The Relationship of the Big Five Personality Dimensions to Personal and Organizational Outcomes: Answering the Questions *Who*? and *When*?

Usman Raja

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ABSTRACT

The Relationship of the Big Five Personality Dimensions to Personal and Organizational Outcomes: Answering the Questions *Who*? and *When*?

Usman Raja
Concordia University, 2004

Despite the enormous growth of research on personality due to the development of the Big Five model, there is still much to be learned about the relation of personality to personal and organizational outcomes. An area requiring attention is the incorporation of situational variables into empirical models to enhance the predictive capacity of personality in explaining outcomes. This study fills this gap by exploring the joint effects of the Big Five personality dimensions and contextual factors (job scope, social aspects of job, and justice perceptions) on a variety of personal and organizational outcomes. The results support many hypotheses suggesting the moderating role of job scope in personality - outcomes relationships. Job scope moderated the relationship between various Big Five traits and job satisfaction, job stress, job performance, and creativity. Similarly, distributive justice and voice had joint effects with personality on citizenship behaviors.

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DEDICATION

To my parents, Shafaat and Kalsoom, and my family, Saima, Maria, Abdullah, Komal, and Hashim.

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CHAPTER ONE

1. INTRODUCTION

The history of the study of personality is as old as the field of psychology itself. Scholars have, however, differed in their views regarding the influence of individual traits on behavior (Epstein & O'Brien, 1985). The debate has involved a division between trait theorists such as Allport (1931) and situationists such as Thorndike (1906). Trait theorists believed in the pervasiveness of personality in determining people's behavior, while the other camp considered behavior to be more situationally determined (Epstein & O'Brien, 1985). Mischel (1968) heavily criticized the utility of the trait perspective and this resulted in a major blow to research on dispositional influences on behavior. A crucial problem faced by researchers at that time was that without a well-accepted taxonomy of personality, it was not possible to determine if there were consistent and meaningful relationships between a particular personality trait and organizational behavior (Barrick & Mount, 1991). It was extremely difficult, if not impossible, to show the pervasiveness of personality in determining behavior.

In the mid eighties Costa and McCrae (1987) showed that five universal factors describing personality could be replicated across cultures and time. This taxonomy, labeled the Big Five model of personality (Digman, 1990; Goldberg, 1990), was to a great extent responsible for the rebirth of research in this area. Researchers in both industrial psychology and organizational behavior converged on the Big Five model comprising neuroticism (e.g., worried, anxious, tense, and insecure), conscientiousness (e.g., reasonable, planful, dependable, and achievement oriented), extraversion (e.g., sociable, talkative, and assertive), agreeableness (e.g., good-natured, cooperative, and

trusting), and openness to experience (e.g., artistically sensitive and intellectual) as a widely accepted framework of personality (Digman, 1990), which allowed them to study meaningful relationships between personality traits and work behaviors.

In the past 25 years, the Big Five model of personality has been investigated in relation to career success (Judge, Higgins, Thoresen, & Barrick, 1999), job satisfaction (Judge, Heller, & Mount, 2002), job performance (Barrick & Mount, 1991), leadership (Judge, Bono, Ilies, & Gerhardt, 2002), performance motivation (Judge & Ilies, 2002), and a variety of other important personal and organizational outcomes. Although the growing acceptance of the Big Five taxonomy of personality has resulted in huge body of literature, studies that investigate the relationship of the Big Five to different outcomes in a single study are rare. Another weakness is the lack of research exploring the combined effects of personality and situational factors on behaviors and attitudes (Stewart, 1996).

This study has two significant aspects that could be major contributions to the existing literature. First, it explores the relationship of personality and a variety of outcomes, explaining how the Big Five dimensions differentially map on to variables such as job performance, job satisfaction, organizational citizenship behavior (OCB), job stress, and creativity. Second, by considering the contextual variables job scope, social aspects of the job (dealing with others; Hackman & Oldham, 1976), and organizational justice (Greenberg, 1990) as moderators in the personality – outcomes relationship, this study helps answer the question "When are situations most likely to exert powerful effects and, conversely, when are person variables likely to be most influential" (Mischel, 1977: 346) in predicting personal and organizational outcomes. Where possible, hypotheses have been developed to explore the nature of the relationships between the

Big Five and job performance, job satisfaction, OCB, job stress, and creativity under varying levels of the contextual factors job scope, dealing with others, and organizational justice.

CHAPTER TWO

2. THEORETICAL BACKGROUND AND HYPOTHESES

2.1. Personality, behavior, and the person-situation debate

Researchers have always mused about the significance of individual characteristics in predicting behavior. As early as the1920s, Hartshorne, May, and colleagues conducted a series of studies on honesty and deception to determine whether a broad trait of honesty existed. Using a sample of 8000 school children, they concluded that it did not (Hartshorne & May, 1928; Hartshorne, May, & Maller, 1929; Hartshorne, May, & Shuttleworth, 1930). Allport is considered one the earliest proponents of the trait perspective in personality psychology. He derived a list of 17,953 traits to explain individual differences (Allport, 1937). Studies by Newcomb (1929), Allport and Vernon (1933), and Dudycha (1936) represent a few examples of the stream of research that attempted to investigate the generality of behavior across situations. The results of these studies were at best mixed (Epstein & O'Brien, 1985), which generated much controversy and fuelled the debate among the trait theorists and the "situationists." While the trait theorists were trying to highlight the importance of individual differences in determining behavior, situationists from the very beginning contended, "... it is evident that the behaviors which are often considered as stable personality trait indicators actually are highly specific and depend on the details of the evoking situations and the response mode employed to measure them" (Thorndike, 1906: 37).

This controversy reached its peak by the mid 1960s, and personality theorists suffered a huge setback when Mischel's influential book, *Personality and Assessment* was published in 1968. Mischel's arguments in that book as summarized by Epstein and

O'Brien were, "behavior is highly situationally specific, that self-report measures characteristically produce correlations no greater than .30 with non-self-report measures, that people's belief in traits and in generality of behavior itself is a paradox that requires explaining, and that behavior can best be explained by concepts referring to operant and respondent conditioning and social learning processes" (1985: 515). Mischel's book led to an almost complete halt to research from the trait perspective over the next couple of decades. During this time, research adopting a learning perspective, which emphasizes the situational control of behavior, flourished (e.g., Bandura, 1969, 1977; Rotter, 1954; Skinner, 1938, 1971).

