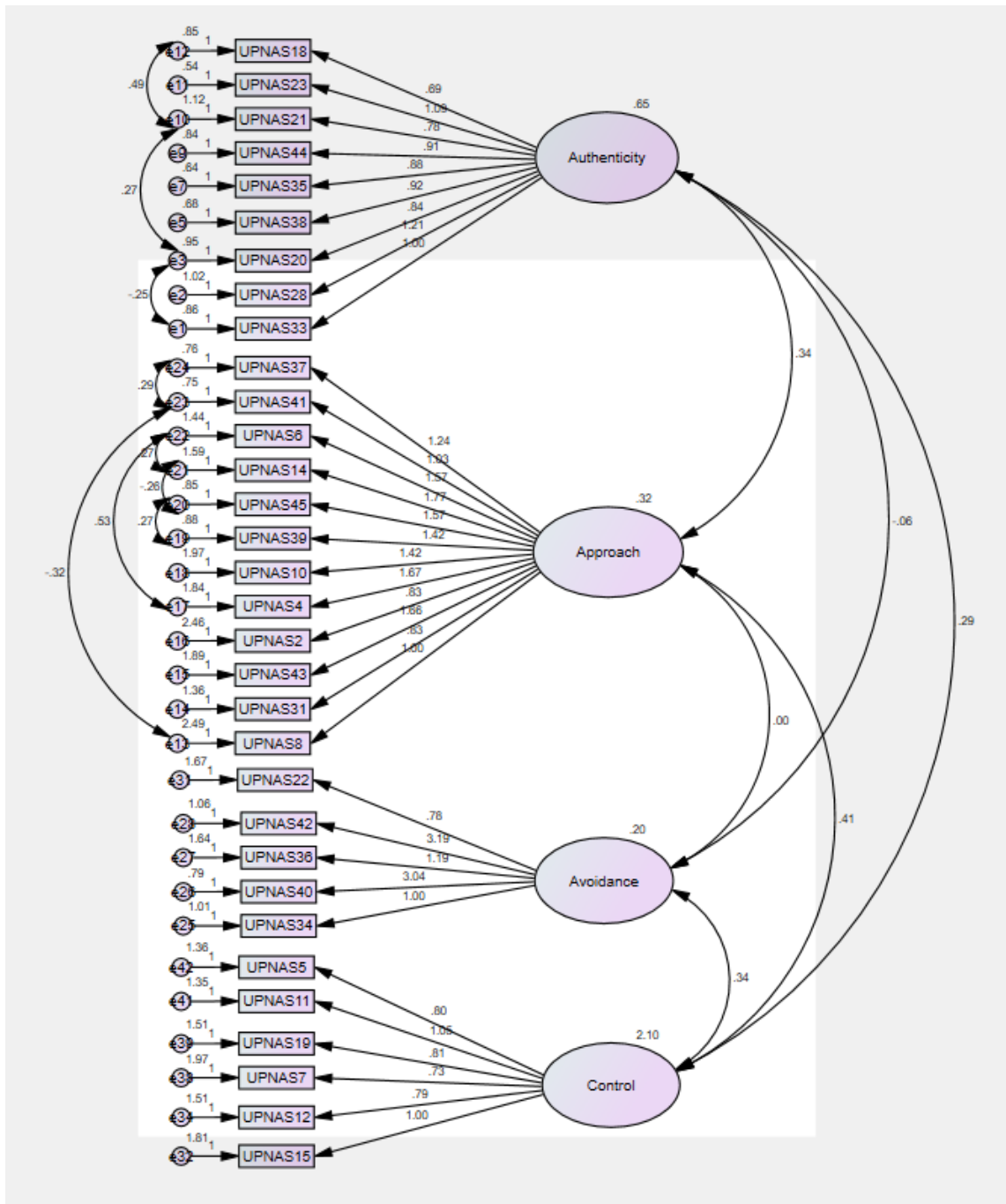
APPENDIX 29: THREE-FACTOR MODEL (REVISED)



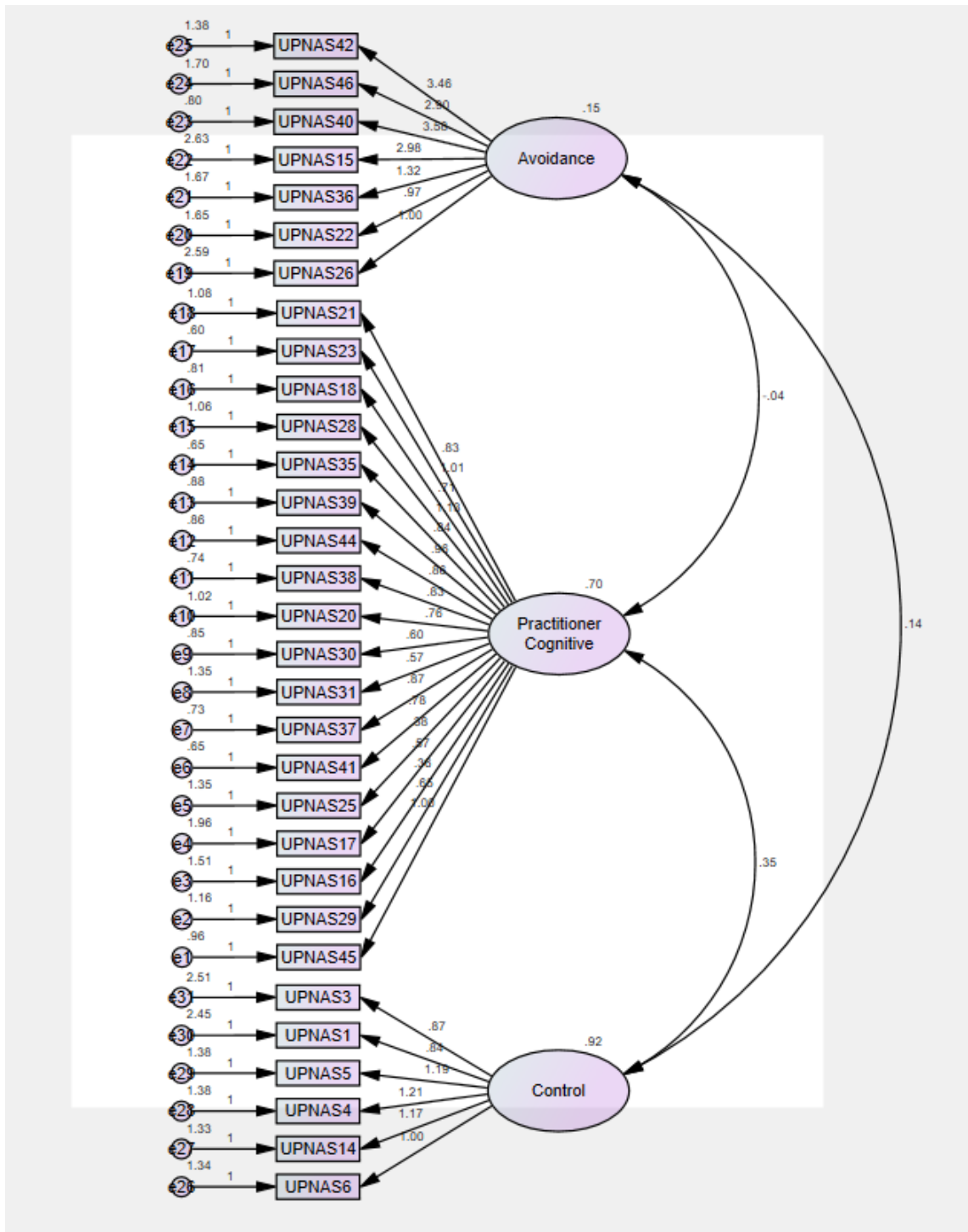
APPENDIX 30: FIVE-FACTOR MODEL (NEW DATA)



