

# Examination of Personality Traits as Predictors of Project Manager Career Success

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## Abstract

*This study was designed to investigate the relationship between project managers' personality traits and career success, and determine if personality traits can predict career success. A total of 156 alumni of a midwestern university (USA) were surveyed. A self-administered Mini-Modular Markers and career success survey collected the data. Forty three surveys (28%) were returned. Spearman's rank coefficient analyzed the ranked data of the personality trait and career success scores. The findings indicated a relationship between extraversion and extrinsic career success; conscientiousness and both extrinsic and intrinsic career success; agreeableness and extrinsic career success; openness to experience and intrinsic career success; and emotional stability and intrinsic career success. Regression analysis indicated conscientiousness and extraversion to be valid positive predictors of career success. The implications of this study are discussed.*

**Keywords:** *Personality Traits; Career Success; Project Manager; Project Management.*

## 1. Introduction:

There has been extensive research on personality traits and career success in the management and psychology literature (Howard & Bray, 1994; Seibert, Crant, & Kraimer, 1999) with several studies investigating personality traits as a predictor of job performance and job satisfaction (Hattrup, Rock & Scalia, 1997; Cascio, 1997). Other researchers, (Tharenou, 1997; Cox & Harquail, 1991) examined the effects of demographic, industry, and organizational variables on career success. Several other studies (Might & Fischer, 1985; Pinto & Slevin, 1988) identified factors affecting project performance and success. However, there has been little research on the link between personality traits and career success of project managers. This question is critical in understanding the contribution of personality traits on project managers' career success.

As many organizations become more complex and dynamic, they turn to project management as a vehicle to meet their strategic objectives (Kerzner, 2006) and as career paths become more complex, they demand that individuals take more responsibility to manage them (Hall, 1996). Turner (2003) recapitulated the essence and widespread use of projects in many organizations as a key strategic initiative more so in the ever changing business environments. For Turner, projects meet the demands of developing a new product or service. To complete these projects, a project manager will need to coordinate the planning, organizing, and scheduling processes (Shtub, Bard, & Globerson, 2005).

Career success reflects one's career development and advancement over many job assignments. Studies on career success constructs and dimensions have established that compensation, work requirements, responsibility level, job satisfaction, recognition, project opportunities, and advancement factors influence an individual's career success (Golbasi, Kelleci, & Dogan, 2008; Greenhaus, et al., 1990; Stamps, 1997). Career scholars point out that career success dimensions include both intrinsic as well as extrinsic factors, where extrinsic factors (such as pay, promotion, and recognition) are objectively measured and intrinsic factors (such as job and life or career satisfaction) are subjectively measured (Bray & Howard, 1980; Judge & Bretz, 1994; Greenhaus, et al., 1990; Judge et al., 1995). More recently, Seibert and Kraimer (2001) reviewed the relationship between the "Big Five" personality dimensions and career success in general management. The Big Five dimensions include extraversion, agreeableness, conscientiousness, openness to experience, and emotional stability (Costa & McCrae, 1988; Hogan & Ones, 1997; Mount & Barrick, 1995; Tokar, Fischer, & Subich, 1998). Seibert and Kraimer (2001) noted that few studies had investigated the

role of personality on career success. While their study's findings were consistent with prior research, they called for further research to expand knowledge on the role of personality on career success. The problem of this study was based on the fact that there was a lack of knowledge about the relationship between project managers' personality traits and career success. Specifically, this investigation will contribute to project management literature by extending previous research on careers. To achieve this objective, the study tries to answer two questions:

- I. Is there a relationship between a project manager's personality trait and his or her perceived career success?
- II. Can a project manager's personality trait predict his or her perceived career success?

The proposed study seeks to answer these questions empirically by testing the following hypotheses.

*Hypotheses 1a – 1e:* There is a significant relationship between an individual's level of extraversion and (a) compensation, (b) promotion, (c) awards/recognition, (d) project opportunities, and (e) job satisfaction at  $p \leq 0.05$ .

*Hypotheses 2a – 2e:* There is a significant relationship between an individual's level of conscientiousness and (a) compensation, (b) promotion, (c) awards/recognition, (d) project opportunities, and (e) job satisfaction at  $p \leq 0.05$ .

*Hypotheses 3a – 3e:* There is a significant relationship between an individual's level of agreeableness and (a) compensation, (b) promotion, (c) awards/recognition, (d) project opportunities, and (e) job satisfaction at  $p \leq 0.05$ .

