Emotional Intelligence and Locus of Control: Fate, Faith, or Personal Control?

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Abstract

Emotional intelligence refers to individual differences in the ability to monitor one's own and others' feelings and emotions, to discriminate them and to use this information to guide one's thinking and actions. These differences have been shown to have a significant effect on life outcomes such as mental health, social relationships and work performance. In this paper the relationship between emotional intelligence, as measured by the Trait Emotional Intelligence Questionnaire Short Form (TEIQue-SF), and belief in personal control, as measured by the Belief in Personal Control Scale (BPCS), were examined in a sample of undergraduate psychology students (N = 94). In line with previous research emotional intelligence was found to be positively correlated with a belief in internal personal control. Gender differences were found with females scoring higher in emotional intelligence than males. Implications and future research directions are discussed.

1. Introduction

For decades Intelligence Quotient (IQ) has been accepted as the best gauge or predictor for an individual's success in life. In spite of this many individuals with high IQ scores were not realising their perceived potential. Subsequently the last 30 years has seen increasing attention given to the possibility that emotions may moderate intelligent behaviour by an individual's reaction to, and their interpretation of information (Salovey & Mayer, 1994). It is now proposed that Emotional Intelligence (Salovey & Mayer, 1989) may be a better predictor of success in life than IQ. A large body of evidence drawn from a variety of domains have found positive correlations between Emotional Intelligence and satisfaction with social relationships (Lopes, Salovey & Straus, 2003); subjective well-being (Kulshrestha & Sen, 2006); empathetic perspective taking, self-monitoring in social situations and social skills (Schutte et al., 2001) and negative correlations with psychological distress (Slaski & Cartright, 2002) and depression (Schutte et al., 1998). Emotional intelligence (EI) is increasingly relevant in business and organisations and is now an important consideration in human resources, job profiling, recruitment interviewing and selection, management development, customer service and more. The concept of EI was brought into the public domain in 1996 by Daniel Goleman's international best-selling book: *Emotional Intelligence: Why it can matter more than IQ*. The book captured the attention of the world media, researchers and the general public claiming that EI can be *"as powerful and at times more powerful than IQ"* in predicting how successful one is in life (Goleman, 1996, p. 34). He also maintains that IQ at best contributes approximately 20% of the factors that contribute to life success, leaving 80% to other forces. According to Goleman (1998) most large companies

have employed trained psychologists to develop what are known as 'competency models' to aid them in identifying, training and promoting likely stars in the leadership firmament.

The current study examines the relationship between Trait Emotional Intelligence, Locus of Control and Personality in a student population and in an Irish context.

1.1. Expanding the concept of intelligence

When psychologists first began to write about intelligence it was with a restricted view in which they focused on cognitive abilities such as: mathematics, language, memory, problem-solving and spatial reasoning. These abilities were measured with various 'intelligence tests' for example, the *Intelligence Quotient* (IQ). However, researchers soon came to realise that these tests presented a very narrow view of intelligence and proposed that non-cognitive aspects were equally important. Psychologists became concerned with how little traditional tests of cognitive intelligence told us about what it takes to be 'successful' in life. Studies by Hunter & Hunter (1984) argued that IQ by itself is not an accurate predictor of job performance and propose that there are people who are highly intelligent but who are not socially adept. They estimate that at best IQ accounts for about 25 percent of the variance. Sternberg (1996) has documented that studies vary and that 10 percent may be a more realistic estimate.

As early as the 1930's scientists began to broaden their view of intelligence. Thorndike (1937) divided intelligence into three facets, pertaining to the ability to understand and manage ideas (abstract intelligence), concrete objects (mechanical intelligence), and people (social intelligence). As originally defined by Thorndike (1920) Social Intelligence referred to the person's ability to understand and manage other people, and to engage in adaptive

social interactions. Building on Thorndike's research, Wechsler (1943) defined intelligence as "*the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment*". He referred to 'on-intellective' elements by which he meant affective, personal, and social factors, and proposed that non-intellective abilities are essential for predicting one's ability to succeed in life. However, these theories didn't hold much sway with theorists of IQ, and by 1960 L. J. Cronbach pronounced social intelligence a "useless concept".

Unfortunately there was a gap in the research when interest in 'non-cognitive' elements of intelligence declined. It was not until 1983 when Howard Gardner began to write about "multiple intelligences" that the construct once more came into vogue. He took a wider view of intelligence, and tried to reinvent it in terms of what it takes to lead life successfully (Goleman, 1996). Gardner (1983) proposed that 'intrapersonal' and 'interpersonal' intelligences, which concern the ability to understand the emotions and mental states in one's own self and in other people, respectively, are as important as the type of intelligence typically measured by IQ and related tests. He identified seven distinct intelligences: Visual-Spatial; Bodily-Kinaesthetic; Musical; Intrapersonal; Interpersonal; Linguistic and Logical-Mathematical. In his book *Multiple Intelligences: The theory in practice* (1993) Gardner suggested that it is through language, mathematics, music, spatial representations and our bodies that we come to understand ourselves, others and the world around us. He asserted that 'Intrapersonal Intelligence' comprises of a capacity to detect one's own moods and the ability to understand them as a means to guiding behaviour. This division of intelligences was supported by Robert Sternberg (1985) who concluded in his book *Beyond IQ* that "*social intelligence is both distinct from academic abilities and a key part of what makes people do well in the practicalities of life.*"

1.2. Emotions and the Brain

Emotions have been traditionally viewed as "*disorganised interruptions of mental activity, so potentially disruptive that they must be controlled*" (Woodworth, 1940). However, there were some theorists who saw emotions in a more positive light and suggested that they are primarily motivating forces. For example, Leeper (1948) asserted that emotions are "*processes which arouse, sustain and direct activity and contribute to logical thought and adaptive behaviour"*. The basic emotions of fear, anger, disgust, sadness, joy and surprise are presumed to be hard-wired and physiologically distinctive. Our 'fight or flight' response suggests there is an evolutionary advantage to emotions, but can these basic emotions override our rational thinking?

Historically emotion and cognition were considered to be separate systems that seldom interacted. However, the last few decades have seen a notable shift in this perspective. Over the past thirty years neuroscientists have sought to understand how the 'thinking' brain interacts with the 'emotional' brain. The discipline of affective neuroscience is concerned with the neural bases of emotion and mood, and combines the work of psychologists, psychiatrists, neurologists, philosophers and biologists to address questions such as: Which brain systems underlie emotions? How does emotion processing in the brain relate to physiological changes due to emotion? And how does emotion processing interact with cognition? (Dalgleish, 2004).

One of the first contributions to the field of affective neuroscience was Charles Darwin's (1872) ground-breaking book, *The Expression of Emotion in Man and Animals*. In this book he made two important contributions: firstly, he proposed that human and animal emotions have the same structure; and secondly, that there was a limited set of fundamental or basic emotions across species and across cultures. These emotions include anger, fear, sadness and

surprise. Following on from Darwin, in the 1880's William James (1882) and Carl Lange (1885) developed similar ideas in parallel with each other that became known as the James-Lange Theory of Emotion (as cited in Dalgleish, 2004, p. 582). They controversially suggested that emotions are no more than the experience of sets of bodily changes that occur in response to emotive stimuli. James (1884) gives the much cited example of meeting a bear in the woods to explain the theory. He suggests that it is not a case of us feeling frightened and running when we see the bear, rather running away follows directly from our perception of the bear, and our experience of the bodily changes involved in running is the emotion of fear. Dalgleish (2004) argues that the main contribution of the James-Lange Theory is the emphasis it places on the embodiment of emotions and for that reason it remains an influential theory.

Subsequent research by Cannon (1927) on the emotional behaviour of cats following brain lesions, challenged the James-Lange Theory. He argued that if emotions were perception of bodily change, then they should be dependent entirely on having their sensory and motor cortices intact. He suggested that the fact that removal of the cortex did not eliminate emotions must mean that James and Lange were wrong (Dalgleish, 2004). Cannon (1927) was first to propose that the hypothalamus is the brain region involved in the emotional response to stimuli. Experiments by Kluver and Bucy (1939) demonstrated how the bilateral removal of the temporal lobes in monkeys led to loss of emotional reactivity indicating a key role for temporal lobe structures in emotion (as cited in Dalgleish, 2004, p. 583).

