Linking Personality traits and individual innovativeness: A Study

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Abstract - By investigating the role of innovativeness in an individual’s perception of satisfaction with life, this research aims to expand existing understanding beyond ‘what’ personality traits are associated with life satisfaction to ‘why’ individuals possessing these personality traits perceive their lives as more satisfying. In doing so, it is hoped that this study will stimulate research beyond the Big Fiver personality traits and toward the attitudes and behaviours that directly influence an individual’s satisfaction with life.

Keywords: Personality Trait, Individual Innovativeness, Satisfaction Level, Human Behaviour, Life Perception.

The theory of personality traits postulates that people naturally deal with different situations and interact with their environment in different ways. From a management perspective, information about an individual’s personality can provide valuable information pertaining to what is the best method of communicating with them and what types of jobs and tasks they are most suitable for. However, personality traits may also be key indicators of other facets of an individual’s life, including innovativeness.

Method

Sample and data collection

The study explores the influence of personality traits on innovation and satisfaction with life perceptions. A conceptual model is proposed and tested empirically through statistical analysis. The unit of analysis is study is individuals, so data is collected from students studying in different colleges of B.R.A. Bihar University, Muzaffarpur. The students enrolled in executive programs, post graduate programs (including MS and M. Phil) and PhD are also considered in data collection so that to incorporate the view points of respondents exposed to practical and professional life. The data is collected through person-ally administered survey questionnaire. A total of 800
individuals were contacted for data collection and 613 survey questionnaires are received back out of which 18 questionnaires were incomplete leaving 595 usable questionnaires (74% effective response rate).

Some questions related to respondents demographics were also included in the questionnaire including; gender, age, education level in order to ensure participation of respondents with diverse socio-economic background. The sample composition of this study includes; majority of respondents (83.7%) were male as compared to female (16.3%) only. Majority of respondents were younger i.e. less than 20 years of age (45%) and there were very less respondents having more than 40 years of age.

**Individual innovativeness**

Innovativeness may be defined as “the degree to which an individual is relatively earlier in adopting an innovation than other members of his system” (Rogers & Shoemaker, 1971), where “relatively earlier” refers to actual, rather than perceived, time of adoption. Individual innovativeness is a persistent trait or disposition that determines how an individual perceives and reacts to an innovation (Yi et al., 2006), where a high level of individual innovativeness would yield a more positive reaction. Individual innovativeness is often studied in the context of diffusion of innovation, particularly relating to consumers and their willingness to adopt innovative new products (Midgley & Dowling, 1978) and the propensity of organizational members to seek external knowledge (Tortoriello, 2006). However, this study adopts a more generalized perspective of individual innovativeness that affects how an individual perceives and reacts to new ideas, inventions, or ways of doing things as well as the individual’s propensity to improvise, generate original ideas, and accept challenges (Hurt, Joseph, & Cook, 1977). This would allow for an authentic investigation of the influence of innovativeness on an individual’s satisfaction with life.¹

**Satisfaction with life**

The conceptualizations of satisfaction with life typically diverge into two streams: the ‘bottom-up’ and ‘top-down’ approaches (Loewe et al., 2014). The ‘bottom-up’ perspective views an individual’s overall satisfaction with life as the culmination of satisfaction in various other domains of life, including family, career, and leisure (Pavot & Diener, 2008). The satisfaction within these domains, in turn, is attributed to situation-induced changes (Pavot & Diener,
In contrast, the ‘top-down’ perspective posits that individuals’ personality and other stable traits affect their disposition to be satisfied with their lives (P. Steel, Schmidt, & Shultz, 2008). These dispositional factors interact with situational factors to determine the extent of an individual’s satisfaction with life (Heller et al., 2004).

This paper synthesizes both the ‘bottom-up’ and ‘top-down’ streams. In line with the ‘bottom-up’ perspective, satisfaction with life is postulated to be a culmination of satisfaction in seven major domains of life, including family, one’s self-worth, health, social relationships, work, financial situation, and leisure-time (Loewe et al., 2014). At the same time, in line with the ‘top-down’ perspective, it is postulated that personality is central to an individual’s perception of a fulfilling life and, therefore, a critical predictor of satisfaction with life. Furthermore, it is postulated that those individuals with personality traits that support innovativeness are more likely to attain positive situational factors in their various domains of life. The number and importance of such domains can vary greatly from one individual and another.