*Hypotheses 4a – 4e:* There is a significant relationship between an individual's level of openness to experience and (a) compensation, (b) promotion, (c) awards/recognition, (d) project opportunities, and (e) job satisfaction at  $p \leq 0.05$ .

*Hypotheses 5a – 5e:* There is a significant relationship between an individual's level of emotional stability and (a) compensation, (b) promotion, (c) awards/recognition, (d) project opportunities, and (e) job satisfaction at  $p \leq 0.05$ .

*Hypotheses 6a – 6e:* An individual's level of (a) extraversion, (b) agreeableness, (c) conscientiousness, (d) emotional stability, and (e) openness to experience is a significant predictor of his or her career success at  $p \leq 0.05$ .

## 2. Literature Review:

An extensive literature review was conducted to support and establish the basis of this study. The review of the literature focused on identifying evidence supported by research to demonstrate that the Big Five have validity in predicting work related behavior such as job satisfaction and performance. The literature review also focused on identifying evidence supported by research to demonstrate that the career success feedback survey constructs have validity in measuring an individual's career success. Discussion is also centered on project management job performance measures.

### 2.1 Project Management:

To provide relevant background, this paper defined the concept of project management. According to Ford and Randolph (1992), project management is so diverse in nature that it means a variety of things making it difficult for scholars to come into consensus on a concise definition. These authors, however, defined project management as “cross-functional organizational overlays that create multiple lines of authority and that place people in teams to work on tasks for finite periods of time” (p. 272). Kerzner (2006) proposed that project management involves planning and monitoring activities such as defining work requirements, quantity and quality of work, resources needed, tracking progress, performance reporting, and taking corrective actions. Perhaps the most widely cited definition in project management literature is one that is provided by the Project Management Institute (PMI). According to *A Guide to the Project Management Body of Knowledge* (2004), project management is “the application of knowledge, skills, tools and techniques to project activities to meet project requirements” (p. 8).

The complex nature of tasks and the dynamic environment in most organizations have mandated the use of project management tools and techniques to complete project tasks (Gray & Larson, 2003; Kerzner, 2006). In addition to the nature of tasks and environment, Kerzner suggested three more questions to determine the need for formal project management, namely: (a) are the constraints tight? (b) are there several activities to be integrated? (c) are the several functional boundaries to be crossed? An affirmative response to any of these questions, according to Kerzner, requires the use of formal project management.

The use of standardized methodology in managing projects across all industries was realized when the PMI developed a standard for the project management profession. The publication *A Guide to the Project Management Body of Knowledge* (PMBOK) recognized a standard methodology to manage projects. Project management is accomplished through processes required to initiate, plan, execute, monitor and control, and close a project. These processes are generally accepted and

applied across all projects globally but should be applied varyingly on different projects (PMBOK, 2004). Typically, a project manager is responsible for coordinating and integrating project activities. To effectively and successfully execute a project, project managers require knowledge and skills in initiating, planning, executing, monitoring and controlling, and closing. Another critical attribute that project managers need is leadership skills to lead the team members through the life cycle of the project (Shtub, Bard & Globerson, 2005; Kerzner, 2006) and more importantly, knowing which leadership skill is appropriate for a particular phase of the project.

A project manager wears several hats in the course of a project such as negotiating with line managers for resources, coordinating the resource pool, communicating with project stakeholders, resolving conflicts, developing the project team, tracking the project budget and schedule, and developing the project plan (PMBOK, 2004; Kerzner, 2006).

### ***2.2 Defining the Concept of Career Success:***

A literature search on career success yielded a considerable number of studies. The results of the search identified mentoring, demographic, human capital, motivational variables, organizational success, position type, work/family variables, and industry type as some of the determinants of career success (Dreher & Ash, 1990; Whitely, Dougherty, & Dreher, 1991; Judge & Bretz, 1994; Judge et al., 1995; Ferris & Judge, 1991; Judge et al., 1999). With all these evidence, there is little doubt that career research has contributed to individual as well as organizational factors that influence and determine career success. Critics, however, point out that past career success research lacked a broader focus, especially on organizational characteristics (Whitely, Dougherty, & Dreher 1991). Since extrinsic and intrinsic aspects of career success are empirically different (Bray & Howard, 1980; Judge & Bretz, 1994; Greenhaus, et al., 1990; Judge et al., 1995), both will be considered as a measure of career success.