Since then advances in technology, for example, functional magnetic resonance imaging (fMRI) and positron emission tomography (PET) scans have enabled us to take a closer look at the neural underpinnings of human emotion and examine how cognitive and emotional brain systems interact in the generation of complex behaviours. The work of neurologist

Damasio (1995) demonstrates how neurobiology can help us understand the role of emotion in thinking. The results of his studies of patients with damage to the prefrontal-amygdala circuit reported evidence of extremely flawed decision making with no deterioration to IQ or any cognitive ability. Thus, suggesting that intellect cannot work at its best without some input from emotion. The results of a meta-analysis of emotion activation studies by Luan Phan, Wager, Taylor & Liberzon (2002) suggests separate brain regions are involved in different aspects of emotions. Specifically they reported that: the medial prefrontal cortex had a general role in emotional processing; fear engages the amygdala; the subcallosal cingulate was associated with sadness; and emotional tasks with cognitive demand involved the anterior cingulated and insula.

1.2.1. Emotional Intelligence

Emotional Intelligence is a relatively new psychological construct that embraces the core concepts of the psychology of individual differences: Intelligence, Personality and Emotions. It posits the existence of actual or perceived differences in the extent to which people attend to, process and utilise affect-laden information. Developing on the concepts of 'non-cognitive' and 'social intelligence', Salovey & Mayer (1989) were first to propose a formal definition of EI as "*a subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate them and to use this information to guide one's thinking and actions*". They viewed emotions as organised responses that incorporated many psychological disciplines including physiological, cognitive, motivational and experiential. Four facets of EI have been identified in the literature (Bellamy, Gore & Sturgis, 2005). They are *Self-awareness, Empathy, Managing Relationships, and Emotion Management.* Self-awareness refers to the ability to accurately assess one's own behaviours, feelings and emotions. It also includes the expression of emotion. In short, it refers to an

individuals' cognitive ability for self reflection and understanding of emotion. Empathy refers to the ability to appraise other emotions. The Managing Relationships facet involves the ability to recognise and understand the emotions and behaviours of others and to adjust one's own emotional response accordingly. Finally, Emotion Management is the ability to regulate emotions and behaviour to suit a situation.

Inspired by the research of Salovey & Mayer (1989) interest in EI has gathered momentum to the point where Matthews, Zeidner & Roberts (2002) suggest that the study of EI has become a pivotal area of contemporary psychology. In their book *Emotional Intelligence: science and myth* they posit that EI has been touted as a panacea for modern business, is essential in the practice of nursing, law, medicine and engineering. Notwithstanding its popularity Matthews et al., (2002) argue that scientific investigation of a clearly identified construct of emotional intelligence is sparse and question whether there is anything to EI that psychologists working within the fields of personality, intelligence, and applied psychological research do not know already.

Despite these reservations research in EI continues in an effort to establish it as a distinct mental ability that can be measured. Mayer, Salovey and Caruso (2000) propose that an 'intelligence' must meet several standard criteria before it can be considered scientifically legitimate. Firstly, it should be capable of being operationalised as a set of abilities. Secondly, it should meet certain correlational criteria for example; abilities should be inter-correlated and be related to pre-existing intelligences whilst also showing some unique variance. Thirdly, the abilities should develop with age and experience.

Some preliminary findings reported that subjects who scored high on emotional clarity (the ability to identify and name an emotion that is being experienced) after viewing an upsetting movie, recovered more quickly than those who scored lower (Salovey, Mayer,

Goldman, Turvey, & Palfai, 1995). In a later, study researchers found that individuals who scored higher in the ability to accurately perceive, understand and appraise others' emotions were better able to respond flexibly to changes in their social environments and better equipped to build supportive social networks (Salovey, Bedell, Detweiler, & Mayer, 1999). There is evidence suggesting that high EI scores are related to positive outcomes such as pro-social behaviour (Mayer, Caruso & Salovey, 1999) and positive family and peer relations (Salovey, Mayer, Caruso & Lopes, 2001). Lower Emotional Intelligence scores have been correlated with self-destructive behaviours, for example cigarette smoking and alcohol consumption (Trinidad & Johnson, 2001; Austin, Saklofske, & Egan, 2005). There is also evidence for negative associations between EI and stress, depression-proneness and loneliness (Saklofske, Austin & Minski, 2003).

The majority of the research on EI to date focuses on beneficial aspects and pro-social outcomes, neglecting the use of emotional skills in negative and malicious contexts, including emotional manipulation. Kilduff, Chiaburu & Menges (2010), suggest that most research presumes emotions arise spontaneously and neglects how emotions may be used as a weapon. Addressing the gap in the literature Ali, Amorim & Chamorro-Premuzic (2009) and Austin, Farrelly, Black & Moore, (2007) examined the 'dark side' of the construct. Both studies found that Machiavellianism was negatively correlated with both trait and ability EI. Examining the darker side of EI in a business context, Kilduff et al., (2010) reported that individuals high in EI are likely to have the ability to regulate feelings of compassion, guilt and remorse so that "*the expression of such emotions serves the overriding goal of getting ahead*."

Since Salovey and Mayer (1989) first defined Emotional Intelligence research in this field has gathered momentum and several more theories have been proposed. The *Emotional Creativity Theory* (Averill & Nunley, 1992) focuses on the value of emotional fulfilment

through emotional creativity. Saarni's (1999) *Theory of Emotional Competence* is similar to other theories of EI, but places emphasis on the social contexts of emotional functioning and on emotional self-efficacy. Despite the growing body of evidence establishing EI as a valid concept, Locke (2005) argues that it is not a valid form of intelligence and has no intelligible meaning due to the fact that it is so broadly defined and inclusive.

1.2.2. Concepts of Emotional Intelligence

Emotional Intelligence has been conceptualised in different ways, resulting in confusion about the nature of it and the best way to measure it. According to Davey (2005) early work on EI failed to understand the essential role of measurement in the operationalisation of the construct. More specifically, the fundamental distinction between self-report and maximum performance measurement went unheeded, thus leading to conceptual confusion and contradictory results. Some conceptualisations of EI are somewhat broad and include a range of adaptive characteristics associated with emotions, whereas others emphasise cognitive elements, such as emotions aiding judgement and memory (Schutte et al., 2001). The choice of measurement has a direct and significant influence on the operationalisation process and thus on empirical findings. Davey (2005) argues that the measurement of EI through maximum performance tests will not yield the same findings as its measurement through self-report questionnaires. This is because the former will assess actual abilities whilst the latter assess behavioural tendencies and self-perceived abilities.

There are currently two concepts of Emotional Intelligence: Ability (involving the cognitive processing of affect-laden information) which should be measured by ability-type tests (Goleman, 1995; Mayer, Salovey & Caruso, 2000); and Dispositional (or Trait - a personality trait) which should be measured by self-report questionnaires (Bar-On, 1997;

Schutte & Malouff, 1999; Petrides & Furnham, 2001). Problems associated with both concepts of EI (i.e. Ability and Trait) are discussed in detail by Roberts, Zeidner and Matthews (2001) and Matthews et al., (2002). However, it is still not clear if or how these two measurements should be reconciled. Studies by Petrides & Furnham (2000; 2001) suggest that trait and ability EI should be regarded as distinct. This is supported by Lopes et al., (2003) who reveal that self-report and ability measures of EI yield different findings. Empirical studies have revealed very low correlations between trait and ability EI (O'Connor & Little, 2003; Warwick & Nettlebeck, 2004).

Addressing the debate on the status of Emotional Intelligence as an 'ability' or a 'trait', Mikolajczak (2009) proposed a tripartite model of EI. Along with the aspects of ability and trait, this model posits a third aspect, knowledge. Mikolajczak outlines the difference between them as follows: The ability aspect of EI refers to the application of knowledge to an emotional situation and the implementation of a plan, the focus is not on what people know but on what they can do; the trait aspect of EI relates to emotion-related dispositions, specifically the tendency to behave in a particular way in emotional situations, the focus is on what the individual does in the situation; the knowledge aspect refers to the extent and complexity of the individuals knowledge of emotion and focuses on how they deal with emotion-laden situations. The rationale behind the three levels of EI is that knowledge does not always translate into abilities and likewise abilities are not always expressed in practice.