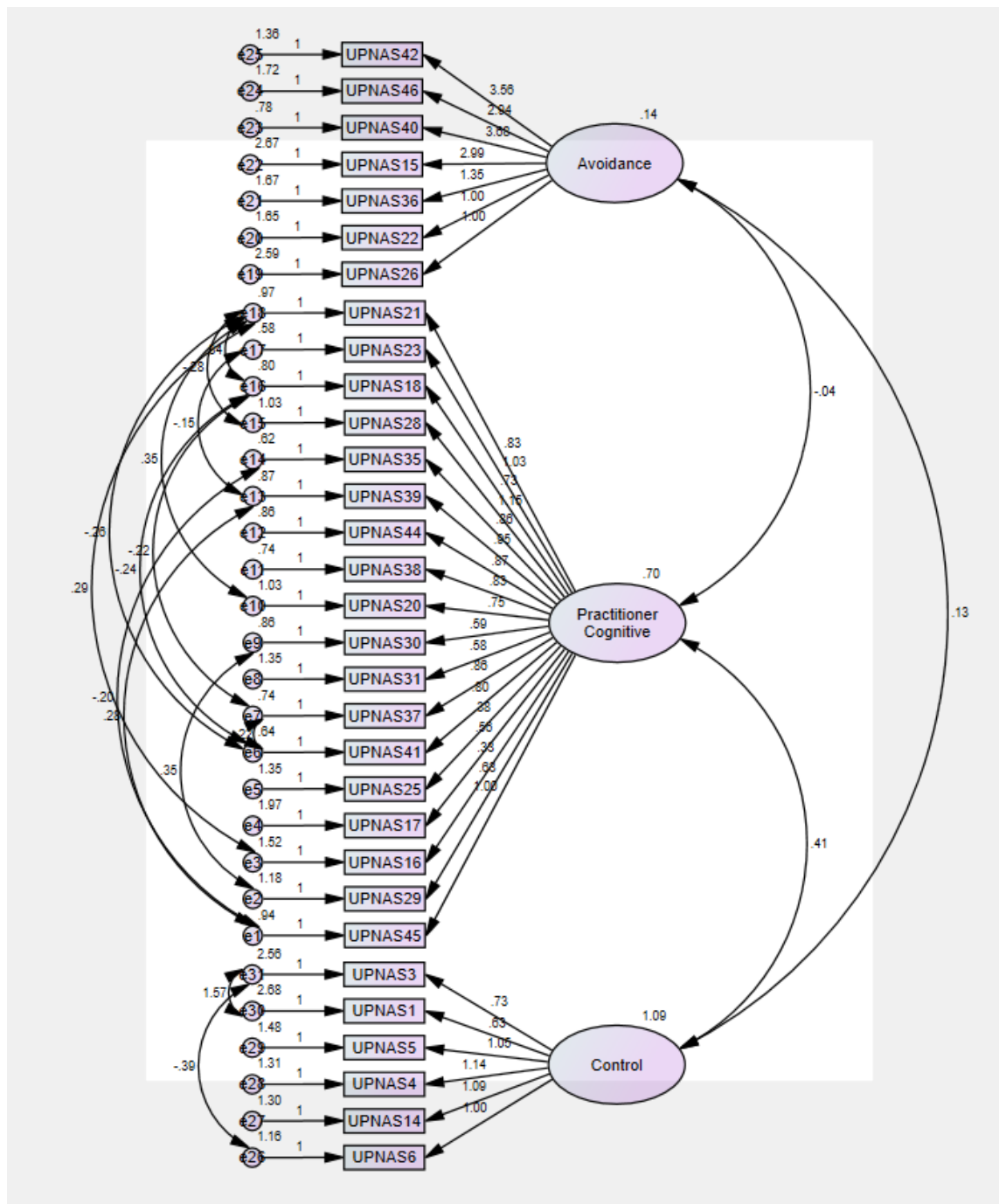
APPENDIX 31: FIVE-FACTOR MODEL (NEW DATA – REVISED)