### ***2.3 Job Satisfaction:***

It is important to distinguish between job performance and job satisfaction. A number of studies have examined the relationship between personality traits and job performance and between personality and job satisfaction (Judge et al., 1999; Greenhaus & Parasuraman, 1993) reporting a positive correlation between personality dimensions and job satisfaction.

Job satisfaction, which is often defined in terms of extrinsic (wages, work benefits, and bonuses) and intrinsic values (Stamps, 1997) defines the manager's career advancement prospects. In their 1959 study, Herzberg, Mausner, and Snyderman found achievement, recognition, job responsibility,

challenge, and advancement to be valid contributors to job satisfaction. Job satisfaction has been found to be positively correlated with emotional stability in several studies (Furnham & Zacherl, 1986; Judge et al., 1999). Judge et al.'s (1999) study also revealed that openness to experience and conscientiousness were strong predictors of job satisfaction. Their study, however, did not find significant relationship between extraversion and job satisfaction.

#### ***2.4 Project Management Job Performance:***

Drucker's (1991) "Management by Objectives" (MBO) described a systematic process of goal setting between the supervisor and subordinate with the hope of influencing positive employee performance and reducing employee turnover. The PMBOK (2004) and Kerzner (2006) discuss extensively what constitutes project success. They view success as meeting the project objective on time, on budget, and within specified performance standards. These success criteria have come to be known as the triple constraint. Both PMBOK and Kerzner's argument posits that if a project manager meets the triple constraints, then, perhaps she is a successful project manager.

Studies on personality traits as predictor of job performance (Barrick & Mount, 1991; Hattrup, Rock, & Scalia, 1997; Salgado, 1997) have reported varying correlations between the two constructs, but meta-analyses reports indicate consistent pattern of relationships. For instance, Barrick and Mount's (1991) study concluded that conscientiousness positively correlated with job performance thereby making it a credible predictor for job performance. According to these scholars, individuals with a high level of conscientiousness tend to be better performers and exhibit a willingness to set higher standards for achievement. Higher standards resulted in higher job performance. Salgado's (1997) investigation found that in addition to conscientiousness, emotional stability and agreeableness positively correlated with job performance. Although the correlation between agreeableness and job performance was weak, Salgado concluded that it was nonetheless a valid predictor of job performance.

#### ***2.5 Project Manager's Personality Traits:***

A personality trait is defined as a distinguishing personal characteristic often reflected in thought, emotion, and behavior (Funder, 2001). Numerous studies in the social science literature have highlighted personality traits (Saucier & Goldberg, 2002; Judge, Bono, & Locke, 2000; Seibert & Kraimer, 2001). Likewise, volumes of scientific studies have been engrossed in search for a taxonomy that will accurately and efficiently measure the personality traits. The Big Five personality dimensions are based on the idea that an individual's personality can be described and

measured using the five personality categories. Although there have been disagreements as to what aspects of personality the Big Five measure, the taxonomy continues to dominate as the most salient personality measure model (Saucier, 2002). Goldberg (1992), and Saucier (2002) described the Big Five personality domains in a more simplified manner. Extraversion indicates aptness to be sociable, assertive, energetic, warm, and extraverted. Agreeableness represents a pattern of being trustful, cooperative, kind, gullible, and generous. Conscientiousness is associated with achievement, responsibility, self-discipline, persistence, and dependability. Openness to experience indicates autonomy, artistic, open minded, and unconventional. Emotional stability indicates negative affect such as hostility, anxiety, discontentment, depression, and insecurity (Costa & McCrae, 1988; Hogan & Ones, 1997; Mount & Barrick, 1995; Tokar, Fischer, & Subich, 1998). Other authors have labeled these dimensions differently and reversely coded them, for example emotional stability for neuroticism (Salgado, 1997).

There is consensus among personality researchers that indeed the Big Five does measure the dimensions of personality (Saucier, 2002; Gelissen & de Graaf, 2006). The Big Five personality taxonomy has gained confidence especially in studies on personnel selection in which the personality domains were used to predict job performance. These studies have termed it robust dimensions of personality structure (Becker, 1999; Costa & McCrae, 1992). Multiple regression analyses indicated that personality domains predicted both extrinsic and intrinsic career success. Conscientiousness positively correlated with job performance across several occupational groups (Barrick & Mount, 1991), as well as showed a positive relationship with long-term career success (Judge et al., 1999). However, neuroticism was negatively associated with job performance (Salgado, 1997). Perhaps this could be explained by Gardner and Cummings' (1988) activation theory that poor task performance can be as a result of too little or too much external stimulation. Similarly, Judge, et al. (1999) and Furnham and Zacherl (1986) found a negative relationship between neuroticism and extrinsic career success. Agreeableness, extraversion, and openness to experience, unlike conscientiousness and emotional stability, were found to be predictors of overall job performance on only select jobs. For instance, Barrick et al. (2001) reported extraversion to be a good job performance predictor for individuals in management and sales and agreeableness for people involved in cooperative work environments that utilize work teams [such as project management].