1.2.3. Measures of Emotional Intelligence

One of the first instruments developed to measure EI is the Bar-On EQ-i (Bar-On, 1997). This self-report instrument originally evolved out of a clinical context. It was designed to assess the personal qualities that enabled some people to possess better emotional well-being

than others. Bar-On (1997, p.14) characterises EI as "*an array of non-cognitive capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures*". This instrument measures 15 distinct facets of EI namely: Emotional self-awareness; Assertiveness; Self-regard; Self-actualisation; Independence; Empathy; Interpersonal relationships; Social responsibility; Problem solving; Reality testing; Flexibility; Stress tolerance; Impulse Control; Happiness; and Optimism.

The Mayer – Salovey – Caruso (MSCEIT, 2002) conceptualisation of EI made intelligence their focal point. They attempted to measure EI as a construct separate from established personality dimensions. Early EI ability scales, for example, the Multi-factor Emotional Intelligence Test (MEIS; Mayer et al., 1999) were criticised for possessing lower-than-desirable reliability (Davies, Stankov, & Roberts, 1998; Roberts et al., 2002). This measure was improved upon with a shorter, more reliable test called the Mayer–Salovey–Caruso Emotional Intelligence Scale (MSCEIT 2002). The MSCEIT is content valid and possesses a factor structure congruent with the four-part model of EI (Mayer, Salovey, Caruso & Sitarenios, 2003). The four EI abilities the MSCEIT measures are: (a) Perceiving Emotion, (b) Using Emotion to Facilitate Thought, (c) Understanding Emotion, and (d) Managing Emotion. Mayer et al., (2000) argue that some conceptions of EI are misleading and suggest that their specific "*use of the term stresses the concept of an intelligence that processes and benefits from emotions"*. From their perspective, EI is composed of mental abilities, skills, or capacities. However, the measurement of ability EI is problematic because the inherently subjective nature of emotional experience undermines the effort to develop test items along cognitive ability lines, such as those used in standard IQ tests (Davey, 2005).

Petrides and Furnham (2001) proposed a conceptual distinction between two types of EI, based on the method of measurement used to operationalise them. Ability EI (or cognitive-

emotional ability) concerns the actual ability to perceive, process, and utilise affect-laden information. Davey (2005) argues that this construct pertains primarily to the realm of cognitive ability and should be measured via maximum-performance tests. Trait EI (or emotional self-efficacy) concerns a constellation of emotion-related self-perceptions and dispositions. This construct pertains primarily to the realm of personality and should be measured via self-report questionnaires. The measurement of trait EI is more straightforward than ability EI because the construct consists of self-perceptions and behavioural characteristics, which are compatible with the subjective nature of emotions.

Petrides and Furnham (2001) developed their Trait Emotional Intelligence Questionnaire (TEIQue) on the basis of 15 components of EI that they identified. They are: (1) Adaptability; (2) Assertiveness; (3) Emotion perception; (4) Emotion expression; (5) Emotion management (of others); (6) Emotion regulation; (7) impulsiveness (low); (8) Relationship skills; (9) Self-esteem; (10) Self-motivation; (11) Social competence; (12) Stress management; (13) Trait empathy; (14) Trait happiness; and (15) Trait optimism. In addition, it provides scores on four factors of broader relevance: Well-being which includes measures of Self-esteem, Trait happiness and Trait Optimism; Self-control includes measures of Emotion regulation, Stress management and Impulsiveness; Emotionality encompasses Emotion perception, Emotion expression, Trait empathy and Relationships; and Sociability consisting of Social awareness, Emotion management and Assertiveness. A full description of the four EI factors can be viewed in Table 1. The TEIQue-60 was chosen for this study as it was considered to be the most appropriate measure due to its established correlations with the big five personality traits

1.3. Personality theories

Defining the construct of personality is problematic as it addresses three issues that are difficult to reconcile: (1) Human Universals, (2) Individual Differences, and (3) Individual Uniqueness. Cervone and Previn (2008, p. 8) write that different personality scientists employ subtly different definitions of the word personality however, they all use the term to refer to "*psychological qualities that contribute to an individual's enduring and distinctive patterns of feeling, thinking and behaving".*

Instruments to assess personality traits originate with Hans Eysenck (1947) who conceptualised a two-dimensional model of personality based on Neuroticism and Extroversion (as cited in Cervone & Previn, 2008, p. 259). In the 1970's a third dimension, Psychoticism was added to this theory (Chamorro-Premuzic, 2011). Debate on the number of personality traits needed to classify individual differences dominated the research and by the 1980's a five factor model had been developed due to the repeated emergence of five particular traits in English language studies. The Big Five Model is a trait theory of personality that proposes there are five major and universal factors of personality namely; Neuroticism (N); Extroversion (E); Openness (O); Agreeableness (A); and Conscientiousness. Since then, lexical studies of personality structure have been carried out using mainland European and Asian languages. Ashton & Lee (2001) report the findings from these studies did not provide uniform support for only five factors of personality. Eight independent lexical studies of personality structure conducted in seven languages: Dutch, French, German, Hungarian, Italian, Korean and Polish, posits a similar set of six, not just five factors (Ashton, Lee & Goldberg (2004), the sixth factor being Honesty-Humility.

Based on these studies a new instrument to assess personality, the HEXACO, was developed by Lee & Ashton (2004) consisting of six broad factor scales, each subsuming four more narrow facet scales. A more recent, modified version of the HEXACO (the HEXACO-

60, Ashton & Lee, 2009), was used in this study. The HEXACO-60 model has 6 factors comprising of: Humility (H); Emotionality (E): eXtraversion (X); Agreeableness (A); Conscientiousness (C); and Openness to experience (O). The Honesty-Humility scale includes the subscales of sincerity, fairness, greed avoidance and modesty. Individuals scoring high on the Honesty-Humility scale avoid manipulating others for personal gain, feel little temptation to break rules, are uninterested in lavish wealth and luxuries, and feel no special entitlement to elevated social status. The Emotionality scale consists of fearfulness, anxiety, dependence and sentimentality. High scores on this scale indicate a fear physical danger, anxiety at life's stressors and a need for emotional support from others. Social self-esteem, social boldness, sociability and liveliness are subsumed in the Extraversion scale. Persons scoring high on this scale experience positive feelings about themselves, are confident leading or addressing groups, experience positive feelings of enthusiasm and energy, and enjoy social interactions. The Agreeableness domain includes forgivingness, flexibility, patience and gentleness. A high agreeableness score represents a non-judgemental, lenient person who is willing to cooperate and compromise with others, and who can easily control their temper. The Conscientious scale contains the subscales of organisation, prudence, diligence and perfectionism. Individuals high in conscientiousness strive for accuracy and perfection in their tasks, they are disciplined, diligent and organised. Openness to Experience includes measures of aesthetic appreciation, inquisitiveness, creativity and unconventionality. High scores on this measure suggest an individual who becomes absorbed by beauty, art and nature. They use their imagination freely and are interested in unusual ideas and people. The HEXACO model was chosen for this study as it provides a more comprehensive personality framework than the conventional big five models (Saklofske et al., 2003; Schutte et al., 1998).

1.3.1. Personality and Emotional Intelligence

It is of interest that studies show stronger evidence of a relationship between EI and personality than they do a relationship between EI and intelligence, even though EI is considered a construct within the framework of intelligence (e.g. Stankov & Crawford, 1998; Van Der Zee, Thijs & Schakel, 2002). According to Petrides, Pita & Kokkinaki (2007) locating trait EI in personality space is important, principally because it allows the connection of the construct with mainstream personality literature. By establishing the location of trait EI within existing taxonomies they provided empirical support for the construct's discriminant validity vis-à-vis the higher-order traits. They concluded from their research that trait EI is a compound personality construct located at the lower levels of the Eysenckian and Big Five Factor taxonomies.