### The Big Five personality traits and individual innovativeness

Research ranging from the disciplines of psychology to management has determined that stable personality characteristics can be used to identify creative and innovative individuals (Ahmed, 1998). These traits can typically fall under Extraversion (high energy), Agreeableness (ability to accommodate opposites), Conscientiousness (persistence), low Neuroticism (self-confidence), and Openness to Experience (broad interests, attraction to complexity, independence of judgment, curiosity, and firm sense of self as creative) (Ahmed, 1998). Some studies even suggest that personality traits may be the most significant explanatory factor of innovative and entrepreneurial behavior (Eastman et al., 2001). Other theories suggest that highly creative people tend to be ‘situationists’ that possess an ethic of caring and a pragmatic moral decision-making style (Bierly, Kolodinsky, & Charette, 2009). This implies that an individual’s values and beliefs, and hence their culture, may also be important predictors of innovativeness. While this may be true, there is a large and increasing body of literature that provides evidence for the impact of personality traits on innovativeness (Buchanan, 1998; Hsieh et al., 2011; Kirton & De Ciantis, 1986; Rossberger, 2014; Steel, Rinne, & Fairweather, 2011;
Weele, 2013). A discussion on the influence of each of the Big Five personality traits on individual innovativeness follows.

The positive attributed associated with Extraversion, including being sociable, assertive, and active (Weele, 2013). This allows extraverted individuals to successfully create and engage with their social network. In turn, this creates opportunities for knowledge exploration and exploitation,\(^3\) which are vital to innovativeness. Furthermore, the qualities of enthusiasm and positive emotions\(^4\) enable extraverted individuals to try new things. While some studies did not find Extraversion to have a significant impact on innovativeness\(^5\), a number of studies have reported that individuals with high levels of Extraversion have greater innovation capability. Also, Buchanan\(^6\) found that teams with moderate levels of Extraversion tend to perform better in terms of innovative task performance. Accordingly, the first part of the first hypothesis is proposed:

**H1a.** Extraversion positively affects the level of Individual Innovativeness

The relationship between Agreeableness and individual innovativeness is somewhat complicated. Whilst some characteristics such as being cooperative, good-natured, and flexible (Weele, 2013) appear to support innovativeness, other characteristics such as tolerance and compliance (McCrae & Terracciano, 2005) may instead impede an individual’s innovative tendencies. Therefore, it is not surprising that some studies have found Agreeableness to have an insignificant (Hsieh et al., 2011) or even negative (Patterson, 2002) influence on innovativeness. However, Agreeableness has been found to be a significant predictor of innovation-supportive national cultural practices and national-level innovation (Rossberger, 2014; Steel et al., 2011). Although some aspects of Agreeableness may discourage innovative behavior, the implementation of innovations requires effective management of social networks and business partners, for which the positive characteristics of Agreeableness are of great importance (Rossberger, 2014). While Extraversion may determine an individual’s propensity to socialize, Agreeableness is an important determinant of whether the individual is accepted by social groups and can effectively maintain social and business relationships, which are vital for the success of innovative initiatives. Accordingly, the second part of the hypothesis is propose:

**H1b.** Agreeableness positively affects the level of Individual Innovativeness
Not unlike Agreeableness, the literature pertaining to the influence of conscientiousness on innovativeness is divided. While the propensity of conscientious individuals to plan, be organized, and be achievement-oriented (Weele, 2013) may discourage innovative behaviors, the qualities of competence, persistence, and self-discipline (McCrae & Terracciano, 2005) are vital for creating successful innovations. In line with this, Hsieh et al. (2011) found Conscientiousness to have a significant positive effect on innovation capability. Also, Buchanan (1998) found high levels of conscientiousness to be an important predictor of a team’s innovative task performance. However, other studies have found an insignificant relationship between Conscientiousness and innovativeness (Kirton & De Ciantis, 1986; Steel et al., 2011). Ultimately, the positive attributes of conscientiousness are necessary for seeing innovative ideas through to execution. Accordingly, the third part of the hypothesis is proposed:

**H1c.** Conscientiousness positively affects the level of Individual Innovativeness

The influence of neuroticism on innovativeness is much better understood. The negative characteristics of anxiety, hostility, and self-consciousness (McCrae & Terracciano, 2005) as well as the propensity to experience negative feelings (Rossberger, 2014) indicate that individuals with highly neurotic personalities would find it difficult to exhibit innovative behaviors and pursue innovative ideas (Eastman et al., 2001). Innovative individuals tend to be self-confident (Kirton & De Ciantis, 1986) and emotionally stable (Hsieh et al., 2011), which are characteristics associated with low levels of neuroticisms. Accordingly, the fourth part of the hypothesis is proposed:

**H1d.** Neuroticism negatively affects the level of Individual Innovativeness

Of the Big Five personality traits, Openness to Experience has the strongest and most well-documented influence on innovativeness. The characteristics of Openness include intellectual curiosity, broad-mindedness, imaginativeness, and originality (Weele, 2013) along with multiplicity of interests and information-seeking behaviour (Bozionelos et al., 2014). All of these empower individuals with a strong Openness trait to engage in new experiences and challenges established views (Rossberger, 2014). Similarly, the characteristic of being creative, another critical antecedent of innovativeness (Probst, Romhardt, & Raub, 2000), is often attributed to Openness (Bozionelos
et al., 2014; Prabhu, Sutton, & Sauser, 2008; Saucier, 1994). Similarly, Kirton and De Ciantis (1986) profile an innovator as someone who is tolerant of ambiguity and willing to experiment and take risks. Such an individual requires a strong disposition to be open to new experiences.

The literature provides almost unequivocal evidence of the strong positive influence of Openness on innovativeness, in terms of innovation capability (Hsieh et al., 2011) and innovation performance (Weele, 2013). Similarly, high levels of Openness in teams was found to support innovative task performance (Buchanan, 1998). Openness was also found to be a strong predictor of innovation-supportive national cultural practices in terms of both innovation inputs and outputs (Rossberger, 2014) and national-level innovativeness (Steel et al., 2011). Accordingly, the fifth and final part of the first hypothesis is proposed:

**H1e.** Openness to Experience positively affects the level of Individual Innovativeness

### The Big Five personality traits and satisfaction with life

The concept of satisfaction with life is fundamentally subjective in that every individual has a unique set of criteria of what constitutes a fulfilling life. Although the concept of success in life has comparatively more objective criteria, such as family, good health, and a successful career, satisfaction with life is strongly tied to the individual’s unique circumstances in the seven key domains of life, including family, health, social relationships, work, financial situation, one’s self-worth, and leisure-time (Loewe et al., 2014). Satisfaction with life is significantly predicted by how these circumstances are perceived by the individual, which is inexplicably tied to the individual’s personality traits (Furler et al., 2013; Joshanloo & Afshari, 2011; Tuce & Fako, 2014; Zhai, Willis, O’Shea, Zhai, & Yang, 2013).

In addition to personality traits, an individual’s values and beliefs, and therefore culture, are also important determinants of perceptions of general well-being (Giacalone, Jurkiewicz, & Promislo, 2015). Indeed, numerous other factors influence an individual’s satisfaction with life and these factors may vary from one person to another. Even personality traits other than the Big Five have been found to have a significant influence on satisfaction with life, especially self-esteem (Joshanloo & Afshari, 2011) and optimism in the domain of job satisfaction (Lounsbury et al., 2003). Furthermore, Furler et al. (2013)
found evidence that in addition to one’s own personality traits, partner’s personality traits also significantly influence satisfaction with life. However, in adherence to the principle of parsimony, the scope of this study is limited to the Big Five personality traits. A discussion on each of the Big Five traits and their influence on satisfaction with life follow.