Although some good research focusing on traits such as need for achievement (McClelland, 1961), self-esteem (Rosenberg, 1965), and growth need strength (Hackman & Oldham, 1975, 1980), did emerge from time to time, there was a general lack of an acceptable model or taxonomy to describe personality, creating a "Babel" of concepts and scales (John & Srivastava, 1999). It is easy to imagine the difficulty of working in an area with thousands of trait descriptors, all potentially related to a similar set of behaviors. The absence of an acceptable taxonomy created a lack of coherence among various streams in personality research. Allport (1958: 258) described this as "each assessor has his own pet units and uses a pet battery of diagnostic devices."

By the mid eighties, researchers started to converge on relatively smaller and more manageable numbers of personality traits and models. This was the turning point in this area of research. One the one hand, the highly influential studies by Staw and his colleagues, which provided evidence for the dispositional sources of job attitudes (Staw, Bell, & Clausen, 1986; Staw & Ross, 1985), were published. On the other hand, the Five

Factor Model (FFM) of personality started to gain acceptability among researchers (John & Srivastava, 1999). The FFM is rooted in the work of Cattel (1943, 1945), who while working on Allport's (1937) trait list, eventually developed his 16 Personality Factor (16PF) questionnaire (Catell, Eber, & Tatsuoka, 1970). Tupes and Christal found "five relatively strong and recurrent factors and nothing more of any consequence" (1961: 14). This five factor structure was later replicated by many researchers (e.g., Borgatta, 1964; Costa & McCrae, 1987; Digman, 1990; Goldberg, 1990; Norman, 1963), and became known as the Big Five (Goldberg, 1981, 1990). With strong evidence showing its robustness, the Big Five model was embraced by researchers in the eighties. With the availability of more sophisticated analytical tools, better personality taxonomies, and a manageable set of common traits, research on personality began flourishing again by the late 1980s (John & Srivastava, 1999).

Although it has consistently and strongly been criticized by some researchers (e.g., Block, 1995; McAdams, 1992), the Big Five is today the most accepted and widely used personality taxonomy (Judge et al., 2002). In the past 20 years, the Big Five traits have been shown to relate to a variety of personal and organizational outcomes in both field and meta-analytic studies (e.g., Barrick & Mount, 1991; Costa & McCrae, 1980, 1987; Judge et al., 2002). Today the person – situation debate is largely over (Funder, 2001; Hough & Schneider, 1996). However, as the situationists downplayed the role of personality in predicting behavior in 1960s, personality researchers, usually investigating the effect of individual differences on behavior, have not paid enough attention to possible contextual influences on behavior (Funder, 2001).

Even though researchers agree that "complex human behavior is regulated by interactions that depend intimately on situational conditions (stimulus variables) as well as on dispositions" (Mischel, 1977: 334), very few have attempted to open this "Black Box." For example, Barrick and Mount (1993) found that autonomy moderated the relationship between two Big Five traits and job performance. Individuals with high conscientiousness or extraversion performed better in situations that were less restrictive (i.e., autonomy was high). Similarly, Stewart (1996) provided evidence that reward structure had interactive effects with extraversion on sales performance. Besides a handful of such examples "little is empirically known or even theorized about how situations influence behavior, or what the basic kinds of situations are (or, alternatively, what variables are useful for comparing one situation with another)" (Funder, 2001: 211). Funder further argues that we need to pay attention to all elements of the triad comprising personality, situation, and behavior. This study addresses this gap in research and explores the combined effects of personality and situational variables on an array of outcomes. In the following sections, I will briefly discuss the dependent and contextual variables of interest in this study and develop appropriate hypotheses that pay due diligence to all the elements of the triad (i.e., person, situation, and outcomes).

2.2. Important personal and organizational outcomes

The decision to include personal and organizational outcomes such as job performance, job satisfaction, OCB, job stress, and creativity was motivated by two factors. First, current and past research suggests that these outcome variables have frequently been studied in the areas of industrial psychology and organizational behavior

because of their potential to influence the proper functioning of organizations. Second, such a mix of dependent variables in one study provides a unique opportunity to compare the effects of personality on different outcomes, which is very rare in field research. This study provides an opportunity to see how personality traits map on to different outcomes. For example, being positively related to job performance (Barrick & Mount, 1991), is conscientiousness always a desirable trait in organizations? Tett, Jackson, Rothstein, and Reddon (1999) suggested that conscientiousness could become a liability in jobs that demand creativity and innovation. Therefore, high conscientiousness is likely to be a less desirable trait if the job requires high creativity. Having measures of in-role performance, OCB, and creativity in one study provides a unique opportunity to see how conscientiousness maps on to these organizationally important outcomes. Similarly, hypotheses have been developed for relationships between other Big Five dimensions and attitudinal and behavioral outcomes: job satisfaction, job stress, job performance, OCB, and creativity.

Job satisfaction is a personal outcome that bemused personality psychologists for years (Judge et al., 2002). Two studies by Staw and colleagues (Staw et al., 1986; Staw & Ross, 1985) sparked research on job satisfaction and personality, and more recently, Judge et al.'s (2002) meta-analytic study provided clear and strong evidence for the relationship between personality and job satisfaction. They found that while neuroticism, extraversion, and conscientiousness were consistently related to job satisfaction, results for agreeableness and openness to experience in relation to job satisfaction were unstable (Judge et al., 2002).

Job stress refers to the emotional response to stimuli that may have dysfunctional psychological or physiological consequences (Parker & DeCotiis, 1983). There is consensus among researchers that job stress is caused by stressors, which evoke negative psychological or physiological reactions (Kahn & Byosiere, 1992). Job stress is an important variable in the organizational context (Baba, Jamal, & Tourigny, 1998) and is negatively related to performance (Jamal, 1984). Although some research has explored the relationship of personality traits such as negative affectivity (NA) and type A with job stress (e.g., Jamal, 1990), there is very limited research investigating the influence of the Big Five dimensions on job stress (e.g. Brebner, 2001; Penley & Tomaka, 2002). With increasing popularity and acceptability of the Big Five taxonomy, there is a need to clearly establish the link between the Big Five dimensions and job stress, and this study addresses this gap in research.