Using the five factor model of personality a large significant positive correlation was found between Trait EI and Extroversion (E), a large significant negative correlation with Neuroticism (N) and a smaller but positively significant relationship with O, A & C (Saklofske et al., 2003; Schutte et al., 1998). Using the Big Five Factors Model of personality (Gosling, Rentfrow & Swann, 2003) and the TEIQue-SF for trait EI, Chamorro-Premuzic, Bennett & Furnham (2007) found that four of the five factors namely, Stability, Extraversion, Agreeableness and Conscientiousness, were positively correlated with trait EI. Results from a study by Bastian, Burns & Nettlebeck, (2005) state that self-report measure of EI are more closely related to personality than are ability measures. This confirms previous findings by Saklofske et al., (2003) and Van Der Zee et al., (2002). Although the distinction was less clear, cognitive abilities were more closely related to ability EI than to self-report EI. Studies by Brackett & Mayer (2003) and Lopes et al., (2003) yielded similar results.

A recent study by Veselka, Schermer, Petrides & Vernon, (2009) investigating the location of trait EI within the context of the HEXACO model, in a sample of twins yielded interesting results. They reported many positive significant phenotype correlations between TEIQue-SF and the HEXACO-60. The strongest correlation was found with the Extraversion dimension and the weakest with Honesty-Humility. Emotionality was the only HEXACO dimension to correlate negatively with TEIQue-SF scores. Their study confirmed the validity of trait EI as a constellation of emotional self-perceptions located at the lower levels of personality.

1.4. Locus of Control

People have a general belief in the amount of control they have over their lives. The construct of personal control is central to psychological research. Ross and Sastry (1999) claim it may be a more important determinant of psychological well-being than any other psychological factor. The concept of Locus of Control (LOC) originates from Rotter's (1966) Social Learning Theory. Locus of Control refers to the degree to which individuals believe they are masters of their own destinies. Rotter (1966) referred to individuals who believe they can control their fate as 'Internals' whilst those who believe their lives are controlled by outside forces, he called 'Externals'. Individuals who display an Internal LOC believe that outcomes are the direct result of their own actions, abilities, efforts and so on. Externals reflect the belief that outcomes are the consequence of some external causal agent, such as luck, fate or powerful others. According to Spector (1982) perceptions of control (or lack of control) determine whether outcomes are positive or negative. Research suggests that individuals with Internal LOC are more motivated, put in more effort at work, perform better and have higher starting salaries compared with individuals with external LOC (Nystrom, 1983; Spector, 1982).

Whilst Rotter's (1966) concept of LOC (RLOC) considered it to be a unidimensional concept (i.e. internal v external), subsequent research by Collins (1974) identified 4 factors within the RLOC, namely belief in: a difficult world; a just world; a predictable world; and a politically responsive world. Berrenberg (1987) supported the view of LOC as a multi-dimensional construct however, she argued that previous models conceived control over outcomes as a direct function of the causal agent where internal and external control were non-interactional and non-mediational, respectively. In other words an outcome was perceived as the result of an internal or external cause but never both. Berrenberg's (1987) Belief in Personal Control Scale (BPCS) posits the existence of Mediated Control and is designed to measure three dimensions of personal control: General External Control, Exaggerated Internal Control and God-Mediated Control.

Two approaches have been taken to define and measure God Mediated Control. Welton, Adkins, Ingle and Dixon (1996) maintain that control over an individual's life is entirely in the hands of God. *My life is primarily controlled by God* is an example on an item taken from Welton's *The Multidimensional Locus of Control Scales: God Control Revision* (Welton, 1999). A similar approach is taken by Schieman, Pudrovska and Milkie, (2005) to measure their concept of divine control. A different approach to God Mediated Control is taken by Berrenberg (1987) in which one can enlist God's help without completely surrendering control of one's life. It is more of a partnership with God to enable one to control one's life. This view is reflected in the following item taken from Berrenberg's Belief in Personal Control Scale (Berrenberg, 1987) *I can succeed with God's help.*

In Berrenberg's (1987) Belief in Personal Control Scale, General External Control assesses the extent to which an individual believes his or her outcomes are self-produced (internality) or produced by fate or others (externality). The Exaggerated Internal Control dimension measures an extreme and unrealistic belief in personal control. Finally the God

Mediated Control reflects the belief that outcomes are indirectly produced by one's actions, that there is an external agent mediating between the self and the outcome. The mediator may be a supernatural force (e.g. a God) or a social force (e.g. another person). An individual may believe that she or he has control over their life to the extent that some external agent(s) can be engaged to assist. This dimension distinguishes between those who feel control outcomes from God or those who believe they have no control over their outcomes.

1.4.1. Locus of Control and Emotional Intelligence

Research exploring the relationship between EI and LOC is sparse, but those studies that have been carried out yield interesting results. Kulshrestha and Sen (2006) reported a significant relationship between Subjective Well-Being, EI and LOC. More specifically, subjects scoring high on EI and Internal LOC scored high on positive affect, low on negative affect and significantly high on all three dimensions of life satisfaction (satisfaction with personal life, with achievements, and with life-style). This supports a study by Bellamy, Gore & Sturgis (2005) who found that each Emotional Quotient (EQ) sub-division was significantly correlated with internal LOC. Much of the research in this area use Rotter's (1966) RLOC instrument to measure LOC, therefore the motivation behind using Berrenberg's (1987) (BPCS) model is to investigate the relationship between the extra dimension of God Mediated Control and the construct of EI.

1.5. Gender Differences in Emotional Intelligence

There is a common belief held in society that females experience and express their emotions more intensely than their male counterparts (Grossman & Wood, 1993). According to Brody (1997) stereotypes about gender and emotional expression tend to be imprecise and misleading as they fail to acknowledge situational, individual and cultural variations in males' and females' emotional expressiveness. She argues that when gender differences do occur, they are the result of social processes, such as differences in gender roles and status and power imbalances. Brody (1997) claims that young boys and girls are taught very different lessons about handling emotions by their parents. Girls, she argues, are exposed to more information about emotions than boys and when mothers play with their infants they display a wider range of emotions to daughters than to sons. Also girls play in smaller, more intimate groups with an emphasis on minimising hostility and maximising cooperation, while boys' games are in larger groups, with an emphasis on competition.

In a study on gender differences in emotional experience researchers found that women described themselves as *more affectively intense, more open and sensitive to their feelings, more anxious, more sad, and more happy, than did men* (Feldman Barrett, Robin, Pietromonaco & Eyssell, 1998). According to Goleman (1996) there is little gender differences in adulthood between the typical characteristics of males and females who score high in measures of EI. High scoring men are socially poised, gregarious and optimistic. They are not prone to fearfulness or worried rumination. They are sympathetic and caring in their relationships and are noted for having an ethical outlook. Emotionally intelligent females, like males are outgoing and sociable and express their feelings appropriately. They tend to be assertive and express their feelings directly.

Feldman Barrett, Lane, Sechrest and Schwartz (2000) looked at sex differences in emotional awareness and found that females consistently scored higher than males. Studies on gender differences in ability EI and trait EI yield mixed results. Research focussing on self-report (or trait) EI and EI measures through performance tests, reveal that women self-report a lower EI than they show in performance tests (Brackett & Meyer, 2003; Petrides & Furnham, 2000). The opposite is true for males. However, there was no significant gender difference in overall trait EI (Petrides & Furnham, 2000). This is in contrast to Schutte et al., (1998) who found that females scored higher in trait EI.

Exploring gender differences in ability EI the results show that females score significantly higher than males (Austin et al., 2007; Brackett, Mayer & Warner, 2004), whilst males have a higher sense of personal control than females (Ross & Mirowsky, 2002). In addition Brackett et al., (2004) inform us that males with lower ability EI engage in significantly more potentially harmful behaviours such as using illegal drugs, drinking alcohol excessively, and engaging in deviant behaviour than their female counterparts.

1.6. Age Differences in Emotional Intelligence

Examining correlations between Age and Emotional Intelligence is a growing area of research and investigations to date have provided us with interesting results. In a study using 10 year intervals up to the age of 50 years, Bar-On (1997) reported that EQ-i scores increase with age. One study that looked at a broad range of ages (19-84 years) in a sample of 873 subjects, found an interesting pattern between EI and age. Derksen, Kramer & Katzko, (2002) found that EI peaked in the 35-44 years interval and then decreased in older age.