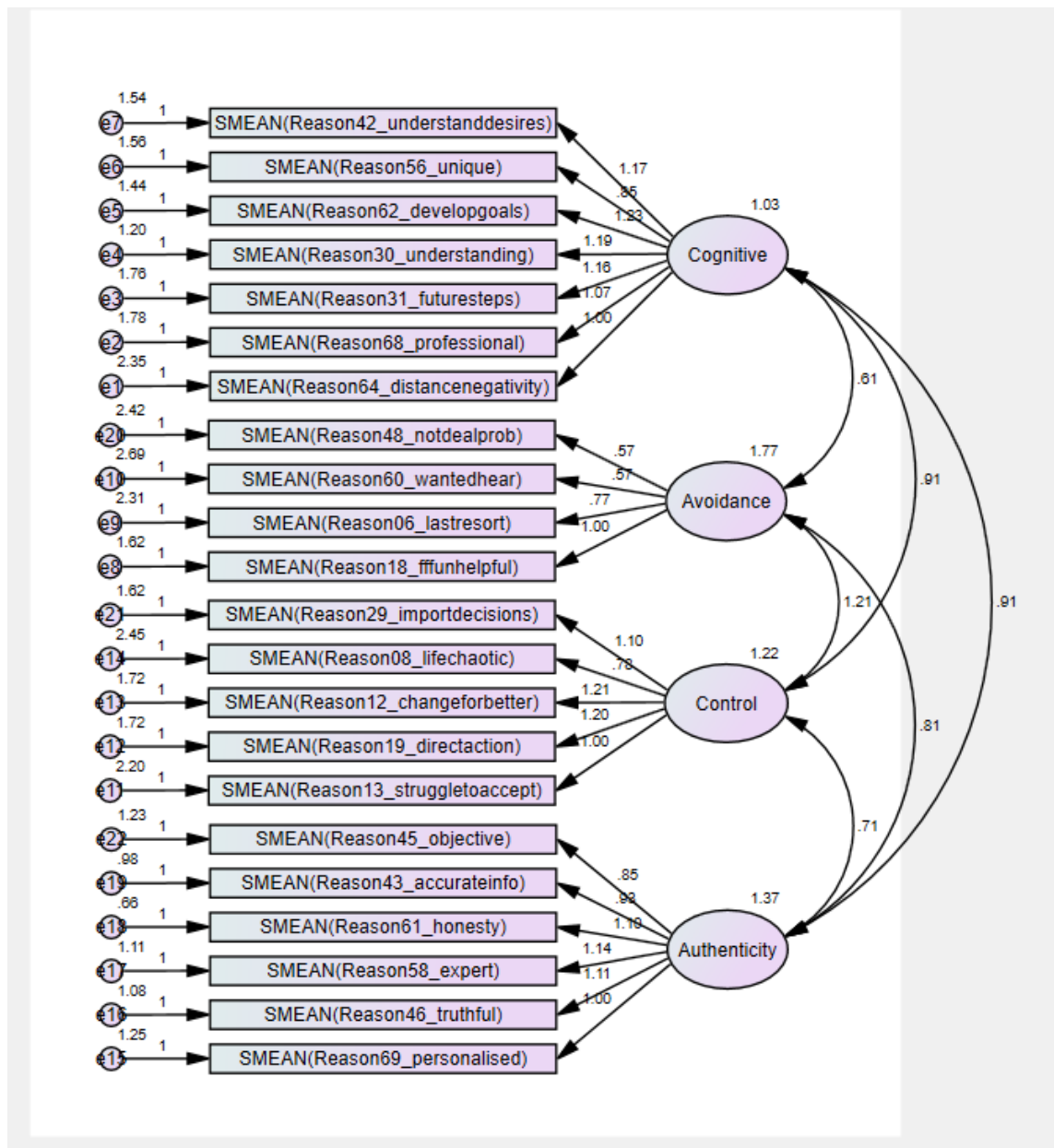
APPENDIX 32: THREE-FACTOR MODEL (NEW DATA)



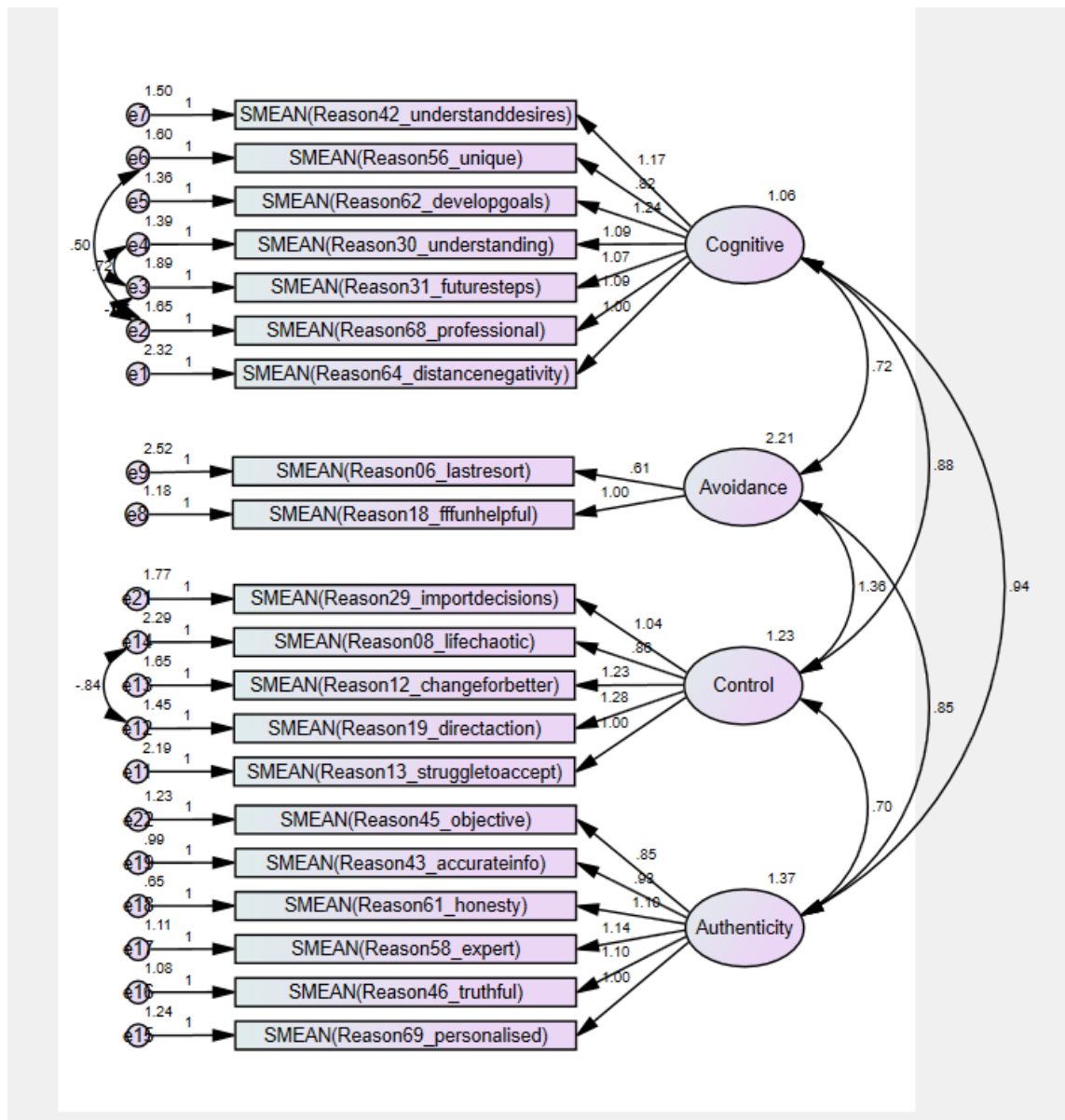
APPENDIX 33: THREE-FACTOR MODEL (NEW DATA – REVISED)