The positive attributes of Extraversion, particularly gregariousness and the feeling of positive emotions (McCrae & Terracciano, 2005), suggest that extraverted individuals would perceive their life positively and thus be more likely to be satisfied with life. Also, the predisposition of extraverted individuals to be social and actively engage with the external world (Weele, 2013) strongly suggests that they would be more successful, and therefore more satisfied, with the social relationships domain of their lives than introverted individuals. Also, Extraversion has been found to be an important predictor of job satisfaction (Zhai et al., 2013) as well as career satisfaction (Lounsbury et al., 2003), indicating that extraverted individuals would be more satisfied with work and possibly financial situation domains of their lives. With respect to overall satisfaction with life, Extraversion has consistently been found to have a strong positive influence on satisfaction with life perceptions (Furler et al., 2013; Grevenstein & Bluemke, 2015; Joshanloo & Afshari, 2011; Judge, Heller, & Mount, 2002; Suldo, Minch, & Hearon, 2014; Zhai et al., 2013). Accordingly, the first part of the second hypothesis is proposed:

H2a. Extraversion positively affects the level of Satisfaction with Life

Similar to Extraversion, individuals with a high level of Agreeableness are motivated to seek interpersonal intimacy and their positive attributes of honesty, trustworthiness, and altruism (McCrae & Terracciano, 2005) enables them to get along well with others. Therefore, such individuals would be more likely to have satisfying social relationships and possibly even professional relationships (McCrae & Terracciano, 2005). In a similar vein, a high level of Agreeableness was found to be positively associated with family satisfaction (Weber & Huebner, 2015) and health satisfaction (Kesavayuth, Rosenman, & Zikos, 2015). Furthermore, although evidence of the relationship was not as pervasive as that for Extraversion and Neuroticism, a number of studies also found a significant positive influence of Agreeableness on overall satisfaction with life (Furler et al., 2013; Grevenstein & Bluemke, 2015; Weber & Huebner, 2015). Accordingly, the second part of the hypothesis is proposed:
H2b. Agreeableness positively affects the level of Satisfaction with Life

Individuals with a strong Conscientiousness trait are highly competent, persistent, dutiful, organized, self-disciplined, and achievement-oriented (McCrae & Terracciano, 2005; Weele, 2013). These traits enable highly conscientious individuals to achieve success and satisfaction in all domains of their life, particularly work. For example, Furnham, Eracleous, and Chamorro-Premuzic (2009) found Conscientiousness to be significant predictors of job satisfaction. Similarly, using a longitudinal approach, Judge et al. (2002) found that Conscientiousness positively predicts both intrinsic and extrinsic career success. Also, Lounsbury et al. (2003) found a positive correlation between Conscientiousness and career satisfaction. Interestingly, in the domain of health, Kesavayuth et al. (2015) found a negative relationship between Conscientiousness and health satisfaction. However, the majority of evidence indicates a positive relationship between Conscientiousness and overall life satisfaction (Furler et al., 2013; Grevenstein & Bluemke, 2015; Suldo et al., 2014; Weber & Huebner, 2015; Zhai et al., 2013). Accordingly, the third part of the hypothesis is proposed:

H2c. Conscientiousness positively affects the level of Satisfaction with Life

Neuroticism is associated with negative feelings including anxiety, hostility, depression, and impulsiveness (McCrae & Terracciano, 2005). As a result, highly neurotic individuals tend to experience more negative life experiences (Magnus, Diener, Fujita, & Pavot, 1993). Neuroticism is a strong and consistent negative correlate of job satisfaction (Judge et al., 2002) and is also found to negatively influence extrinsic career success (Judge et al., 1999). Neuroticism has also been consistently found to have a strong, usually the strongest amongst all the Big Five traits, and negative influence on overall satisfaction with life (Grevenstein & Bluemke, 2015; Joshanloo & Afshari, 2011; Suldo et al., 2014; Weber & Huebner, 2015; Zhai et al., 2013). In contrast, emotional stability, the inverse of Neuroticism, has been found to have a positive influence on career satisfaction (Lounsbury et al., 2003) as well as overall satisfaction with life (Furler et al., 2013). Accordingly, the fourth part of the hypothesis is proposed:

H2d. Neuroticism negatively affects the level of Satisfaction with Life

Unlike the other Big Five personality traits, Openness has a somewhat inconsistent relationship with satisfaction with life. Some studies
have found a positive relationship (Furler et al., 2013; Suldo et al., 2014) while others have found an insignificant relationship (Grevenstein & Bluemke, 2015; Lounsbury et al., 2003; Zhai et al., 2013). This may be due to the nature of Openness which DeNeve and Cooper (1998) liken to a ‘double-edged sword’ that causes individuals to be sensitive to both positive and negative experiences. Still, the attributes of intellectual curiously, imaginativeness, broad-mindedness, and originality (Weele, 2013) are increasingly becoming important to live a fulfilling life as opportunities to gain new knowledge and try new experiences are becoming increasingly available to individuals. Accordingly, the fifth and final part of the second hypothesis is proposed:

**H2e.** Openness to Experience positively affects the level of Satisfaction with Life

**Individual innovativeness and satisfaction with life**

The relationship between innovativeness and satisfaction with life is complex and multi-faceted. Huhtala and Parzefall (2007) proposed that innovativeness and well-being have a two-way relationship where they may mutually enhance each other (a ‘virtuous cycle’) or mutually inhibit each other (a ‘vicious cycle’). In the context of the work domain, the authors tap into the Job Demands-Resources theory (Bakker & Demerouti, 2007) to explain the relationship, where innovation activities may be perceived as demands upon the individual and hence reduce well-being. Alternatively, they may be perceived as resources that help individuals achieve their goals and increase well-being (Huhtala & Parzefall, 2007). In line with this, Honkaniemi, Lehtonen, and Hasu (2015) found that high innovativeness has a significant positive relation-ship with well-being and vice versa.

While a two-way, cyclical relationship may exist in the work domain, the influence of innovativeness on overall satisfaction with life is more linear. Nimrod and Kleiber (2007) postulated that the most significant role of innovativeness may be to create opportunities for individuals to lead a more challenging and meaningful life, which would, in turn, lead to greater well-being and satisfaction with life. This was validated by the findings of Nimrod (2008) that innovative individuals were more likely to agree that they had achieved what they expected from life and indicated significantly higher satisfaction with life than non-innovative individuals. Accordingly, the third hypothesis is proposed:
H3. Individual Innovativeness positively affects Satisfaction with Life

The model proposed by this study is quite unique as it offers a new explanation of personality theory by embedding individual innovativeness and satisfaction with life derived from different personality traits. The study proposes that innovativeness is driven by the personality traits, as described by Goldsmith and Foxall (2003). The people who have higher levels of ‘openness to experience’ are more innovative as compared to those having low levels. Openness to experience develops curiosity and willingness to learn and experience new things among individuals that leads to innovation (Goldsmith, 1991; Hurt et al., 1977). Individual innovativeness leads to sense of accomplishment and satisfaction with life (Honkaniemi et al., 2015; Nimrod, 2008; Nimrod & Kleiber, 2007). Similarly, the other personality traits also influence individual’s innovativeness one way or another. Number of studies propose association between personality traits and satisfaction with life persecutions. For instance, Furler et al. (2013), Grevenstein and Bluemke (2015), Joshanloo and Afshari (2011), Judge et al. (2002), Suldo et al. (2014), Weber and Huebner (2015), and Zhai et al. (2013) describe strong association between different personality traits and satisfaction with life perceptions.

Conclusion

The study examined the influence of personality traits on individual innovativeness and satisfaction with life perception. Wellbeing and satisfaction of employees is considered to be very important by organizations these days. Organizations are spending generous resources to promote wellbeing among its employees in order to ensure yield more innovation and productivity from employees. Management scholars are also striving to find ways to increase employees wellbeing and satisfaction with life. Understanding employees’ personality traits are important in order to increase their innovativeness and wellbeing. Although there is plenty of research available on personality traits, this study extends the theory of personality traits which propose that human beings have different personality traits and that they behave in different environments in dissimilar ways. The study found positive influence of extraversion, agreeableness, conscientiousness, and openness to experience on individual innovativeness and satisfaction with life perceptions. Neuroticism is found to be negatively related to individual innovativeness and satisfaction with
life perceptions. Finally, the study noted a positive association between individual innovativeness and perception with life.

References