### 2.5.1 Agreeableness:

Empirical evidence shows a negative relationship between Agreeableness and career success (Judge et al., 1999). Agreeable individuals are characterized by good nature, generosity, cooperativeness, and gentleness (Barrick & Mount, 1995; Costa & McCrae, 1988). One could expect that the cooperative nature of agreeable individuals would point them toward a successful career success. It is also expected that agreeable persons playing ‘nice guys’ may sacrifice their success in order to please others. Both these instances are contradictory particularly if they are applied to specific occupations.

### 2.5.2 Extraversion:

Extraverts are highly motivated, energetic, and assertive individuals. These traits are typically highly regarded and rewarded particularly at higher levels and in leadership positions. These traits portray extraverts as individuals who are eager and ready to take up new, exciting, and bold challenges. Several studies corroborate that extraversion is positively related to career success (Dunn et al., 1995; Melamed, 1995). McCrae and Costa’s (1991) study found a positive correlation between extraverts and job and life satisfaction. Likewise, Judge et al. (1999) reported a positive relationship between extrinsic career success (salary and occupation) and extraversion.

### 2.5.3 Openness to Experience (Intellect):

Openness to experience indicates the extent to which individuals are imaginative, curious, and creative (Goldberg, 1992). Gelissen and de Graaf (2006) noted that few studies have examined the association between openness to experience and career success. On their study on “model of personality and career success” Seibert and Kraimer (2001) found a negative relationship between openness to experience and extrinsic career success. Judge et al. (1999) attributed these results to the tendency that open individuals are likely to be unhappy in conventional jobs leading them to move from one job to another. Individuals who score high on openness to experience exhibit flexibility, creativity, and intellectual prowess while those who score low may be described as unreflective, uncreative, unintelligent, and unimaginative. Empirical studies have shown openness to experience as a weak predictor of job performance (Salgado, 1997), but as a strong factor in measuring an individual’s willingness and ability to learn (Barrick & Mount, 1991).

#### 2.5.4 Emotional Stability:

Emotional stability is characterized by anxiousness, depression, and instability. Empirical evidence shows a positive link between career success and emotional stability. High levels of emotional stability in individuals demonstrate more success. Conversely, low levels of emotional stability (neuroticism) indicate high levels of anxiety and depression. For example Salgado's (1997) review indicated a coefficient of .19 suggesting that emotional stability is a useful predictor of job performance. However, Barrick and Mount (1991) reported a negative link between emotional stability and job performance in certain professional jobs. They suggested that perhaps certain careers may have high pressure that could cause an individual to be depressed. Neurotic employees portray a diminished level of motivation to achieve results as they tend to be unstable, discontented, and tense. With decreased levels of emotional stability, individuals experience decreased performance and therefore not suited for occupations dealing with complex and technical activities such as project management (Costa & McCrae, 1992; Judge et al., 1999; Barrick et al., 2003).

#### 2.5.5 Conscientiousness:

Conscientiousness indicates an individual's degree to perform well. Prior studies found a positive relationship between conscientiousness and career success (Judge et al., 1999; Barrick & Mount, 1991, Salgado, 1997; Hogan & Ones, 1997). For instance, in their study of sales representatives, Barrick, Mount, and Strauss (1993) found that individuals who scored high on conscientiousness were more likely to set and be committed to goals, which in turn translated to a positive relationship between conscientiousness and career success. Conscientious individuals tend to advance their career through promotions (Gelissen & de Graaf, 2006).

Empirical evidence shows a significant correlation between personality traits and career success. For example, Judge et al. (1999) concluded that there was a positive correlation between conscientiousness and extrinsic career success. Likewise, Barrick, Mount, and Strauss' (1993) study determined that conscientiousness was a valid predictor of job performance. Hogan and Ones (1997) made similar conclusions asserting that personality domains are appropriate predictors of job performance measurement. A meta-analysis research (Barrick & Mount, 1991) showed positive correlation between conscientiousness and compensation.