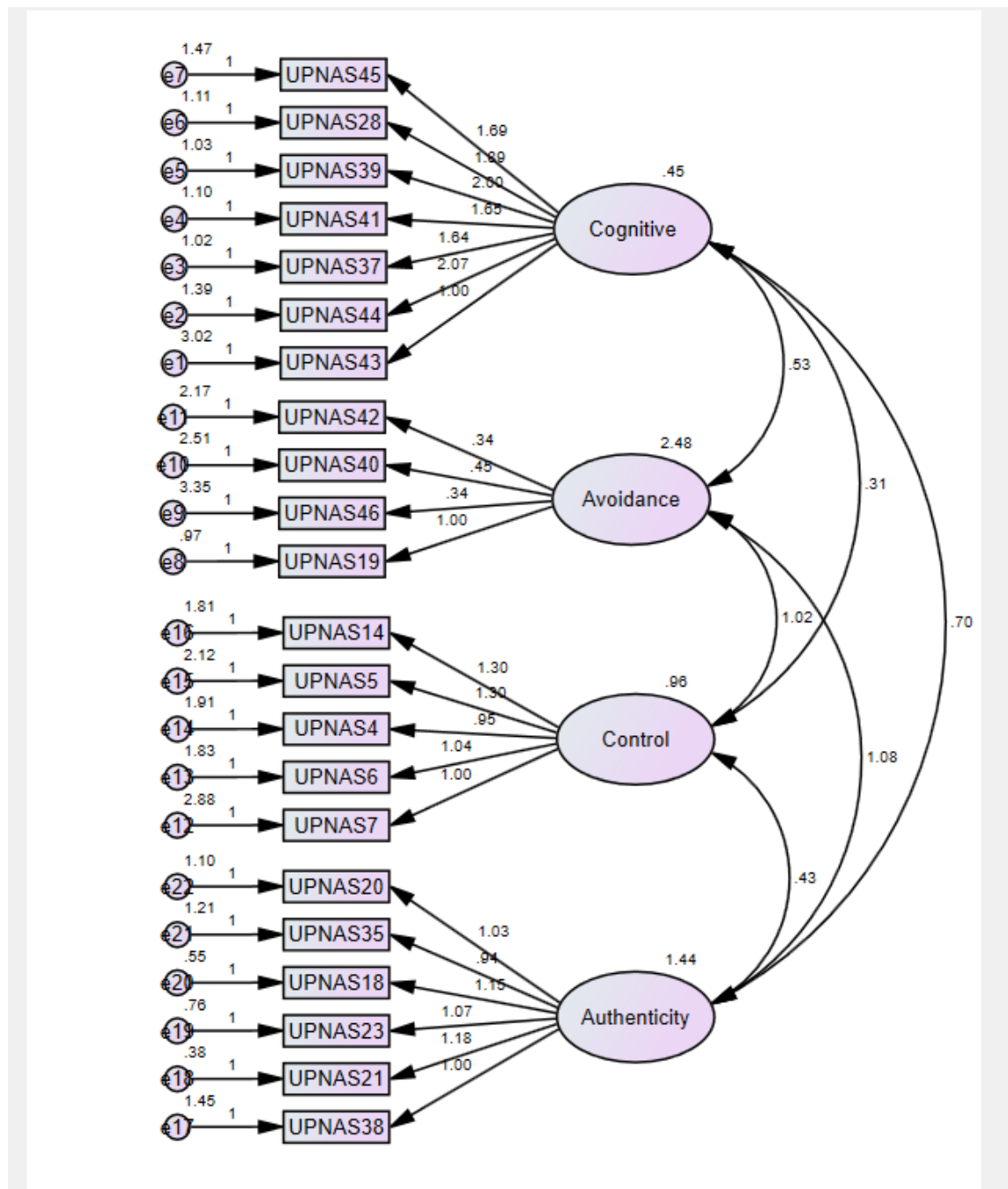
APPENDIX 34: FOUR-FACTOR MODEL (5-DATA)