Job performance is one of the most extensively investigated job behaviors in OB and industrial/occupational psychology. The relationship between personality and performance, especially with respect to the Big Five, has been established by empirical research (e.g. Barrick & Mount, 1991; Salgado, 1997; Tett, Jackson, & Rothstein, 1991). OCB refers to discretionary behaviors that in the aggregate promote the effective functioning of organizations and are not enforceable under the formal contract (Organ, 1988, 1997). Though OCB has been a very important variable in organizational behavior, research on OCB and personality has not been conclusive. Very limited and weak evidence exists to support a relationship between the Big Five and OCBs (Organ & Ryan, 1995). Although many conceptualizations of OCB exist in the literature (Van Dyne, Cummings, & McLean Parks, 1995), in this study, I have adopted the two-dimensional

view of OCB suggested and validated by Williams and Anderson (1991). They suggested that citizenship behavior directed explicitly towards the organization, called OCBO, is distinct from OCBI, which is behavior intended to benefit other individuals in the organization. This conceptualization not only allows one to hypothesize how people might differ in exhibiting citizenship behaviors that are directed toward people or the organization explicitly, but also, "avoids the 'excess baggage' which terms such as compliance and altruism are likely to carry" (Van Dyne et al., 1995: 239).

Creativity has always been a variable of immense interest to personality psychologists (Feist, 1998). Creativity is defined as thought or behavior that is novel and useful (Amabile, 1988). Almost every personality theorist has mulled over creativity as an attribute that distinguishes between people (Woodman, 1981). A meta-analysis by Feist (1998) revealed how the Big Five dimensions of personality related to creativity. No study, to the best of my knowledge, has investigated the combined effects of job scope and personality on creativity.

2.3. Moderators of personality - outcomes relationships

The renewed attention of researchers to personality research led to a substantial growth of empirical research in this area. This resulted in a number of meta-analyses that provide enough evidence supporting the theoretically appealing argument of the presence of moderators in personality – outcomes relationships (e.g., Barrick & Mount, 1991; Judge & Ilies, 2002; Organ & Ryan, 1995; Tett et al., 1991). A look at the results of almost all the major meta-analyses on personality – outcomes relationships reveals that the percentage of variance in observed correlations due to statistical artifacts (i.e.,

sampling error, predictor and criterion unreliability, and range restriction) fails to exceed the 75% rule prescribed by Hunter and Schmidt (1990). Barrick and Mount (1991) reported mean estimated true correlations ranging from .04 to .22 (median = .08) with the percentage of mean accounted variance ranging from 54 to 70 (median = 63) for the relationship between the Big Five traits and job performance across various occupations. A deeper look further strengthens the argument for the presence of moderators in the personality – performance relationship. Barrick and Mount (1991) found that extraversion was a valid predicator of performance only for sales and managerial jobs (ρ = .18 and .15, respectively). A similar trend is observed in other meta-analytic studies on the personality performance – personality relationship (e.g., Salgado, 1997; Tett et al., 1991). In addition, a meta-analysis on the relationship between the Big Five traits and performance motivation, which is closely related to job performance, revealed that across the three motivational criteria (goal setting, expectancy, and self-efficacy) and the five personality traits, only 59% of the variability in correlations was explained by study artifacts (Judge & Ilies, 2002).

Judge et al. (2002) recently performed a meta-analysis on the relationship between the Big Five and job satisfaction. Although they found support for relationship between personality and job satisfaction, especially for neuroticism (ρ = -.29), conscientiousness (ρ = .26), and extraversion (ρ = .25), study artifacts explained only a small percentage of the variability in correlations across studies. They report, "Across the five traits, only 16.1% of the variability in correlations was explained by sampling error and other statistical artifacts (26.5% of the variability was explained using alternative weighting procedure described later)" (Judge et al., 2002: 533). Results of a meta-

analysis on personality and OCB by Organ and Ryan (1995) revealed that only conscientiousness (ρ = .22) and positive affectivity (PA) (ρ = .12), a construct closely related to extraversion, had meaningful relationship with OCB. For both conscientiousness and PA, the variability in correlations with OCB explained by study artifacts was 8.2% and 33.1% respectively.

In summary, it is observed that the unaccounted variance in correlations between the personality traits and outcomes in the meta-analytic studies is well above 25% suggesting the presence of moderators (Hunter & Schmidt, 1990). The next issue relates to answering the questions of "*How?*" and "*What?*" about potential moderators in personality – outcomes relationships, because the evidence of unexplained variance in the correlations alone does not address these questions in any way. The first question concerns the theoretical frameworks that explain how situational factors moderate the personality – outcomes relationships. The second question deals with the nature of such situational or contextual factors that can be used as appropriate moderators.

Despite the relative lack of empirical studies from the interactionist perspective on personality, theory on the subject has seen some development over time. Notable examples of major theoretical frameworks from the interactionist perspective include Mischel's (1968) idea of *strong* versus *weak* situations, the person – environment (PE) fit model (Murray, 1938; Pervin, 1968), the person – organization (PO) fit model (Chatman, 1989; O'Reilly, Chatman, & Caldwell, 1991), the attraction – selection – attrition (ASA) framework (Schneider, 1987), and the concept of *trait activation* process (Tett & Burnett, 2003; Tett & Guterman, 2000). The common theme underlying the work of all the above

mentioned theorists is to explain how personal traits and situational factors jointly affect attitudes and behaviors.

Mischel suggested that personality could influence behavior in a given situation most strongly when the situation is ambiguously structured (i.e., weak situation) because it allows for subjective reconstruction by the person. Conversely, when the situation is well structured and everyone expects that there is only one appropriate response (i.e., a strong situation), the impact of individual differences becomes minimal (Mischel, 1977). While strong situations lead people to perceive particular events the same way and induce uniform expectancies regarding the most appropriate response pattern, weak situations are not similarly construed and do not generate uniform expectancies concerning the desired behavior (Mischel, 1977). Therefore, the use of appropriate situational variables can help distinguish between weak situations in which the effect of traits on behavior is most prominent, and strong situations in which this influence is minimal.