1.7. Rationale

Psychologists, health professionals and educators are interested in Emotional Intelligence because of its implications for people's lives. The aim of this study is to extend knowledge of the construct of Emotional Intelligence and examine the relationship between Trait Emotional Intelligence and Belief in Personal Control in an Irish context. More specifically, this study will explore which dimension of Personal Control (General External – Fate, Exaggerated Internal – Personal Control or God-Mediated Control - Faith) is most strongly correlated with Trait Emotional Intelligence in a student population in Ireland. The influence of Gender will also be examined in relation to EI and LOC.

1.8. Hypothesis

H1 Following on from the findings from previous research it was hypothesised that Trait Emotional Intelligence will be significantly positively associated with Internal LOC.

H2 Although studies investigating the relationship between Age and Emotional Intelligence are sparse, those examined showed a positive relationship. Therefore it was hypothesised there will be a significant positive correlation between Age and Trait Emotional Intelligence.

H3 In accordance with the previous research examined on the relationship between Emotional Intelligence and Personality it was predicted that Emotional Intelligence will be significantly positively associated with Extraversion, Agreeableness and Openness.

H4 Although the findings conflict on the gender differences in Emotional Intelligence (when measured as an ability or a trait), Females tend to score higher on Trait Emotional Intelligence than Males. In line with these findings it was hypothesised that females will score significantly higher than males in measures of Trait Emotional Intelligence.

2. Method

2.1. Participants

Participants were selected by means of convenience sampling. The sample consisted of 94 undergraduate psychology students (60 Female, 34 Male) from a third level college in Dublin, recruited via in-class announcements. To provide as much diversity as possible among the student sample, participants were chosen from all three academic years, and from part-time and full-time classes. Their ages ranged from 18 to 47 years (M = 26.34, SD = 7.21); 75 were Irish (79.8%), 12 were EU (excluding Irish) (12.8%) and the remaining 7 were Non-EU (7.4%).

2.2. Design

A correlational design was used to examine the relationship between Trait Emotional Intelligence and individuals' Belief in Personal Control, and between Trait Emotional Intelligence and Personality. The predictor variables were the personality traits of Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, Openness to experience, and the Personal Control facets of Internal-External control, Exaggerated Internal control and God Mediated control. The criterion variable was level of Trait Emotional Intelligence.

2.3 Measures

Participants supplied demographic information i.e. age, gender and nationality (Irish, EU excluding Irish, Non EU) and completed three pen and paper questionnaires: The HEXACO-60 Personality Questionnaire (Ashton & Lee, 2009); The BPCS Locus of Control Questionnaire (Berrenberg, 1987); and the TEIQue-SF Trait Emotional Intelligence Questionnaire (Petrides & Furnham, 2006). It took participants approximately 15 minutes to complete all questionnaires.

2.3.1. Personality

Ashton and Lee's (2009) HEXACO-60 was used to measure six major dimensions of personality: honesty-humility, emotionality, extraversion, agreeableness, conscientiousness, and openness to experience. Each personality dimension contains four subscales, for example honesty-humility contains sincerity, fairness, greed-avoidance and modesty. Participants respond on a five point Likert scale with the anchors 1 = strongly disagree, and 5 = strongly agree. Sample items include *I wouldn't pretend to like someone just to get that person to do favours for me* (honesty-humility), *I sometimes can't help worrying about the little things* (emotionality), *In social situations, I'm usually the one who makes the first move* (extraversion), *I rarely hold a grudge, even against people who have badly wronged me* (agreeableness), *I often push myself very hard when trying to achieve a goal* (conscientiousness), *I like people with people who have unconventional ideas* (Openness to experience). Some items for all factors are reverse scored in order to diminish response sets. Reliability for the HEXACO-60 is acceptable to good, with Cronbach's αs between .73 and .80 for the various subscales (Ashton & Lee, 2009).

2.3.2. Belief in Personal Control

Locus of control was measured using Berrenberg's (1987) Belief in Personal Control Scale (BPCS). This instrument consists of 45 items designed to measure three dimensions of personal control: general internal-external control, exaggerated internal control, and God mediated control. Participants respond on a five point Likert scale with the anchor points 1 = always true and 5 = never true. A sample item from the internal-external dimension is; *My success is a matter of luck.* An example of an item from the exaggerated internal control dimension is; *I am solely responsible for the outcomes in my life. I can succeed with God's help* is an example of an item from the God mediated control dimension. The BPCS has very

good to excellent internal consistency, with alphas of .85 (internal-external), .88 (exaggerated internal), and .97 (God-mediated) (Berrenberg, 1987). All items for exaggerated internal control were reverse scored. The BPCS has very good to excellent internal consistency, with alphas of .85 (Internal/External), .88 (Exaggerated Internal) and .97 (God Mediated). It has very good stability, with four-week test-retest correlations of .81 (Internal/External), .85 (Exaggerated Internal) and .93 (God Mediated). The BPCS has excellent construct validity, with correlations in the expected directions with several other measures including Internal-External Locus of Control, the Taylor Manifest Anxiety Scale, the Feelings of Inadequacy Scale and the Mania and Depression Scales. The 45-item BPCS is also highly correlated with an earlier 85-item version (factors correlate from .85 to .95) (Berrenberg, 1987).

2.3.3. Emotional Intelligence

The instrument chosen to measure trait EI in this study was the Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF) (Petrides & Furnham, 2006). This is a 30-item questionnaire designed to measure global trait emotional intelligence (trait EI). The scale is based on the full 153-item TEIQue, which covers the entire sampling domain of trait EI (Petrides & Furnham, 2003). Two items from each of the 15 subscales of the TEIQue were selected for inclusion, based primarily on their correlations with the corresponding total subscale scores. The 15 subscales are organised under four factors: *Well-being, Self-control, Emotionality, and* Sociability. A full description of each of the scales and factors can be viewed in Appendix 1. A sample item from the Well-being subscale would be; *On the whole I am pleased with my life.* An item representing the Self-control subscale would be; *I'm usually able to find ways to control my emotions when I want to.* An example of an item from the Emotionality factor is; *I'm normally able to "get into someone's shoes" and experience their emotions. I would describe myself as a good negotiator* is an example of a Sociability

item. Satisfactory internal consistencies were reported (α male = .84; α female = .89), (Petrides & Furnham, 2006). Participants were asked to rate their degree of agreement with each item on a seven point Likert scale with responses ranging from 1 (completely agree) to 7 (completely disagree). It provides scores for global trait EI and four factors (well-being, self-control, emotionality and sociability).

2.4. Procedure

Ethical approval was gained from the college's ethics committee prior to the collection of data. The questionnaires were distributed during class time with the earlier agreement of the lecturer. In a brief introduction by the author the participants were advised that the survey was related to Emotional Intelligence, Personality and Belief in Personal Control and it would take approximately 15 minutes to complete. The respondents were advised that participation was voluntary and they could choose not to finish the questionnaire or omit any question they would prefer not to answer. They were also advised not to write their name on the questionnaire to guarantee anonymity.

3. Results

The data was found to be 'not normally' distributed and so non-parametric tests were chosen to examine the data.

3.1. Hypothesis 1

A Spearman's Rho was employed to examine a possible association between Trait Emotional Intelligence and Internal LOC (for details see Table 2). In agreement with the prediction in hypothesis 1, at a significance level of .05, there was a significant positive association between Emotional Intelligence and Internal Locus of Control (rho = .316, p = .002). Results also showed a significant positive association between Emotional Intelligence and Exaggerated Internal Locus of Control.

3.2. Hypothesis 2

With regards to the second hypothesis a Spearman's Rho was conducted to investigate the relationship between Age and Emotional Intelligence. Contrary to the prediction no association (rho = .12, p = .24) was found. See Table 3 for details.

3.3. Hypothesis 3

The relationship between Trait Emotional Intelligence and Personality was examined using a Spearman's Rho. Contrary to previous findings (Saklofske et al., 2003; Schutte et al., 2003) and the prediction in hypothesis 3, no associated was found with Extraversion (rho = -.19, p = .07), Agreeableness (rho = -.13, p = .21) or Openness to Experience (rho = -.03, p = .77). Details available on Table 4.

3.4. Hypothesis 4

In order to determine if there was a gender difference in Trait Emotional Intelligence scores, a Mann Whitney U test was conducted. Consistent with the hypothesis females scored significantly higher than males ($U = 736.00$, $p = .025$). This supports the research of Schutte et al., (1998).