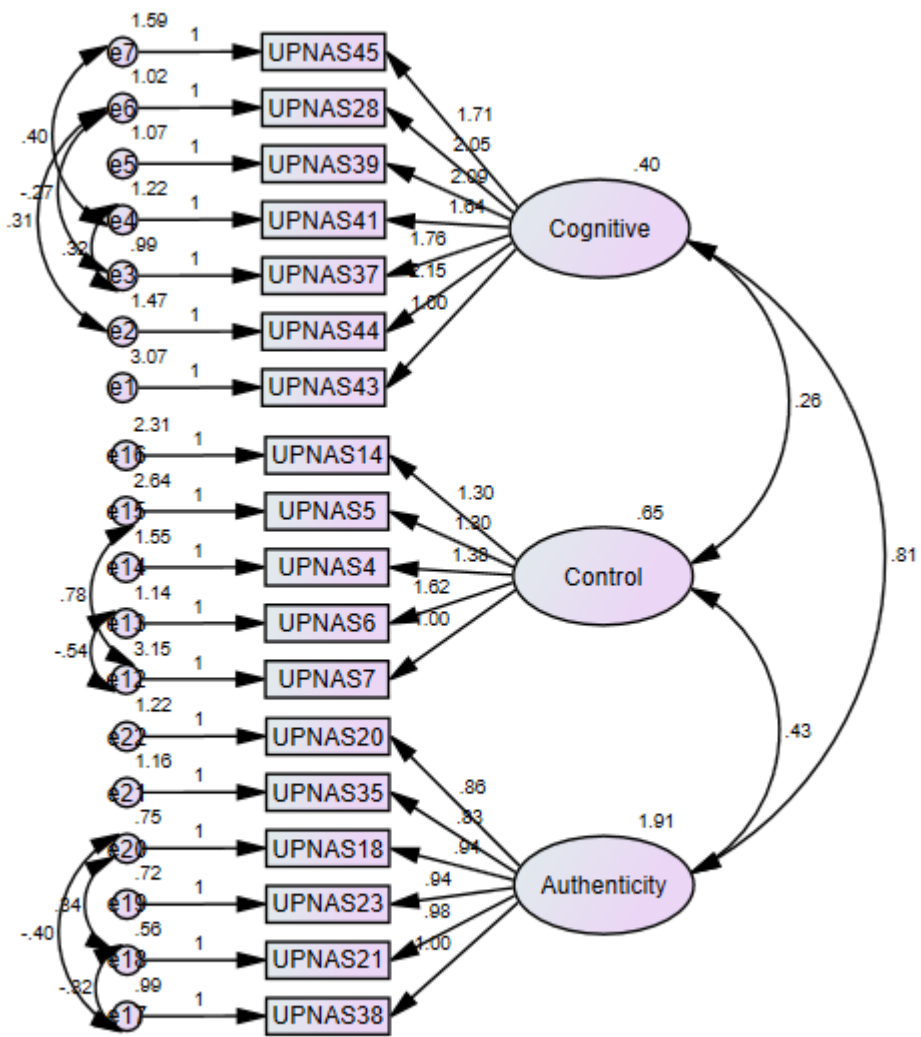
APPENDIX 35: FOUR-FACTOR MODEL (5-DATA-REVISED)



APPENDIX 36: FOUR-FACTOR MODEL (3-DATA)



APPENDIX 37: FOUR-FACTOR MODEL (3-DATA-REVISED)



APPENDIX 38: PERCEIVED CHILDHOOD CONTROL QUESTIONNAIRE

PERCEIVED CHILDHOOD CONTROL QUESTIONNAIRE Watt, Watson & Wilson (2006)

This questionnaire is designed to find out your impressions of what growing up was like for you as a child (i.e. 16 years or younger). Please answer these questions with what first comes to mind and indicate your response by circling a number from “1” (strongly disagree) to “5” (strongly agree).

The questionnaire does refer to both parents combined and when possible, you are encouraged to answer the questions about both of them. However, we understand that some parents may interact with you differently or sometimes not at all if you grew up with a single parent or with other family members. If so, please indicate how much you agree with the following statement based on the adult you spent the most time with growing up.

	1 Strongly Disagree	2 Disagree	3 Unsure	4 Agree	5 Strongly Agree
01. I was often blamed for things that were not my fault					
02. I was allowed to do the things I liked doing					
03. My parents tried to control everything I did					
04. I thought I could get my own way if I just kept trying					
05. I could dress in any way I pleased					
06. It was pretty impossible to change my parents mind about anything					
07. I had a lot of choice in deciding who my friends were					
08. I was treated like a baby					
09. I believed that wishing for good things could make them happen					
10. Whether or not people liked me depended on how I acted					
11. My parents tried to make me dependent on them					
12. I felt I could look after myself if my parents weren't around					
13. I had little privacy					
14. Trying to get my own way at home was pointless					
15. I was allowed to go out as often as I wanted					
16. When good things happened, they happened through my efforts					

- | | | | | | | |
|-----|--------------------------------------------------------------------------|---|---|---|---|---|
| 17. | My parents usually helped me if I asked them to | 1 | 2 | 3 | 4 | 5 |
| 18. | My parents did not want me to grow up | 1 | 2 | 3 | 4 | 5 |
| 19. | I was encouraged to make my own decisions | 1 | 2 | 3 | 4 | 5 |
| 20. | I had little say about what I ate at home | 1 | 2 | 3 | 4 | 5 |
| 21. | When I did something wrong, there was little I could do to make it right | 1 | 2 | 3 | 4 | 5 |
| 22. | I felt overprotected | 1 | 2 | 3 | 4 | 5 |
| 23. | I was allowed to decide things for myself | 1 | 2 | 3 | 4 | 5 |
| 24. | It was easy to get my friends to do what I wanted them to do | 1 | 2 | 3 | 4 | 5 |
| 25. | I felt that most of the time, my parents listened to what I had to say | 1 | 2 | 3 | 4 | 5 |
| 26. | I was given as much freedom as I wanted | 1 | 2 | 3 | 4 | 5 |
| 27. | Nobody seemed to understand what I needed or wanted | 1 | 2 | 3 | 4 | 5 |
| 28. | I had little say in family decisions | 1 | 2 | 3 | 4 | 5 |
| 29. | Overall my parents had an authoritarian style of parenting | 1 | 2 | 3 | 4 | 5 |
| 30. | Overall my parents had a democratic style of parenting | 1 | 2 | 3 | 4 | 5 |