The fit approaches such as the PE fit (Murray, 1938; Pervin, 1968), PO fit (Chatman, 1989), and the ASA framework (Schneider, 1987) are very similar in nature (Tett & Burnett, 2003). The ASA framework holds that people select organizations they perceive as having similar values, are further selected by the organization, and leave when fit is poor (Schneider, 1987). Similarly, the fit approaches contend that effects of traits on attitudes or behavior are enhanced when there is congruence between a person and his or her environment. Murray's (1938) *need – press* model emphasized the idea of trait – situation relevance. Similar arguments for performance and satisfaction being a function of individual – environment fit were made by Pervin (1968). Yet another model by Chatman (1989) focused on a fit between individuals' and organizations' values. In

summary, the fit approaches provide a useful and unique interactionist approach to understanding trait – outcomes relationships (Tett & Burnett, 2003).

More recently, Tett and colleagues have been asserting the principle of trait activation, which is the process by which individuals express their traits when presented with trait-relevant situational cues (Tett & Guterman, 2000; Tett & Burnett, 2003). Though the concept of *"situation trait relevance"* has been around for a long time (e.g., Murray, 1938; Kenrick & Funder, 1988), it has recently been more systematically presented theoretically and empirically by Tett and colleagues (e.g., Tett & Guterman, 2000; Tett & Burnett, 2003). Drawing from Murray's (1938) idea of *"press"* that situations exert on individuals to behave in trait-related ways, the principles underlying the fit models, and the concept of weak versus strong situations, Tett and colleagues suggest that trait activation is the process by which people express their traits when presented with trait-related situational cues. Tett and Burnett (2003: 503) explain this as:

> "Trait relevance and strength are distinct situational characteristics, and both are required for a full appreciation of situational factors involved in personality expression. Consider the following examples. An employee is assigned to an office left in disarray by the previous occupant. This situation is relevant to the trait of orderliness by the provision of cues (e.g., messy desk), offering opportunities to engage in organizing behavior. A strong version of the situation might include a clearly communicated threat of termination for failure to organize the office in timely manner, thus restricting (although perhaps not eliminating) individual differences in organizing behavior. A weak version, entailing no such threat, would allow differences in orderliness to be more easily observed. Other situations may be strong or weak but have little or no relevance to orderliness. The employee, for instance, might be introduced to prospective clients either with the promise of a sizeable bonus made contingent upon landing a lucrative contract (i.e., strong situation) or without such a promise (i.e., weak situation). Both versions of this situation might be relevant to achievement and sociability but less to orderliness. The question of strength with respect to orderliness in this

> case is largely moot. Thus, in a sense, trait relevance supercedes strength in understanding the interaction between traits and situations."

Similarly, Schuler (1980) argued that some contextual factors might be seen as either an opportunity or as excessively demanding, resulting in varying behavioral and attitudinal responses. For example, people who are attracted to complexity and challenge are likely to be more satisfied and less stressed in such situations than in simplistic and restrictive ones (McGrath, 1976). On the contrary, some people might see complex jobs as excessively demanding, and therefore, be stressed on such jobs. Such people are likely to be more satisfied on simple jobs. In addition, social exchange theory (Blau, 1964) in general and literature on psychological contracts (e.g., Rousseau, 1989; Rousseau & McLean Parks, 1993) in particular, can also be helpful in explaining the variations in personality – outcomes relationships in the presence of a situational factor. Research shows that people differ in forming and monitoring psychological contracts with their organizations (Raja, Johns, & Natlianis, 2004). Employees' expectations from their organization can range from short term economic rewards (i.e., transactional contracts) to long-term relationship oriented growth opportunities (i.e., relational contracts) in exchange for their services (Raja et al., 2004). Some people (e.g., neurotics) as compared to others (e.g., the conscientious) are more inclined to detect a breach in their psychological contract, which in turn can lead to feelings of betrayal and anger resulting in negative outcomes such as job dissatisfaction and intentions to quit (Raja et al., 2004). Perceived breach, which refers to the realization by an employee that his/her employer has failed to meet its obligations in the exchange relationship (Morrison & Robinson, 1997), is conceptually very similar to perceived injustice. Therefore, perceived lapses in

distributive justice will provide trait relevant cues for those who lack trust in others and are focused mostly on economic gains in an exchange relationship. These cues will elevate the distrust and anger among such individuals leading to negative consequences. However, same situational factor, that is, low distributive justice, will not be a trait relevant cue for someone who is not exclusively focused on economic gains and wishes to maintain a relational contract.

I will now focus on the next question of *"what?"* that deals with the nature of personality – outcomes relationships. Though a great deal is said about situational variables, research in this area is still in its infancy (Funder, 2001). We have not seen the distillation of contextual variables into a manageable number as we saw for personality traits (Johns, in press). It is therefore not possible to adopt a well established set of contextual factors in any research study. Most of the discussion of situational moderators of personality – outcomes relationships has traditionally been focused on occupation types. There are two reasons for this trend in personality research. First, most of the research in the personality domain has focused on selection and placement issues, such as, hiring people based on a match between their individual traits and the occupation to which the job belongs (e.g., hiring extraverts for sales jobs). Although this idea has some merit at a general aggregate level for initial screening of candidates, it falls short of finding the best person-job fit because of its neglect of specific job-related factors. It is possible that a sales job requires a lot of attention to detail and fewer opportunities for social contact, attributes that will make it a poor fit for an extraverted person. Schneider (1987: 447) explained this as, "Using typical personality or interest tests to make fine-grained distinctions among applicants for a particular job in a particular company is like

employing a yardstick when a micrometer is required." Second, meta-analytic studies have to rely on the information provided in the source studies and information on potentially relevant situational factors is hardly ever provided in source studies (Tett et al., 1999). This lack of information about context at the best allows making useful inferences about personality – outcomes relationships only at the occupational level. Noted scholars in OB have emphasized the importance of more details on task-related context for further needed improvements in research methodology in personality psychology (e.g., Johns, 2001; Tett et al., 1999).