4. Discussion

The present study set out to expand the body of research on Emotional Intelligence by investigating the relationship between trait EI and Belief in Personal Control (or Locus of Control) in an Irish context. More specifically, to examine if high scores in trait EI correspond with an External LOC (Fate), God Mediated Control (Faith) or Internal LOC (Personal Control). The relationship between trait EI and Personality was also examined. Gender differences in EI and in Belief in Personal control were also investigated yielding very interesting results.

As hypothesised, trait EI was significantly and positively correlated with Internal LOC. This means that individuals who believe they control the events in their lives are more likely to have strong aptitudes for monitoring and controlling their emotions. The result indicates that EI is a case of *personal control*, rather than *fate* or *faith*. The findings support previous research (Singh, 2006; Gore & Sturgis, 2005). The results also showed a significant positive correlation with Exaggerated Internal LOC **(**Table 2**),** indicating that a person with an excessive and unrealistic belief in their personal control are also high in EI. Doherty (1983) suggests that our LOC can change in response to disturbing or disrupting life events. This implies it can also change due to positive life events which may give one an unrealistic sense of control. Rotter (1975) acknowledged that LOC may be context specific and suggested that LOC scales should be developed that are domain specific. In response to this suggestion Trice (1985) developed an Academic Locus of Control Scale (ALOC) to look at control beliefs in academic and achievement contexts.

Locus of Control is one of the facets subsumed in Weiner's (1974) Attribution Theory. Attributions are classified along three causal dimensions: locus of control, stability, and controllability. One interesting element of Attribution Theory is the phenomena known as

'self-serving bias'. Self-serving bias suggests that people have a more internal LOC when they are successful and a more external LOC when they experience failure. This suggests that one's belief in their personal control may be in constant flux.

One interesting yet un-hypothesised finding was a significant difference between males and females in God Mediated Control. A Mann Whitney U Test revealed that males scored higher than females on this dimension meaning that males have less belief in God as a mediator of control than females ($U = 748.50$, $p = .029$). According to Stark (2002), this would confirm the generalisation that is held around the world and across the centuries, that men are less religious than women. He suggests that differential socialisation is the explanation for the gender difference. There was no significant gender difference in either Internal/External or Exaggerated Internal LOC. Full details are available on table 5.

A further exploration of the data revealed some significant negative correlations between Personality and LOC. A Sperarman's Rho correlation showed a significant negative correlations between Exaggerated Internal LOC and Extraversion ($rho = -.24$, $p = .02$) and between God Mediated LOC and Conscientiousness ($rho = -.30$, $p = .003$).

The results of the second hypothesis were contrary to the prediction. No association was found between Age and global trait EI, or with any of the four EI factors (Well-being, Self-control, Emotionality, and Sociability) (Table 3). This result conflicts with the findings of Bar-On (1997), and Derksen et al., (2002). Both studies employed the Bar-On measure of trait EI and both reported a positive correlation between the two variables. One explanation for the finding of the current study may be that the majority (79.32%) of the sample were between the ages of 19 and 29 years old. Also the results may have been stronger had the sample not been limited to undergraduate psychology students. To further examine the relationship between Age and EI a broader range of ages should be examined in future research.

As Emotional Intelligence has been shown to have a significant effect on important life outcomes for example, subjective well-being (Kulshrestha & Sen, 2006), social relationships (Lopes et al., 2003), health (Schutte et al., 1998), deviant behaviours (Ali et al., 2009) and academic success (Jaeger, 2003) to name but a few, researchers are now looking at the possibility of increasing an individual's EI. This would be of more consequence should it be established that EI does not increase with age. In an interesting intervention study Nelis, Quoidbach, Mikolajczak & Hansenne (2009) demonstrated that EI can be enhanced with a short, empirically derived program. The training intervention was conducted over four weeks and consisted of four sessions of 2.5 hours each. Emphasis was placed on four modules: 1. Perception, appraisal and expression of emotion; 2. Emotional facilitation of thinking; 3. Understanding and analysing emotion; and 4. Reflective regulation of emotion. The subjects attended short lectures, participated in role play and group discussions. They also completed a diary of their emotional experiences which were analysed and explained in class as part of their training. Results showed that the four week intervention was sufficient to significantly improve emotion identification and emotion management (self and others' emotions) when compared with a control group. One area that showed no improvement was that of 'understanding emotion'. Nonetheless, these results are promising as they show that at least some facets of EI can be enhanced. Also, a major finding of the study was that the positive findings of the study remained significant six months after the intervention. This has implications not only for education but for also for health and organisational settings. As the study of EI enhancement is in its infancy much more research in this field is essential.

The findings for Trait Emotional Intelligence and Personality were inconsistent with the literature. Contrary to the prediction in hypothesis 2, no significant correlations were found between EI and any of the six personality factors of the HEXACO. Of the six personality factors Conscientiousness was the only one that showed a positive correlation with EI,

Honesty-Humility, Emotionality, Extraversion, Agreeableness and Openness to Experience all showed negative correlations. This was a surprising result considering much of the literature has found that EI is positively and significantly correlated with Openness, Agreeableness and Conscientiousness (Chamorro-Premuzic et al., 2007; Gosling et al., 2003; Saklofske et al., 2003; Schutte et al., 1998). A further analysis was carried out to explore the relationship between Personality and the four subscales of trait EI. Interestingly all six personality factors showed a significant positive correlation with the trait EI subscale of Well-being. There were no other correlations found. For full details see Table 4. One reason for this result may be the limitations inherent in a convenience sample which may not be reflective of the general population.

Consistent with the research of Schutte et al., (1998) a significant difference was found between the global trait EI scores of males and females, with females scoring higher than males. However, when the four factors of *well-being, self-control, emotionality and sociability* were investigated individually (see details on table x), no gender differences were found. As previously reported there are mixed result in the literature. Petrides and Furnham (2000) examined gender differences in self-estimated and measured trait EI and found no significant difference in global trait EI, however females scored higher than males on the Sociability subscale. This differed from the self-estimated EI scale in which males' self-estimates were higher than females'. This indicates a bias in the process of self-estimation. The study however was limited by fact that there was not one-to-one correspondence between the factors on both questionnaires which makes it difficult to assess the accuracy of the bias. The empirical status of sex differences in emotion remains uncertain and warrants further exploration.

4.1. Limitations of the Present Study

The concept of Emotional Intelligence is still in its infancy and the debates on its measurement are ongoing. Consequently it is possible that current measures did not assess EI adequately. It is also possible that the distinctly homogeneous sample assessed (third level psychology students) affected the results. The participants were a convenience sample which can be risky and caution should be exercised when interpreting the results. This study was also limited by the relatively small sample, and the fact that male and female participants were not equally distributed. Finally, relying exclusively on self-report data has been widely acknowledged as a limitation in the domain of Personality (Previn, 1999).

4.2. Directions for Future Research

Future studies would benefit from replicating this study with a larger and more heterogeneous sample. Although trait EI has been correlated with the personality traits of Extraversion, Openness and Agreeableness in the research, this was not the conclusion of the current study. Therefore it is suggested that further research in this area should be conducted. As the literature indicates that Emotional Intelligence can be learned (Nelis et al., 2009) more research should be focused in this area with a view to developing educational programs for both primary and secondary schools. Along that same vein future research could look at Emotional Intelligence and Academic Locus of Control in a student population. It would also be interesting to conduct a comparative study between a sample of psychology students and a sample of business students on scores of EI.

4.3. Conclusions

Notwithstanding the above-mentioned limitations, the results of the present study provide a more in-depth look, within an Irish context, of the relationship between emotional intelligence, belief in personal control and personality traits. The conclusion of this study is that emotional intelligence is correlated with internal or personal control and therefore is not a matter of fate or faith. Although still in its infancy as a psychological construct, Emotional Intelligence has captured the imagination of researchers in domains as diverse as; Health (Austin et al., 2005); Education (DiFabio & Palazzeschi, 2009); Organisations (Goleman, 1996); Interpersonal Relations (Schutte et al., 2001); Deviant Behaviour (Trinidad & Johnston, 2001), and Everyday Behaviour (Brackett et al., 2004). It is hoped that the current study will encourage further research in emotional intelligence and comparative studies across cultures.