APPENDIX 39: RATIONAL-EXPERIENTIAL INVENTORY

RATIONAL-EXPERIENTIAL INVENTORY
Pacini & Epstein (1999)

Please use the following scale to indicate how much you agree with each of the statements below

1 Completely False	2 False	3 Unsure	4 True	5 Completely True
-----------------------	------------	-------------	-----------	----------------------

- | | | | | | |
|---------------------------------------------------------------------------------------------|---|---|---|---|---|
| 01. I have a logical mind | 1 | 2 | 3 | 4 | 5 |
| 02. I prefer complex problems to simple ones | 1 | 2 | 3 | 4 | 5 |
| 03. I believe in trusting my hunches | 1 | 2 | 3 | 4 | 5 |
| 04. I am not a very analytical thinker | 1 | 2 | 3 | 4 | 5 |
| 05. I trust my initial feelings about people | 1 | 2 | 3 | 4 | 5 |
| 06. I try to avoid situations that require thinking in depth about something. | 1 | 2 | 3 | 4 | 5 |
| 07. I like to rely on my intuitive impressions. | 1 | 2 | 3 | 4 | 5 |
| 08. I don't reason well under pressure. | 1 | 2 | 3 | 4 | 5 |
| 09. I don't like situations in which I have to rely on intuition | 1 | 2 | 3 | 4 | 5 |
| 10. Thinking hard and for a long time about something gives me little satisfaction. | 1 | 2 | 3 | 4 | 5 |
| 11. Intuition can be a very useful way to solve problems. | 1 | 2 | 3 | 4 | 5 |
| 12. I would not want to depend on anyone who described himself or herself as intuitive. | 1 | 2 | 3 | 4 | 5 |
| 13. I am much better at figuring things out logically than most people. | 1 | 2 | 3 | 4 | 5 |
| 14. I usually have clear, explainable reasons for my decisions. | 1 | 2 | 3 | 4 | 5 |
| 15. I don't think it is a good idea to rely on one's intuition for important decisions. | 1 | 2 | 3 | 4 | 5 |
| 16. Thinking is not my idea of an enjoyable activity. | 1 | 2 | 3 | 4 | 5 |
| 17. I have no problem thinking things through carefully. | 1 | 2 | 3 | 4 | 5 |
| 18. When it comes to trusting people, I can usually rely on my gut feelings. | 1 | 2 | 3 | 4 | 5 |
| 19. I can usually feel when a person is right or wrong, even if I can't explain how I know. | 1 | 2 | 3 | 4 | 5 |

- | | | | | | | |
|-----|------------------------------------------------------------------------------------------------|---|---|---|---|---|
| 20. | Learning new ways to think would be very appealing to me. | 1 | 2 | 3 | 4 | 5 |
| 21. | I hardly ever go wrong when I listen to my deepest gut feelings to find an answer. | 1 | 2 | 3 | 4 | 5 |
| 22. | I think it is foolish to make important decisions based on feelings. | 1 | 2 | 3 | 4 | 5 |
| 23. | I tend to use my heart as a guide for my actions. | 1 | 2 | 3 | 4 | 5 |
| 24. | I often go by my instincts when deciding on a course of action. | 1 | 2 | 3 | 4 | 5 |
| 25. | I'm not that good at figuring out complicated problems. | 1 | 2 | 3 | 4 | 5 |
| 26. | I enjoy intellectual challenges. | 1 | 2 | 3 | 4 | 5 |
| 27. | Reasoning things out carefully is not one of my strong points. | 1 | 2 | 3 | 4 | 5 |
| 28. | I enjoy thinking in abstract terms. | 1 | 2 | 3 | 4 | 5 |
| 29. | I generally don't depend on my feelings to help me make decisions. | 1 | 2 | 3 | 4 | 5 |
| 30. | Using logic usually works well for me in figuring out problems in my life. | 1 | 2 | 3 | 4 | 5 |
| 31. | I think there are times when one should rely on one's intuition. | 1 | 2 | 3 | 4 | 5 |
| 32. | I don't like to have to do a lot of thinking. | 1 | 2 | 3 | 4 | 5 |
| 33. | Knowing the answer without having to understand the reasoning behind it is good enough for me. | 1 | 2 | 3 | 4 | 5 |
| 34. | Using my gut feelings usually works well for me in figuring out problems in my life. | 1 | 2 | 3 | 4 | 5 |
| 35. | I don't have a very good sense of intuition. | 1 | 2 | 3 | 4 | 5 |
| 36. | If I were to rely on my gut feelings, I would often make mistakes. | 1 | 2 | 3 | 4 | 5 |
| 37. | I suspect my hunches are inaccurate as often as they are accurate. | 1 | 2 | 3 | 4 | 5 |
| 38. | My snap judgements are probably not as good as most people's. | 1 | 2 | 3 | 4 | 5 |
| 39. | I am not very good at solving problems that require careful logical analysis. | 1 | 2 | 3 | 4 | 5 |
| 40. | I enjoy solving problems that require hard thinking. | 1 | 2 | 3 | 4 | 5 |

APPENDIX 40: UPNAS QUESTIONNAIRE (VERSION 4)

USE OF PARANORMAL AND NEW AGE SERVICES QUESTIONNAIRE (UPNAS)

This questionnaire asks about your use of paranormal and New Age services (i.e. psychics, clairvoyants, fortune tellers, spiritual healers, tarot card readers and mediums etc.)