From the interactionist perspective, attention should be placed on contextual factors that can further our knowledge in the personality psychology domain and provide useful information for more effective and efficient placement of employees. Johns (in press) contends that factors related to the task and the social environment form *discrete context,* which can influence personality – outcomes relationships. "Discrete context refers to specific situational variables that influence behavior directly or moderate relationships between variables... discrete context includes task context, social context, and physical context ... examples of task context include autonomy, uncertainty, accountability, and resources. Examples of social context include social density, social structure, and direct social influence. Examples of physical context include temperature, light, the built environment, and décor" (Johns, in press: 16). Similar arguments emphasizing the importance of job-related factors as contextual variables have been made by Tett et al. (1991; 1999; 2003), Judge et al. (2002), and Pervin (1968; 1989). For example, while concluding a discussion on person and situation interactions, Pervin (1989: 357) suggests that "it is desirable to focus on relationships between person

characteristics and task demands or environment characteristics rather than traits desired across tasks or environments that are desirable for all people and all circumstances." Tett et al. (1999) describe job tasks (i.e., what the worker does), work groups (i.e., the worker's immediate co-workers, including supervisors, peers, and subordinates), and organizational culture as the three most important factors when considering trait-relevant situational demands as moderators of personality – outcomes relationships. This idea has been further refined and put forth as a model in which these three situational factors (i.e., task, social, and organizational) moderate the link between personality and work behaviors (Tett & Burnett, 2003). Judge and colleagues (2002) also made similar assertions while discussing the importance of the moderating role of task or job type in the personality – leadership relationship. The trait activation idea (Tett & Burnett, 2003) suggests that one set of factors might be trait-relevant for one set of outcomes and not for another. Therefore, it makes sense to have a number of relevant situational factors as moderators in the relationship of personality with different personal and organizational outcomes. Although task and social factors seem highly useful situational factors for the relationship of personality with outcomes such as job performance, job satisfaction, job stress, and creativity, it is difficult to contemplate how these task specific factors could influence the relationship of personality with citizenship behaviors. In this context, perceived organizational justice seems a useful situational factor that can provide trait relevant cues so that the relationship between personality and OCB varies in strength and possibly direction for varying levels of justice. People have studied the combined effects of justice and personality on outcomes such as retaliatory behaviors (e.g., Skarlicki, Folger, & Tesluk, 1999).

Therefore, the decision to include some contextual variables as moderators of personality-outcomes relationships and not others was predicated on their usefulness in enhancing the predictability of personality traits and the practicality of successfully deploying such variables in a field study. I decided to incorporate variables that could capture maximum features of discrete context as described by (Johns, in press) and promised relevance from the fit perspectives and the trait activation concepts. Therefore, job scope (task context), requirements of the job to deal with others (social context), and justice perceptions (social context) were included as potential moderators of personality – outcomes relationship. In what follows I will explain further how each of these variables could affect the predictive power of the Big Five traits.

2.3.1. Job Scope. The Job Characteristics Model (JCM) suggests that the internal motivation of employees can be enhanced through the redesign of work by providing high scope jobs that lead to greater internal motivation via three psychological states: experienced meaningfulness of work, experienced responsibility for outcomes of the work, and knowledge of results (Hackman & Oldham, 1976). In the JCM, job scope comprises five job characteristics; skill variety, task identity, task significance, autonomy, and feedback (Hackman & Oldham, 1976), and it is one of the most widely studied contextual variables in organizational behavior. As described by Hackman and Oldham (1976: 257-258) skill variety is "the degree to which a job requires a variety of different activities in carrying out the work, which involve the use of a number of different skills and talents of a person," task identity refers to "the degree to which the job requires completion of a 'whole' and identifiable piece of work; that is, doing a job from

beginning to end with a visible outcome," task significance is "the degree to which the job has a substantial impact on the lives or work of other people, whether in the immediate organization or in the external environment," autonomy is defined as "the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out," and feedback is "the degree to which carrying out the work activities required by the job results in the individual obtaining direct and clear information about the effectiveness of his or her performance."

This model enjoys good empirical support in the literature, and the independent effects of job scope on internal motivation, job satisfaction, job stress, and job performance are well documented (e.g., Fried & Ferris, 1987; Hackman & Oldham, 1976; Xie & Johns, 1995). Similarly, research supports the mediating role of the three psychological states in the relationship between job scope and work outcomes (e.g., Hackman & Oldham, 1976; Johns, Xie, & Fang, 1992). Research is, however, not conclusive and unanimous regarding the moderating role of individual traits in the JCM. While studies by Loher, Noe, Moeller, and Fitzgerald (1985) and Champoux (1992) found evidence for the moderating role of Growth Needs Strength (GNS), others studies found little or no support for GNS as a moderator in the job scope – psychological states relationships (e.g., Fried & Ferris, 1987; Johns et al., 1992).

Although job scope is the most suitable situational factor to consider as a moderator of personality – outcomes relationships, it is interesting to note that no study, to the best of my knowledge, has explicitly considered job scope as a moderator in the relationship between the Big Five and work outcomes. People who prefer a high

performance environment and are attracted to challenge and complexity will fit better when job is high on complexity as compared to low. Similarly, the situation trait relevance idea contends that complex jobs will provide relevant cues for people who prefer challenge and are high need achievers, resulting in better job performance (Tett & Burnett, 2003).

The autonomy dimension of the JCM has been used in past research as a measure of situational strength (e.g., Barrick & Mount, 1993). As Mischel (1977) notes "individual differences can determine behavior in a given situation most strongly when the situation is ambiguously structured (as in projective testing) so that people are uncertain about how to categorize it, have to structure it in their own terms, and have no clear expectations about the behaviors most likely to be appropriate (normative, reinforced) in that situation." High scope jobs provide greater freedom and hence exert fewer constraints on behavior. On the other hand, low scope jobs are more restrictive and structured, and appropriate behaviors for such jobs are usually well described (Hackman & Oldham, 1980), hence constituting strong situations. For example, it is difficult to exactly describe and limit the work processes of a musician or a scientist (high scope jobs) as compared to specifying the desired work behaviors for people working on an assembly line or in a packing plant. A job offering high autonomy will offer relevant cues for people who desire control (e.g., extraverts). On the contrary, a low autonomy job will provide positive cues for those who prefer clear direction and specified procedures (e.g., neurotics).