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Table 1. Trait Emotional Intelligence Factors

Trait EI Factors	High Scorers Perceive Themselves as…..
Well-being	
Self-esteem	..... *successful and self-confident.*
Trait happiness	..... *cheerful and satisfied with their emotions.*
Trait optimism	..... *confident and likely to "look on the bright side" of life.*
Self-control	
Emotion regulation	..... *capable of controlling their emotions.*
Stress management	..... *capable of withstanding pressure and regulating stress.*
Impulsiveness (low)	..... *reflective and less likely to give in to their urges.*
Emotionality	
Emotion perception	..... *clear about their own and other people's feelings.*
Emotion expression	..... *cheerful and satisfied with their lives.*
Trait empathy	..... *capable of taking someone else's perspective.*
Relationships	..... *capable of having fulfilling personal relationships.*
Sociability	
Social awareness	..... *accomplished networkers with excellent social skills.*
Emotion management	..... *capable of influencing other people's feelings.*
Assertiveness	..... *forthright, frank, and willing to stand up for their rights.*

Source: Petrides, Pita & Kokkinaki, 2007, p274.

Table 2: Correlations of Global Emotional Intelligence and Locus of Control

	EQ	Internal/External	Exaggerated Internal	God-Mediated
EQ	-	.316**	.316**	.019
Internal/External	-	-	-.214*	.401**
Exaggerated Internal	-	-	-	.003
God-Mediated	-	-	-	-

EQ = Global Emotional Intelligence

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 3: Correlations of Age and Global Emotional Intelligence and the four EI factors.

	Age	EQ	Well-Being	Self-Control	Emotionality	Sociability
Age	-	.123	-.019	.120	.036	-.026
EQ	-	-	-.138	.609**	.562**	.653**
Well-being	-	-	-	-.048	-.191	-.042
Self-Control	-	-	-	-	.052	.444**
Emotionality	-	-	-	-	-	.155
Sociability	-	-	-	-	-	-

EQ = Global Emotional Intelligence

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 4. Correlations of Personality with Global Emotional Intelligence and the four EI factors.

	H	E	X	A	C	O	EQ	WB	SC	EM	SO
H		.20	.30	.16	.20	-.15	-.19	.48**	-.06	-.18	.05
E			.27	.30	.10	.17	-.01	.36**	.03	.06	.06
X				.34	.14	.18	-.19	.25**	-.18	.10	-.07
A					.33	-.04	-.13	.48**	-.06	-.13	-.11
C						-.02	.05	.35**	.12	-.04	.01
O							-.03	-.15	-.03	.17	-.10

H = Honesty-Humility, E = Emotionality, X = Extraversion, A = Agreeableness, C = Conscientiousness, O = Openness to Experience, EQ = Global Emotional Intelligence, WB = Well-being, SC = Self-control, EM = Emotionality, SO = Sociability.

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 5. Means and Stand Deviations of Males and Females in Locus of Control

	Gender	N	Mean	Std. Deviation
Internal External	Female	60	65.80	8.64
	Male	34	66.47	8.75
Exaggerated Internal	Female	60	43.97	8.34
	Male	34	42.50	8.14
God Mediated	Female	60	33.87	10.49
	Male	34	38.50	8.45

HEXACO-PI-R-60

On the following pages you will find a series of statements about you. Please respond to each of the statements below by indicating the extent to which that statement describes your beliefs. For each statement **CIRCLE** the number that best describes your feelings.

1 = Strongly disagree 2 = Disagree 3 = Neutral (Neither agree nor disagree) **4 = Agree 5 = Strongly agree**

1	I would be quite bored by a visit to an art gallery	**1**	**2**	**3**	**4**	**5**
2	I plan ahead and organise things, to avoid scrambling at the last minute	**1**	**2**	**3**	**4**	**5**
3	I rarely hold a grudge, even against people who have badly wronged me	**1**	**2**	**3**	**4**	**5**
4	I feel reasonably satisfied with myself overall	**1**	**2**	**3**	**4**	**5**
5	I would feel afraid if I had to travel in bad weather conditions	**1**	**2**	**3**	**4**	**5**
6	I wouldn't use flattery to get a raise or promotion at work, even if I thought it would succeed	**1**	**2**	**3**	**4**	**5**
7	I'm interested in learning about the history and politics of other countries	**1**	**2**	**3**	**4**	**5**
8	I often push myself very hard when trying to achieve a goal	**1**	**2**	**3**	**4**	**5**
9	People sometimes tell me that I am too critical of others	**1**	**2**	**3**	**4**	**5**
10	I rarely express my opinions in group meetings	**1**	**2**	**3**	**4**	**5**
11	I sometimes can't help worrying about the little	**1**	**2**	**3**	**4**	**5**
12	If I knew that I could never get caught, I would be willing to steal a million dollars	**1**	**2**	**3**	**4**	**5**
13	I would enjoy creating a work of art, such as a novel, a song, or a painting	**1**	**2**	**3**	**4**	**5**
14	When working on something, I don't pay much attention to small details	**1**	**2**	**3**	**4**	**5**
15	People sometimes tell me that I'm too stubborn	**1**	**2**	**3**	**4**	**5**
16	I prefer jobs that involve active social interaction to those that involve working alone	**1**	**2**	**3**	**4**	**5**
17	When I suffer from a painful experience, I need someone to make me feel comfortable	**1**	**2**	**3**	**4**	**5**
18	Having a lot of money is not especially important to me	**1**	**2**	**3**	**4**	**5**
19	I think that paying attention to radical ideas is a waste of time	**1**	**2**	**3**	**4**	**5**
20	I make decisions based on the feeling of the moment rather than on careful thought	**1**	**2**	**3**	**4**	**5**
21	People think of me as someone who has a quick temper	**1**	**2**	**3**	**4**	**5**
22	On most days I feel cheerful and optimistic	**1**	**2**	**3**	**4**	**5**
23	I feel like crying when I see other people crying	**1**	**2**	**3**	**4**	**5**
24	I think that I am entitled to more respect than the average person is	**1**	**2**	**3**	**4**	**5**
25	If I had the opportunity, I would like to attend a classical music concert	**1**	**2**	**3**	**4**	**5**
26	When working, I sometimes have difficulties due to being disorganised	**1**	**2**	**3**	**4**	**5**

27	My attitude toward people who have treated me badly is "forgive and forget"	**1**	**2**	**3**	**4**	**5**
28	I feel that I am an unpopular person	**1**	**2**	**3**	**4**	**5**
29	When it comes to physical danger, I am very fearful	**1**	**2**	**3**	**4**	**5**
30	If I want something from someone, I will laugh at that person's worst jokes	**1**	**2**	**3**	**4**	**5**
31	I've never really enjoyed looking through an encyclopedia	**1**	**2**	**3**	**4**	**5**
32	I do only the minimum amount of work needed to get by	**1**	**2**	**3**	**4**	**5**
33	I tend to be lenient in judging other people	**1**	**2**	**3**	**4**	**5**
34	In social situations, I'm usually the one who makes the first move	**1**	**2**	**3**	**4**	**5**
35	I worry a lot less than most people	**1**	**2**	**3**	**4**	**5**
36	I would never accept a bribe, even if it were very large	**1**	**2**	**3**	**4**	**5**
37	People have often told me that I have a good imagination	**1**	**2**	**3**	**4**	**5**
38	I always try to be accurate in my work, even at the expense of time	**1**	**2**	**3**	**4**	**5**
39	I am usually quite flexible in my opinions when people disagree with me	**1**	**2**	**3**	**4**	**5**
40	The first thing that I always do in a new place is to make friends	**1**	**2**	**3**	**4**	**5**
41	I can handle difficult situations without needing emotional support from anyone else	**1**	**2**	**3**	**4**	**5**
42	I would get a lot of pleasure from owning expensive luxury goods	**1**	**2**	**3**	**4**	**5**
43	I like people who have unconventional ideas	**1**	**2**	**3**	**4**	**5**
44	I make a lot of mistakes because I don't think before I act	**1**	**2**	**3**	**4**	**5**
45	Most people tend to get angry more quickly than I do	**1**	**2**	**3**	**4**	**5**
46	Most people are more upbeat and dynamic than I generally am	**1**	**2**	**3**	**4**	**5**
47	I feel stong emotions when someone close to me is going away for a long time	**1**	**2**	**3**	**4**	**5**
48	I want people to know that I am an important person of high status	**1**	**2**	**3**	**4**	**5**
49	I don't think of myself as the artistic or creative type	**1**	**2**	**3**	**4**	**5**
50	People often call me a perfectionist	**1**	**2**	**3**	**4**	**5**
51	Even when people make a lot of mistakes, I rarely say anything negative	**1**	**2**	**3**	**4**	**5**
52	I sometimes feel that I am a worthless person	**1**	**2**	**3**	**4**	**5**
53	Even in an emergency I wouldn't feel like panicking	**1**	**2**	**3**	**4**	**5**
54	I wouldn't pretend to like someone just to get that person to do favours for me	**1**	**2**	**3**	**4**	**5**
55	I find it boring to discuss philosophy	**1**	**2**	**3**	**4**	**5**
56	I prefer to do whatever comes to mind, rather than stick to a plan	**1**	**2**	**3**	**4**	**5**
57	When people tell me that I'm wrong, my first reaction is to argue with them	**1**	**2**	**3**	**4**	**5**
58	When I'm in a group of people, I'm often the one who speaks on behalf of the group	**1**	**2**	**3**	**4**	**5**
59	I remain unemotional even in situations where most people get very sentimental	**1**	**2**	**3**	**4**	**5**
60	I'd be tempted to use counterfeit money, if I were sure I could get away with it	**1**	**2**	**3**	**4**	**5**