### **2.6 Career Success Dimensions:**

Considerable research from organizational literature supports the fact that career success dimensions include both intrinsic as well as extrinsic factors, where extrinsic factors (such as pay and promotion)

are objectively observed and intrinsic factors (such as job and life or career satisfaction) are subjectively measured (Bray & Howard, 1980; Harrell, 1969; Judge & Bretz, 1994; Greenhaus et al. 1990; Judge et al. 1995). The literature has also emphasized that not only are these two dimensions related as they are distinct, but also together they represent conventional as well as feelings of success (Judge & Bretz, 1994). While there are many variables associated with career success, this study focuses on the 360 degree feedback survey (Monson, 2000) determinants of career success. These variables include: compensation, promotion, awards/recognition, project opportunities, and job satisfaction.

### 2.6.1 Compensation:

Considerable empirical evidence exists that indicates positive relationship between a manager's compensation (wages, salary, and bonus) and career success. Success is typically associated with receiving higher compensation and promotion. Kerzner (2006) underscored the important role financial compensation plays in enhancing the morale and motivating employees. Flannes and Levin (2001) also noted that highly motivated individuals tend to perform at high standards. With this 'external stimuli' the project manager may be motivated to set goals, which once attained, may contribute to career success. Other studies have found that salary is a dimension of career success (Gerhart & Milkovich, 1989) arguing that as pay increases, so does one's career.

### 2.6.2 Promotion:

Advancement and promotion are significant factors in measuring career success (Kanter, 1979). Similarly, Locke (1976) argued that promotion based on merit is positively related to job satisfaction. Most recent studies (Sharma & Jyoti, 2006) provide evidence of consistent findings that there is a relationship between promotion and career success: thus promotion affects career success. According to Thomsett (2002), a project manager who exhibits exceptional performance "receives promotions and gains a profitable and fulfilling career" (p. 172).

### 2.6.3 Awards/recognition:

Individuals receive awards and recognition as a result of their positive contribution to the organization. On the same token, achievement-driven individuals are likely to set goals and define how to attain them (Kerzner, 2006). Kerzner points out that awards and recognition do not only enhance morale for project managers to achieve more but also motivates them to find the job satisfying.

Many scholars and researchers have cited evidence that individuals with certain characteristics tend to be more satisfied with their careers. For instance, Stewart and Brown (2009) observed that “individuals who are highly open to experience tend to leave to seek out new adventures. In contrast, conscientious employees tend to feel a higher sense of obligation” (p. 254), thereby heightening their job satisfaction. Moreover, awards and recognition play into the emotion and self-esteem of Maslow’s hierarchy of needs.

#### 2.6.4 Project Opportunities:

Project opportunities within organizations are assigned to project managers who possess the required skills and relevant experience. As Thomsett (2002) asserted, the project itself is the opportunity to demonstrate your best qualities.... When you accept a project assignment, remember that management will develop its perception on your capabilities (or limitations) based on your performance in that role, the results you generate, and the conflicts you are able to resolve quietly and effectively. ...you are on the right track when management comes to you with their most difficult, complex jobs. (p. 183)

Other scholars have made similar arguments that since conscientious individuals have a leadership potential, they are more likely to receive more project opportunities, which will in turn enhance their careers (Seibert, et al., 1999). According to Greenhaus et al. (1990), employees looking for job assignments that engage them for long hours tend to appreciate and attain their career goals.

#### 2.6.5 Job Satisfaction:

The concept of job satisfaction has been described as a multifaceted response that involves emotional and behavioral expression. Additionally, job satisfaction is an affective reaction between the actual work accomplished and the desired outcome (Golbasi et al., 2008). One of the most commonly cited definition of job satisfaction was offered by Locke (1976) terming it a pleasant feeling resulting from job experiences. Weiss (2002), however, does not view job satisfaction as an affective reaction as much as it is a subjective attitude. Instead, Weiss defined job satisfaction as “a positive (or negative) evaluative judgment one makes about ones job or job situation” (p. 175). Weiss’ argument, however, compliments Locke and Golbasi et al.’s observation that job satisfaction is a reflection of one’s emotional attitude.

For decades, job satisfaction literature has drawn from Maslow's (1954) theory of motivation which proposes that individuals are motivated by multiple needs. Maslow's hierarchy of needs consists of (in ascending order): physiological needs, safety needs, belongingness needs, esteem needs, and self-actualization needs. According to Maslow's theory, lower order needs must be satisfied before the higher order needs are met. In organizational settings, physiological needs include salary or compensation; safety needs include job security; belongingness include positive relationships with coworkers; esteem needs include recognition, increased responsibility, title level, and awards; and self-actualization needs include advancement and growth opportunities.