Skill variety is the dimension of job scope that determines the challenge and cognitive difficulty of a job (Hackman & Oldham, 1980). People who prefer challenge

and prepare themselves better for a variety of job situations are likely to feel more comfortable and be better placed in jobs that require a variety of skills (high PE fit) as compared to those who are less prepared for different job options and feel vulnerable to situations that demand higher cognitive abilities (poor PE fit) (Champoux, 1992). In the former case, a high scope job will provide positive trait activation cues leading to desired outcomes in organizational settings (e.g., high performance). In the latter case, a job with high skill variety will contain negative trait related situational cues resulting in undesired outcomes.

Task identity and task significance are dimensions of job scope that determine how important a job is and how it influences the lives of other people (Hackman & Oldham, 1980). Employees who desire positions of power, status, and significance are likely to react positively on jobs that are significant and have greater influence on other people as compared to those who avoid such situations. The feedback dimension of the JCM refers to the degree of direct and clear information about effectiveness and performance obtained by a person while performing a job (Hackman & Oldham, 1980). Some people, especially those who are better performers and have high self-confidence, would consider feedback as an opportunity to improve in future. On the contrary, people who perceive failures in life, have low self-confidence, and are less optimistic would not want greater feedback in order to avoid psychologically discomforting and threatening information (Duval & Duval, 1983). Therefore, the feedback dimension further adds to the capacity of job scope as a moderator in the personality – outcomes relationship.

Finally, overall job scope can be a useful moderator from the perspective of individual differences in stress responses (Abdel-Halim, 1978, 1981; McGrath, 1976).

People who are attracted to challenge and are achievement oriented would perceive a job high in scope as an opportunity while those with weak growth needs could perceive a high scope job as excessively demanding and hence stressful (Schuler, 1980). Similarly, people who are less energetic and prefer routine tasks will not draw high satisfaction from enriched jobs. For example, Gellatly, Paunomen, Meyer, Jackson, and Goffin (1991) reported that "unit managers most similar to a PIV (Enjoy routine) trait configuration were rated as more effective in conducting routine job tasks, and reported higher levels of job satisfaction." Hackman and Oldham (1975: 160) extended a similar argument that "...people who strongly value and desire personal feelings of accomplishment and growth should respond very positively to a job which is high on the core dimensions; individuals who do not value personal growth and accomplishment may find such a job anxiety arousing and may be uncomfortably 'stretched' by it."

2.3.2. Social aspects of the job. The Job Diagnostic Survey (JDS) developed by Hackman and Oldham (1975) included a social dimension of jobs called dealing with others (DO). It is defined as "the degree to which the job requires the employee to work closely with other people in carrying out the work activities (including dealings with other organization members and with external organizational 'clients.')." DO determines how people differ in their response to the social aspects of a job. It can especially be a useful moderator for traits that have a significant social content. For example, people who are socially skilled and desire intense social interactions will experience more positive outcomes when their job entails greater social contact with others. On the contrary, people who do not prefer being with others and lack social skills will experience negative

psychological outcomes when their job demands higher levels of dealing with other people. Similar arguments were extended by Kiggundu (1981) who proposed that task interdependence, which requires high social interactions, would interact with individual characteristics in predicting experienced positive psychological states. For traits with significant social dimension, in addition to job complexity, DO can provide trait relevant cues further compounding the effects of complexity on personality – outcomes relationships. Adding the social dimension of job can also improve the fit of the relevant traits. Traits that signal high social skills (e.g., extraverts) will experience a superior PE fit when job is complex and has a significant social aspect as compared to those traits that signal poor social skills (e.g., neurotics).

2.3.3. Organizational justice. Organizational justice is one of the most frequently investigated topics in organizational research (Van den Bos, Lind, Vermunt, & Wilke, 1997; Cropanzano, Byrne, Bobocel, & Rupp, 2001; Cropanzano & Greenberg, 1997). Literature on this topic explains how people's actions are influenced by their perceptions of fairness in the workplace (Greenberg, 1990, 1993). There is continued ambiguity concerning the structure of justice with models possessing as few as two dimensions to as many as four (Cropanzano et al., 2001). For example, Cohen-Charash and Spector (2001) found a three-dimensional view to be useful, but Colquitt, Conlon, Wesson, Porter, and Yee Ng (2001) found evidence supporting a four-dimensional structure of organizational justice. However, distributive and procedural justice are the two most widely accepted and investigated dimensions of organizational justice. Recently researchers have started focusing more on interpersonal and informational justice as

separate dimensions of justice. Distributive justice research, rooted in the work of Adams' (1965) equity theory, focuses on reactions of individuals to perceived inequity in the distribution of rewards or resources (Greenberg, 1990). Procedural justice refers to people's perceptions concerning the fairness of processes and procedures in organizations (Thibaut & Walker, 1975). Recent meta-analytic studies by Colquitt et al. (2001) and Cohen-Charash and Spector (2001) clearly show that both distributive and procedural justice perceptions are related to job performance, job satisfaction, OCB, and other organizationally important variables.