1. Please tick the paranormal or New Age services that you have previously used

Medium	
Spiritual Cleanser	
Past Life Regression	
Psychic (Clairvoyants & Fortune Tellers)	
Card Reader (Angel, Tarot, Spirit)	
Rune Reader	
Palm Reader	
Crystal Gazer	
Horoscopes (e.g. Newspapers, Magazines, Online)	
Healing (Crystals, Reiki, Energy)	
Astrology	
Alternative Medicine	
Dream Interpretation	
Other (Please Specify)	

2. Which three paranormal and New Age services from the list above do you prefer to use?

1.
2.
3.

3. How many times have you used a paranormal or new age service in your *lifetime*? (Circle)

0-3 times	4-7times	8-11 times	12-15 times	16-19 times	20-23 times	24+ times
-----------	----------	------------	-------------	-------------	-------------	-----------

4. How many times in the *last year* have you used a paranormal or new age service?

0-3 times	4-7 times	8-11 times	12-15 times	16-19 times	20-23 times	24+ times
-----------	-----------	------------	-------------	-------------	-------------	-----------

5. How *often* do you use paranormal or new age services?

Every day	2-3 times per week	2-3 times per month	Once a month	2-3 times per year	Once a year	Less than once a year
-----------	--------------------	---------------------	--------------	--------------------	-------------	-----------------------

6. How much money do you spend visiting paranormal and New Age services per year?

£0-£49	£50-£99	£100-£149	£150-£199	£200-£249	£250-£299	£300+
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For the following 22 items please indicate how much you agree or disagree with each statement. Please circle the appropriate number from 1 'strongly disagree' to 7 'strongly agree'. Think about when you have previously used a paranormal and New Age service and the reasons why.

Strongly Disagree 1	Disagree 2	Slightly Disagree 3	Neither 4	Slightly Agree 5	Agree 6	Strongly Agree 7
------------------------	---------------	------------------------	--------------	---------------------	------------	---------------------

I like to use paranormal and New Age services as,

- | | | | | | | | |
|-------------------------------------------------------|---|---|---|---|---|---|---|
| 01. They are objective | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 02. They give me a better understanding of my desires | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 03. They honest | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 04. Then I don't have to deal directly with a problem | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 05. They are a professional source of information | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 06. They are truthful | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 07. They tell me what I want to hear at the time | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 08. They give me accurate information | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 09. They understand I am a unique person | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. They provide expert help | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. They are personalised to my needs | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. They help me develop my goals | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

I mainly use paranormal and New Age services when,

- | | | | | | | | |
|--------------------------------------------------------------------|---|---|---|---|---|---|---|
| 13. I need to change something so things will turn out alright | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. I need to distance myself from negativity | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. I want to look at a situation in order to understand it better | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. I need help to make important decisions | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. A last resort | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. I need to think hard about what steps to take in the future | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19. I want to take direct action to address a problem | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20. I don't feel like my friends or family can help me | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 21. I feel like my life has become chaotic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 22. I struggle to believe certain things have happened | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX 41: BRIEF SHEET

Use of Paranormal and New Age Services (UPNAS) Study



Thank you for your time and interest in this study.

What is the purpose of the study?

This piece of research is interested in people's paranormal and New Age belief and the use of services surrounding these, including but not limited to psychics, clairvoyants, numerologists, palmists, spiritual/crystal healers, past-life regressions therapists and mediums. It also asks about childhood experiences, styles of thinking.

Do I have to take part?

It is up to you if you want to participate. If you decide to take part and later change your mind you can withdraw at any point before returning/submitting the questionnaires. Please only take part if you are over the age of 16 years and have good English reading skills and have used a paranormal service more than three times in the past.

What will I have to do and how long will it take?

The questionnaire pack contains approximately 60 statements. You will be asked to indicate the extent to which you agree or disagree with each. Whilst it is asked that you rate as many statements as you can if you are unsure of a statements meaning or you do not wish to answer you can leave it blank. This will only take around 10 minutes to complete depending on your reading speed.

Who looks at my answers?

Only the research team will see the finished questionnaires. No information is passed on to any third parties and will be stored on a password protected computer. Summaries of the collected data may be used as PhD research, presented at conferences or written up in academic journals. Submitting the questionnaire will indicate your consent to take part in the study and for your data to be used accordingly.

Will my answers be confidential?

Yes, no names, addresses, phone numbers or identifying details will be collected and the questionnaire is given a numerical ID. The study is completely anonymous. A few short questions asking for your age, gender and ethnicity is included but this is only to make sure a wide variety of people take part. If you complete this study online you can also clear your internet browsing history so nobody else who uses that device can access your answers.

What are the possible disadvantages of taking part?

There are no risks to taking part in this study. But if thinking about a time when you have used a paranormal service upsets you then there are people who can help. Support organisations are supplied at the end of the study. You are reminded that you can withdraw from the study at any point if you feel uncomfortable.

What if I want more information first?

If you have any questions about study contact Emma at ELLowrie@uclan.ac.uk or project supervisor Gayle at GBrewer@uclan.ac.uk. If you are unhappy or have concerns about any aspect of the project please contact the University Office for Ethics at OfficerForEthics@uclan.ac.uk. They are entirely independent of the project and can respond to your concerns.

APPENDIX 42: DEBRIEF SHEET

Use of Paranormal & New Age Services (UPNAS) Study

Thank you for completing this questionnaire pack,



What was the aim of the study?

Previous surveys have found that the majority of people believe in at least one aspect of the paranormal and it is conceivable that such beliefs play an important part in peoples' everyday lives. Evidence also suggests people are more likely to "activate" these beliefs during times of high stress implying they are used as a form of coping.

This study aims to link using paranormal and New Age beliefs as a method of coping with previous experiences of control childhood and thinking styles. It is expected that there will be a relationship between the three.

Are you sure no-one else will see my answers?

All the information collected for this study will be used for academic research purposes only and that your responses will remain strictly confidential and anonymous. If you completed this study online you can also clear your internet browsing history so nobody else who uses that device can access your answers.