TEIQue-SF

Instructions: Please answer each statement below by putting a **CIRCLE** around the number that best reflects your degree of agreement or disagreement with that statement. Do not think too long about the exact meaning of the statements. Work quickly and try to answer as accurately as possible. There are no right or wrong answers. There are seven possible responses to each statement ranging from 'Completely Disagree' (number 1) to 'Completely Agree' (number 7).

1 . . . . . 2 . . . . . 3 . . . . . 4 . . . . . 5 . . . . . 6 7

Completely Agree **Neutral** **Completely Disagree**

1	Expressing my emotions with words is not a problem for me.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
2	I often find it difficult to see things from another person's viewpoint.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
3	On the whole, I'm a highly motivated person.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4	I usually find it difficult to regulate my emotions.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
5	I generally don't find life enjoyable.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
6	I can deal effectively with people.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
7	I tend to change my mind frequently.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
8	Many times, I can't figure out what emotion I'm feeling.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
9	I feel that I have a number of good qualities.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
10	I often find it difficult to stand up for my rights.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
11	I'm usually able to influence the way other people feel.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
12	On the whole, I have a gloomy perspective on most things.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
13	Those close to me often complain that I don't treat them right.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
14	I often find it difficult to adjust my life according to the circumstances.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
15	On the whole, I'm able to deal with stress.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
16	I often find it difficult to show my affection to those close to me.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
17	I'm normally able to "get into someone's shoes" and experience their emotions.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
18	I normally find it difficult to keep myself motivated.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
19	I'm usually able to find ways to control my emotions when I want to.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
20	On the whole, I'm pleased with my life.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
21	I would describe myself as a good negotiator.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
22	I tend to get involved in things I later wish I could get out of.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
23	I often pause and think about my feelings.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
24	I believe I'm full of personal strengths.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
25	I tend to "back down" even if I know I'm right.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
26	I don't seem to have any power at all over other people's feelings.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
27	I generally believe that things will work out fine in my life.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
28	I find it difficult to bond well even with those close to me.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
29	Generally, I'm able to adapt to new environments.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
30	Others admire me for being relaxed.	**1**	**2**	**3**	**4**	**5**	**6**	**7**

Age: **Gender:** (Circle One) Male Female

Nationality: (Circle one) Irish EU (other than Irish) Non-EU

Belief in Personal Control

This questionnaire consists of items describing possible perceptions you may have of yourself, others, and life in general. Please respond to each of the statements below by indicating the extent to which that statement describes your beliefs. For each statement **CIRCLE** the number that best describes your feelings.

1 = Always true 2 = Often true 3 = Sometimes true 4 = Rarely true 5 = Never true

1	I can make things happen easily	**1**	**2**	**3**	**4**	**5**
2	Getting what you want is a matter of knowing the right people	**1**	**2**	**3**	**4**	**5**
3	My behaviour is dictated by the demands of society	**1**	**2**	**3**	**4**	**5**
4	If I just keep trying, I can overcome any obstacle	**1**	**2**	**3**	**4**	**5**
5	I can succeed with God's help	**1**	**2**	**3**	**4**	**5**
6	I find that luck plays a bigger role in my life than my ability	**1**	**2**	**3**	**4**	**5**
7	If nothing is happening, I go out and make it happen	**1**	**2**	**3**	**4**	**5**
8	I am solely responsible for the outcomes in my life	**1**	**2**	**3**	**4**	**5**
9	I rely on God to help me control my life	**1**	**2**	**3**	**4**	**5**
10	Regardless of the obstacles, I refuse to quit trying	**1**	**2**	**3**	**4**	**5**
11	My success is a matter of luck	**1**	**2**	**3**	**4**	**5**
12	Getting what you want is a matter of being in the right place at the right time	**1**	**2**	**3**	**4**	**5**
13	I am able to control effectively the behaviour of others	**1**	**2**	**3**	**4**	**5**
14	If I need help, I know that God is there for me	**1**	**2**	**3**	**4**	**5**
15	I feel that other people have more control over my life that I do	**1**	**2**	**3**	**4**	**5**
16	There is little that I can do to change my destiny	**1**	**2**	**3**	**4**	**5**
17	I feel that I control my life as much as is humanly possible	**1**	**2**	**3**	**4**	**5**
18	God rewards me if I obey his laws	**1**	**2**	**3**	**4**	**5**
19	I am not the master of my own fate	**1**	**2**	**3**	**4**	**5**
20	I continue to strive for a goal long after others would have given up	**1**	**2**	**3**	**4**	**5**
21	Most things in my life I just can't control	**1**	**2**	**3**	**4**	**5**
22	God helps me control my life	**1**	**2**	**3**	**4**	**5**
23	I have more control over my life than other people have	**1**	**2**	**3**	**4**	**5**

	over theirs					
24	I actively strive to make things happen for myself	**1**	**2**	**3**	**4**	**5**
25	Other people hinder my ability to direct my life	**1**	**2**	**3**	**4**	**5**
26	What happens to me is a matter of good or bad fortune	**1**	**2**	**3**	**4**	**5**
27	When something stands in my way, I go around it	**1**	**2**	**3**	**4**	**5**
28	I can be whatever I want to be	**1**	**2**	**3**	**4**	**5**
29	I know how to get what I want from others	**1**	**2**	**3**	**4**	**5**
30	Fate can be blamed for my failures	**1**	**2**	**3**	**4**	**5**
31	With God's help, I can be whatever I want to be	**1**	**2**	**3**	**4**	**5**
32	I am the victim of circumstances beyond my control	**1**	**2**	**3**	**4**	**5**
33	I can control my own thoughts	**1**	**2**	**3**	**4**	**5**
34	There is nothing that happens to me that I don't control	**1**	**2**	**3**	**4**	**5**
35	Whenever I run up against some obstacle, I strive even harder to overcome it and reach my goal	**1**	**2**	**3**	**4**	**5**
36	By placing my life in God's hands, I can accomplish anything	**1**	**2**	**3**	**4**	**5**
37	I am at the mercy of my physical impulses	**1**	**2**	**3**	**4**	**5**
38	In this life, what happens to me is determined by my fate	**1**	**2**	**3**	**4**	**5**
39	My actions are the result of God working through me	**1**	**2**	**3**	**4**	**5**
40	I am the victim of social forces	**1**	**2**	**3**	**4**	**5**
41	Controlling my life involves mind over matter	**1**	**2**	**3**	**4**	**5**
42	When I want something, I assert myself in order to get it	**1**	**2**	**3**	**4**	**5**
43	The unconscious mind, over which I have no control, directs my life	**1**	**2**	**3**	**4**	**5**
44	If I really want something, I pray to God to bring it to me	**1**	**2**	**3**	**4**	**5**
45	I am not really in control of the outcomes in my life	**1**	**2**	**3**	**4**	**5**