The bulk of the research on fairness has particularly focused on it as a situational factor influencing people's attitudes and behaviors. While procedural justice is considered to be a better predictor of organizationally-referenced outcomes, distributive justice is considered to have a greater influence on person-referenced outcomes (Colquitt et al., 2001). Although justice is a significant situational variable in organizational studies, its role as a moderator or a mediator in the relationship of personality with organizationally important outcomes has received relatively less attention from researchers. On the one hand, it is possible to argue for the mediating role of justice perceptions in the relationship between personality and work outcomes. Perceptions of justice are highly personal in nature, with their dispositional sources arising from individual beliefs of the world as a just or unjust place (Ball, Trevino, & Sims, 1994; Judge, Locke, & Durham, 1997; Trevino, 1992). Meta-analytic findings show that distributive and procedural justice perceptions are related to negative affectivity (NA; e.g., Cohen-Charash & Spector, 2001; Colquitt et al., 2001), providing support to this argument. On the other hand, justice being a significant situational variable in

organizational studies holds promise in improving the predictive power of personality variables. Some research based on this premise shows that justice perceptions do interact with personality in predicting organizationally relevant outcomes such as retaliatory behaviors. For example, Skarlicki et al. (1999) found that, compared to low NA people, those high in NA had a greater tendency to exhibit retaliatory behaviors in response to perceived injustice. Vermunt, Knippenberg, Knippenberg, and Blaauw (2001) found interactive effects of self-esteem and procedural fairness on outcome evaluations. Similarly, Brockner, Heuer, Siegel, Wiesenfeld, Martin, Grover, Reed, and Bjorgvinsson (1998) found that perceived voice, the process control aspect procedural justice, has different effects on people of varying levels of self-esteem. However, in all of these examples, personality was framed as a moderator of the justice – outcomes relationship.

Although job complexity can be a useful situational factor considering outcomes such as job performance, job satisfaction, job stress, and creativity, it falls short in providing trait relevant cues when it comes to citizenship behaviors. It is difficult to contemplate how the demands of a job might influence the relationship between personality and OCB. A situational factor should only operate as a moderator of the personality – outcomes relationship when trait-relevant cues are present in that factor (Tett & Guterman, 2000). As I do not expect job scope, a strictly job-focused construct, to moderate the relationship between personality and discretionary behaviors, I will examine perceived justice as a moderator in such cases. I expect that varying levels of perceived fairness will reduce or enhance the effects of personality on OCBs. Distributive justice will be a prominent moderator for the traits that exhibit high sensitivity to equity issues. Perceptions of distributive fairness will provide trait related situational cues that

will enhance or reduce the effects of traits on OCB. For traits that are more concerned with the sanctity of following rules and procedures, procedural justice will be a situationally relevant factor that will influence the trait – behavior relationship.

2.4 The Big Five and Outcomes

2.4.1. Neuroticism. Neuroticism is one of the Big Five personality traits (Costa & McCrae, 1987), which has also been labeled as emotional stability, emotionality, and stability (Goldberg, 1990; Tellegan, 1985). Neuroticism is associated with negative emotions (Penley & Tomaka, 2002) and is inversely related to self-esteem (Judge et al., 1997). People with high neuroticism are self-pitying, anxious, less trusting, depressed, nervous, lacking positive psychological adjustment, and feeling helpless and vulnerable (Costa & McCrae, 1988; McCrae & John, 1992). Neuroticism is very closely related to negative affectivity (NA) (Watson & Tellegan, 1985). In fact on many occasions researchers have used NA and neuroticism interchangeably (e.g., Erez & Judge, 2001).

Research shows that there is a negative relationship between neuroticism and job satisfaction (Judge et al., 2002). For example, Judge et al. (2002) in their meta-analysis, report neuroticism to be the strongest correlate of job satisfaction ($r = -.29$). However, the unaccounted variance in correlations across studies was more than 70% for the Big Five traits, clearly signaling the presence of moderators (Hunter & Schmidt, 1990). Little is known about the possible moderators of this trait's relationship with job satisfaction. There is a good reason to expect that job scope will be an appropriate moderator of the neuroticism – satisfaction relationship. Being less equipped to deal with cognitively demanding and challenging situations (Judge et al., 1997), neurotics are expected to see

high scope jobs as a burden or excessively demanding, resulting job dissatisfaction. Locke (1976) suggested that people with low self-esteem, which is very closely related to neuroticism, are less likely to value challenging tasks and find satisfaction in achievement. Vocational choices of such people are more plastic and prone to influence by others (Brockner, 1988). They are not prepared for a variety of jobs and do not choose occupations that match their abilities and personalities (Tharenou, 1979). Therefore, I expect that neurotics, who are less prepared to embrace task variety, have low self-confidence, and who expect failures in life, would be vulnerable in jobs that are high in scope. From the trait activation perspective, complex jobs will arouse greater feelings of helplessness, anxiety, and fear among them, leading to elevated job dissatisfaction.

Neuroticism is a socially expressed trait associated with poor social skills and lack of trust in others (Goldberg, 1992; McCrae & John, 1992). People with high neuroticism are vulnerable to situations that demand high social skills (Judge et al., 1997). It is expected that the social aspects of job will further enhance or reduce the effects of job scope. A cognitively demanding situation (i.e., high job scope) will be particularly threatening to neurotic individuals if it also requires high social skills. A job high in scope entailing high DO will activate the trait poor social adjustment worsening PE fit for neurotics leading to high job dissatisfaction. On the contrary, it is even possible that people with high neuroticism will show positive job satisfaction if their job is simple, cognitively less demanding, and requires fewer contacts with others at work. Such conditions will signal a good fit of situationally relevant factors and the trait. Fit will be worst when a job is high on job scope and DO and best when it is low on both.

Hypothesis 1: Job scope will moderate the relationship between neuroticism and satisfaction such that the relationship will be more strongly negative when job scope is high.

Hypothesis 2: There will be a three-way interaction among neuroticism, job scope, and dealing with others such that the negative relationship between neuroticism and job satisfaction will be strongest when the job is high in scope and DO.

Besides a handful of studies explicitly exploring neuroticism as a dispositional source of job stress (e.g., DeNeve & Cooper, 1998; Penley & Tomaka, 2002), Big Five dimensions have rarely been studied in conjunction with job stress. However, research concerning NA and self-esteem, which are closely related to neuroticism, provide reasonable support for a positive relationship between stress and neuroticism. Penley and Tomaka (2002) found a positive relationship between neuroticism and perceived stress, defensive coping, and negative emotions. Similarly, Gallagher (1990) found that neuroticism was positively related to stressful events. DeNeve and Cooper (1998), in their meta-analytic study, reported that neuroticism was negatively related to subjective well-being, happiness, and life satisfaction, which are considered negative correlates of job stress (Ganster, 1987). Therefore, these associations provide support for a positive relationship between neuroticism and job stress. Highly complex jobs are more challenging and require greater skills and self-confidence. Such jobs could be seen as excessively demanding, triggering greater anxiety among neurotics. Feelings of helplessness, perceptions of failure, and low confidence are likely to make neurotics more vulnerable to stress when job scope is high. High scope jobs will result in a poor fit for

people with high neuroticism, and therefore, result in negative consequences such as high job stress.