### **3. Methodology:**

#### ***3.1 Research Design and Sample:***

This study utilized a quantitative research method. Specifically, a correlational research design was used to compare possible relationships between project managers' personality traits and career success. Population for the study consisted of all alumni of the Master of Science in Project Management Program who graduated between 2001 and 2008 (N = 156) of a midwestern university in USA. Forty three participants, representing 28% of the total population, completed the survey. Data from one respondent who was unemployed was excluded in the statistical analysis. The average number of years respondents were in their present position was 3.4 years with a range of six months to ten years. The participants reported holding jobs in various industries.

#### ***3.2 Instrumentation:***

##### ***3.2.1 "Big Five" Mini-Modular Markers of Personality:***

A set of 40 Mini-Modular Markers (3M40) developed by Saucier (1994) was used to measure the aspects of personality. Saucier (2002) developed a set of 40 adjective items designed to assess the dimensions of the model of personality. The 3M40 was chosen because of its brief and simple structure, the short amount of time it requires to complete, and due to its superiority in achieving orthogonal results (Saucier, 1994). The 3M40 personality inventory consisted of 40 single adjectives to which a participant indicated how the adjective accurately described him or her on a nine-point scale from one (extremely inaccurate) to nine (extremely accurate). Low scores indicate low levels of the particular trait; conversely, high scores translate to high levels of the particular trait. The Alpha coefficients provided by Saucier (1994) for the 3M40 ranged from .69 to .86 averaging around .80. Because these reported alpha coefficients were high, this study deemed the instrument to be reliable for use in the current study.

### *3.2.2 Career Success:*

Overall career success was assessed by the career success feedback questionnaire (Monson, 2000). This instrument consisted of five career success items that ask participants to rate their satisfaction with compensation, promotion, awards and recognition, project opportunities, and job satisfaction. Participants were asked to indicate the extent of their satisfaction relative to their peers to the five dimensions on a nine-point scale ranging from one (1) to nine (9) with a higher score indicating more satisfaction. The use of career success feedback survey was in line with measures of earlier studies such as Gattiker and Larwood (1986). Internal consistency reliability for the career success feedback survey (Monson, 2000) was reported to have an Alpha value of .92. The Cronbach's Alpha of this study's career success feedback survey was determined to be .94 which was slightly higher than that reported by Monson.

### *3.3 Scoring Procedures:*

*Personality traits.* The 3M40 was used to measure personality traits. The 3M40 scale contains 40 items on a Likert type scale ranging from 'Extremely Inaccurate' to 'Extremely Accurate' with eight (8) items on each of the Big Five factors. Scoring item values are: 'Extremely Accurate' 9, to 'Extremely Inaccurate' 1. Several items have negative loading meaning that they were scored negatively. Values were summed then divided (for each scale) by eight to arrive at the mean response for items on the given scale.

*Career success.* Career success was assessed by the career success feedback survey. The feedback survey used a relative scale to measure the position of the respondent on a continuum in relation to his or her peers ranging from 'Much Less' to 'Much More' with one item on each of the five career success measures. Each of the five individual scores represented an equivalent career success. For example, if a respondent rated herself as a seven (7) on promotions, this means that she received 'moderately more' promotions in relation to her peers, signifying her level of success.

### *3.4 Data Analysis:*

A computer statistical software program, Statistical Package for the Social Sciences (SPSS) 17.0 version for Windows, was used to analyze the data categories of personality traits and career success. The nonparametric Spearman rank correlation coefficient (Black, 2003) was used to analyze the ranked data of the personality traits scores and career success scores of project managers. This test was used to determine the correlations between personality traits and career success of project managers. Regression analysis was conducted to determine statistical significance of personality

traits as predictors of career success. Null hypotheses were rejected at 0.05 alpha threshold. Varimax-rotated factor analysis of the career success instrument was performed to determine how reliable the instrument measured the same construct. Four out of five variables loaded strongly on the first factor. The first factor accounts for 47% of the variation. This finding was consistent with prior studies (e.g. Monson, 2000).

The study examined the problem of multicollinearity among the predictor variables. Highly correlated predictor variables produce less reliable coefficients. The strength of the intercorrelations among predictor variables was low to medium high; therefore, they were included in the regression analysis.