Completing this study made me think of something that upset me, who can I talk to?

If you have remembered something that upset you, the organisations listed below may be able to help.

Organisation	Telephone	Web
Samaritans	(01772) 822 022	www.samaritans.org
Cruse Bereavement	(08444) 779 400	www.crusebereavementcare.org.uk
Society for Psychical Research (SPR)	via website only	www.spr.ac.uk/contact

I have more questions about the study, can I contact you?

Of course! If you have any questions about this study or would like a summary of the overall results please contact me via email at ELLowrie@uclan.ac.uk. Alternatively, you may contact the project supervisor Dr Gayle Brewer via GBrewer@uclan.ac.uk. If you are unhappy or have concerns about any aspect of the project please contact the University Office for Ethics at OfficerForEthics@uclan.ac.uk. They are entirely independent of the project and can respond to your concerns.

APPENDIX 43: ETHICAL APPROVAL

11 January 2017

Gayle Brewer / Emma Lowrie
School of Psychology
University of Central Lancashire



Dear Gayle / Emma

Re: PSYSOC Ethics Committee Application
Unique Reference Number: PSYSOC 102 5th Phase

The PSYSOC ethics committee has granted approval of your proposal application 'Paranormal Belief as a Unique Form of Coping'. Approval is granted up to the end of project date* or for 5 years from the date of this letter, whichever is the longer.

It is your responsibility to ensure that

- the project is carried out in line with the information provided in the forms you have submitted
- you regularly re-consider the ethical issues that may be raised in generating and analysing your data
- any proposed amendments/changes to the project are raised with, and approved, by Committee
- you notify roffice@uclan.ac.uk if the end date changes or the project does not start
- serious adverse events that occur from the project are reported to Committee
- a closure report is submitted to complete the ethics governance procedures (Existing paperwork can be used for this purposes e.g. funder's end of grant report; abstract for student award or NRES final report. If none of these are available use [e-Ethics Closure Report Proforma](#)).

Yours sincerely

A handwritten signature in blue ink, appearing to read 'C Larkins', is written over a light blue horizontal line.

Cath Larkins
Deputy Vice Chair
PSYSOC Ethics Committee

APPENDIX 44: PUBLICATION LIST

Publications

- Rogers, P., & Lowrie, E. (2018). Predicting Facets of Adult Paranormality From Childhood Exposure to Inappropriate Styles of Parenting. *Imagination, Cognition and Personality*. (Online first).
- Lowrie & Tyrrell-Smith (2017). Using a new visual engagement tool to understand factors which impact upon early child health and development with the aim of influencing future service design. In C. Canali, J. Ma, & Vecchiato, T. *New perspectives for outcome-based evaluation and research on family and children's services*, 152-155. Fondazione Emanuela Zancan, Padova, Italy.
- Lowrie, E., Brewer, G., Rogers, P., Eslea, M., & Tarling, R. (2017). Endorsement of paranormal and New Age belief as a unique form of coping. In K. A. Moore, & P. Buchwald. (Eds). *Stress and anxiety: Coping and resilience*, 79-92. Logos Verlag, Berlin, Germany.
- Lowrie, E., & Tyrrell-Smith, R. (2017). Using a Community-Engaged Research (CEnR) approach to develop and pilot a photo grid method to gain insights into early child health and development in a socio-economic disadvantaged community. *Research Involvement and Engagement*, 3, 29.
- Rogers, P., Fisk, J., & Lowrie, E. (2017). Paranormal belief and errors of probabilistic reasoning: The role of constituent relatedness in believers' susceptibility to the conjunction fallacy. *Consciousness and Cognition*, 56, 13-29.
- Rogers, P., Fisk, J., & Lowrie, E. (2016). Paranormal believers' susceptibility to confirmatory versus disconfirmatory conjunctions: Paranormal belief and confirmatory conjunctions. *Applied Cognitive Psychology*, 30(4), 628-634.
- Rogers, P., & Lowrie E. (2016). Varieties of childhood maltreatment as predictors of adult paranormality and New Age orientation. *Personality and Individual Differences*, 92, 37-45.

Conferences

- Lowrie, E., & Smy, C. (2018). Understanding factors that impact on early child development: A focus on dads. *BASPCAN 10th International Conference*. University of Warwick (UK), April 8-11.
- Lowrie, E., & Swindells, R. (2017). Alcohol-exposed pregnancies. *The 3rd Blackpool Better Start (NSPCC) Annual Conference*, Blackpool (UK), November 15.
- Lowrie & Tyrrell-Smith (2017). Using a new visual engagement tool to understand factors which impact upon early child health and development with the aim of influencing future service design. *International Association for Outcome-based evaluation and Research on Family and Children's Services*. The Chinese University of Hong Kong (Hong Kong), September 7-8.

- Lowrie, E., & Seng, J. (2016). Trauma-informed care and Survivor Mums (UK). *The 2nd Blackpool Better Start (NSPCC) Annual Conference*. Blackpool (UK), November 15.
- Lowrie, E., Brewer, G., Rogers, P., Eslea, M., & Tarling, R. (2016). Endorsement of paranormal and New Age belief: Measuring a unique form of coping. *The 37th STAR conference: Stress and Anxiety in a Changing Society*. University of Zagreb (Croatia) July 6-8.
- Rogers, P., & Lowrie, E. (2015). Varieties of childhood maltreatment as predictors of adult paranormality. *The combined 58th Annual Convention of the Parapsychological Association and 39th International Society for Psychical Research Annual Conference*. University of Greenwich (UK), July 16-19.
- Lowrie, E. (2015). The psychological benefits of belief. *Skeptics Week*. University of Central Lancashire (UK), April 13-17.
- Rogers, P., Fisk, J., & Lowrie, E. (2014). Further investigations of paranormal believers' susceptibility to the conjunction fallacy: Differences across conditionally related versus unrelated constituent events. *The 38th International Society for Psychical Research Annual Conference*. University of York (UK), September 5-7.