#### **4. Findings and Discussion:**

##### ***4.1 Extraversion and Career Success:***

*Hypotheses 1a – 1e.* Research hypotheses 1a through 1e proposed that there is a significant relationship at the .05 confidence level between project managers' level of extraversion and (a) compensation, (b) promotions, (c) awards/recognition, (d) project opportunities, and (e) overall job satisfaction. The study found statistically significant positive relationships with regard to compensation at .009 ( $r_s = .399$ ), promotions at .014 ( $r_s = .377$ ), and awards/recognition at .001 ( $r_s = .486$ ). No statistically significant relationship was obtained with regard to project opportunities ( $p = .234$ ) and overall job satisfaction ( $p = .111$ ).

Evidence of the relationship between extraversion and extrinsic career success (compensation, promotion, awards/recognition) was consistent with previous research (Seibert & Kraimer, 2001; Howard & Bray, 1994; Judge, et al., 1999; Dunn, et al., 1995; Melamed, 1995). Perhaps the highly motivated, energetic, and assertive nature of extraverted project managers invigorates them to take bold challenges leading them to receive more awards, recognition, promotions, and higher compensation. No evidence was found to support claims that extraversion is related to intrinsic career success like those obtained by Furnham and Zacherl, (1986) and McCrae and Costa (1991).

##### ***4.2 Conscientiousness and Career Success:***

*Hypotheses 2a – 2e.* Research hypotheses 2a through 2e proposed that there is a significant relationship, at the .05 confidence level, between project managers' level of conscientiousness and (a) compensation, (b) promotions, (c) awards/recognition, (d) project opportunities, and (e) overall job satisfaction. The study examined the relationships and found statistically significant correlations

between project managers' level of conscientiousness and each of the career success dimensions: compensation at .000 ( $r_s = .525$ ), promotions at .006 ( $r_s = .415$ ), awards/recognition at .018 ( $r_s = .363$ ), project opportunities at .005 ( $r_s = .422$ ), and overall job satisfaction at .002 ( $r_s = .472$ ). These findings indicated strong positive relationships.

This would seem to indicate that those project managers who ranked themselves high in conscientiousness received higher compensation, more promotions, more awards/recognition, more project opportunities, and were more satisfied with their job. Conscientious project managers may have a tendency to be dependable, orderly, achievement-oriented, and are more likely to set and be committed to goals (Barrick, Mount, & Strauss, 1993). Prior studies (Judge, et al., 1999; Barrick & Mount, 1991; Salgado, 1997; Hogan & Ones, 1997) also found significant relationships between conscientiousness and career success.

#### **4.3 Agreeableness and Career Success:**

*Hypotheses 3a – 3e.* Research hypotheses 3a through 3e proposed that there is a significant relationship, at the .05 significance level, between project managers' level of agreeableness and (a) compensation, (b) promotions, (c) awards/recognition, (d) project opportunities, and (e) overall job satisfaction. Results from correlation coefficient analyses of these hypotheses indicated that there was no significant relationship between agreeableness and compensation ( $p = .179$ ), awards/recognition ( $p = .211$ ), and overall job satisfaction ( $p = .405$ ) at the .05 significance level. However, the study found statistically significant negative relationships between agreeableness and promotions at .048 ( $r_s = -0.261$ ) and project opportunities at .044 ( $r_s = -0.267$ ).

Project managers' level of agreeableness was determined to be significantly related with project opportunities and promotion, indicating that the more agreeable project managers are, the less extrinsic success they received in relation to their peers. The negative relationship established in the current research was also reported by Judge et al. (1999) and Boudreau et al. (2001). One possible explanation for these results could be because highly agreeable individuals tend to be cooperative and gentle thereby sacrificing their career success in the name of playing "one of the boys".

#### **4.4 Openness to Experience and Career Success:**

*Hypotheses 4a – 4e:* Research hypotheses 4a through 4e proposed that there is a significant relationship, at the .05 threshold level, between project managers' level of openness to experience

and (a) compensation, (b) promotions, (c) awards/recognition, (d) project opportunities, and (e) overall job satisfaction. A statistically significant positive relationship was found with regard to overall job satisfaction at .041 ( $r_s = .316$ ). No statistically significant relationship was found between openness to experience and career success constructs as measured by compensation ( $p = .372$ ), promotions ( $p = .466$ ), awards/recognition ( $p = .238$ ), and project opportunities ( $p = .221$ ).

This investigation did not find support for existence of a relationship between openness to experience and extrinsic career success. Although few studies (Gelissen & de Graaf, 2006) have investigated the relationship between openness to experience and career success, Seibert and Kraimer (2001) reported a negative association on an exploratory study. Perhaps, the curious, flexible, intellectual prowess, and open-minded nature of open individuals influences them to move from one job to another in search of a “new experience”. The study found evidence of moderate association between openness to experience and intrinsic career success suggesting that open individuals were satisfied with their jobs. It is reasonable to suggest that this finding was no accident, perhaps because open individuals are willing to learn and are appreciative of new experiences.

#### ***4.5 Emotional Stability and Career Success:***

*Hypotheses 5a – 5e:* Research hypotheses 5a through 5e proposed that there is a significant relationship, at the .05 significance level, between project managers’ level of emotional stability and (a) compensation, (b) promotions, (c) awards/recognition, (d) project opportunities, and (e) overall job satisfaction. Results of the correlation analyses indicated that compensation ( $p = .256$ ), promotions ( $p = .337$ ), awards/recognition ( $p = .238$ ), and project opportunities ( $p = .326$ ) were not statistically correlated with project managers’ level of emotional stability at the .05 significance level. The correlation analysis, however, indicated a somewhat strong positive significant relationship between emotional stability and overall job satisfaction at .027 ( $r_s = .299$ ).

;

As expected, this study found a positive association between emotional stability and intrinsic career success. Similar results were reported by Howard and Bray (1988). Compensation and promotions that were reported to be correlated positively were not supported in the current study.

Conscientiousness was found to be a valid predictor of project managers’ career success in the current study. Some authors have suggested that conscientiousness is a useful predictor of job performance (Barrick, Mount, & Strauss, 1993; Hogan & Ones, 1997). This finding is logical because conscientious individuals tend to be hardworking, dependable, responsible, and reliable.

#### **4.6 Personality Traits and Career Success:**

*Hypotheses 6a -6e:* Research hypotheses 6a through 6e proposed that project managers' personality traits (a) extraversion, (b) agreeableness, (c) conscientiousness, (d) emotional stability, and (e) openness to experience are significant predictors of career success at the .05 alpha level. Results of the regression analysis indicated that project managers' level of extraversion and conscientiousness can significantly predict career success. The corresponding coefficients and *p*-values for these predictor variables were 2.795 and .005 for extraversion and 3.845 and .002 for conscientiousness. There was evidence to conclude that agreeableness ( $p = .391$ ), emotional stability ( $p = .153$ ), and openness to experience ( $p = .168$ ), were not significant predictors of project managers' career success at the .05 threshold level.

This study found evidence that extraversion does predict project managers' career success. This finding was generally consistent with extraversion literature in predicting job performance (Dunn, et al., 1995; Melamed, 1995), and training proficiency (Barrick & Mount, 1991). Literature on personality traits identified conscientiousness and extraversion as the most useful traits in predicting human behavior. This investigation found no evidence that project managers' level of agreeableness, openness to experience, and emotional stability were valid predictors of career success.

#### **5. Conclusions:**

The contribution of career strategies in enhancing one's career success cannot be overemphasized (Gould & Penley, 1984). Understanding project managers' unique characteristics may help organizations recruit highly motivated and performing individuals. Identification of the characteristic traits and factors that stimulate individuals to be successful is especially useful to organizations in selecting and assigning project leaders to projects where they will likely be more productive. It may also help organizations to provide training and development to project managers in order to maximize their potential. This makes sense as the review of the literature supported the fact that employee success translates to organizational success (Judge, et al., 1999). Moreover, as could be expected, once project managers understand the relationships among personality traits and career outcomes they can strategize on how to attain their career ambitions and determine whether or not those career goals are appropriate.

Whereas a vast majority of research have demonstrated that a number of variables, including demographics, level of education, industry type, years of experience, and location of organization

influence career success (Judge & Bretz, 1994; Cox & Harquail, 1991), this study's scope included only an examination of the effect of personality traits on career success.

The current research had a low response rate. It is recommended that the study be replicated using larger sample size; perhaps utilize project management professional associations' databases to obtain larger sample size. Future research should use this study as a platform to investigate project managers in other countries. The study relied on self-reported information for analysis. There is a possibility that the relationships observed were as a result of a self-reported variance. Future investigations should consider utilizing other methodologies to collect data, for example, qualitative or mixed methods.

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