Hypothesis 3: Neuroticism will be positively related to job stress.

Hypothesis 4: Job scope will moderate the relationship between neuroticism and job stress such that the relationship will be stronger when job scope is high.

Meta-analytic findings provide some evidence that neuroticism is negatively related to job performance (Barrick & Mount, 1991; 1991; Tett et al., 1991). However, results of these meta-analyses suggest the presence of moderators in the neuroticism – performance relationship. In the Barrick and Mount (1991) study, there were occupational moderators. Neuroticism was only related to performance in professional, police, and skilled / semi-skilled occupational categories. The relationship was positive for professional jobs and negative for police and skilled / semi-skilled jobs (Barrick & Mount, 1991). In the other meta-analysis, Tett et al. (1991) reported a mean corrected correlation of -.22 between neuroticism and job performance. The variance in correlations accounted by errors and artifacts was only 24%. The magnitude of unaccounted variance (76%) in this case clearly supports a presence of moderators in the neuroticism – performance relationship.

As job complexity provides trait-relevant situational cues for neurotics, it will play a moderating role in trait – behaviors relationship in this case. People with high neuroticism are expected to be less prepared to perform on jobs that are cognitively challenging and demand a variety of skills and initiative (Judge et al., 1997). Therefore, a complex job will arouse feelings of helplessness and anxiety among them, leading to poor performance. Having preference for clearly defined, simple, and low risk jobs, neurotics

will feel threatened when a job requires taking control and facing less structured situations. High scope jobs also constitute weak situations as they provide high autonomy and put fewer constraints on behaviors (Hackman & Oldham, 1980). The negative relationship between neuroticism and performance is expected to be most evident and enhanced when the situation is weak (i.e., high job scope). On the contrary, a simple and clearly defined job (strong situation) is expected to weaken the effects of trait on behavior.

Neuroticism is a socially based trait which reflects poor social skills and social maladjustment (Judge et al., 1997). Dealing with others as part of one's job can further enhance the moderating effects of job scope in the neuroticism – performance relationship. If the job, in addition to being high in scope is also high in DO, it will further activate anxiety and nervousness among people with high neuroticism leading to further deterioration in performance. High social content of the job in addition to complexity will further complicate the matters for people who not only avoid cognitively demanding situations but are also susceptible to social maladjustment. The trait – situation fit will be at its worst when the job is high in scope and DO, resulting in the worst performance. However, neurotics might perform at acceptable levels on jobs that are simpler and require fewer social interactions (i.e., low job scope and low DO).

Hypothesis 5: The negative relationship among neuroticism and performance will be stronger for high scope jobs.

Hypothesis 6: There will be a three-way interaction among neuroticism, job scope, and dealing with others such that the negative relationship between neuroticism

and performance will be strongest for high scope jobs that also require higher levels of social interaction.

Theoretically, it is easy to argue for a relationship between neuroticism and OCB. Neuroticism, being associated with lack of social skills, high anxiety, and distrust in others (Goldberg, 1990), would be negatively related to OCB. At the interpersonal level, the lack of social skills and high anxiety would hinder a neurotic's capacity to maintain successful relationships with others on the job. Expectations of failure and lack of confidence would make such people believe that they could not be of any help to others, and this situation could be further complicated by their suspicion of the motives of others. This means that people with high neuroticism will not exhibit OCBI.

Although a direct relationship between neuroticism and OCBO has not been proposed, it is expected that neuroticism and perceived justice will have interactive effects on OCBO. Literature on psychological contracts suggests that people who form transactional contracts focus purely on economic exchange of short term nature. As neurotics form transactional contracts and are sensitive to contract breach (Raja et al., 2004), perceived distributive justice is likely to provide trait-relevant cues for them. Perceived distributive injustice will enhance their mistrust and they will feel less obligated to exhibit citizenship behaviors that directly or indirectly benefit the organization.

Hypothesis 7: Neuroticism will be negatively related to OCBI.

Hypothesis 8: Distributive justice will moderate the relationship between neuroticism and OCBO such that it will be more strongly negative when perceived distributive fairness is low.

Oldham and Cummings (1996) describe a set of personal characteristics such as broad interests, attraction to complexity, intuition, aesthetic sensitivity, tolerance of ambiguity, and self-confidence, which relate consistently and positively to measures of creativity across a variety of domains. The markers of neuroticism suggest that it would be negatively related to creativity, and this association was supported by the meta-analytic findings of Feist (1998). Not only is neuroticism negatively related to the correlates of creativity, but people high on this trait are also psychologically and emotionally not well equipped to embrace ambiguity and uncertainty (Judge et al., 1997). They lack confidence and are highly vulnerable to situations that demand initiative and leadership (Judge et al., 1997). It is expected that the negative relationship between neuroticism and creativity will be further enhanced if the situation provides cues that activate feelings of nervousness, anxiety, hopelessness, and expectations of failure. High scope jobs require greater self-confidence, initiative, uncertainty and tolerance, and leadership qualities (Hackman & Oldham, 1980). Therefore, job characteristics can provide trait-relevant cues to neurotic individuals such that a high scope job could be seen as excessively demanding and a burden by them resulting in worsening of the PE fit, which in turn will enhance the negative effects of neuroticism on creativity.

Hypothesis 9: Neuroticism will be negatively related to creativity.

Hypothesis 10: Job scope will moderate the relationship between neuroticism and creativity such that it will be stronger when job scope is high.

2.4.2. Conscientiousness. Conscientiousness is also a widely researched trait from the Big Five personality taxonomy. It is associated with adjectives such as efficient,

organized, reliable, planful, thorough, responsible, achievement oriented, and productive (Goldberg, 1990; McCrae & Costa, 1989; McCrae & John, 1992). Conscientiousness has two major facets, achievement and dependability (Mount & Barrick, 1995), and people with high conscientiousness are dependable, risk averse, high need achievers, and ordered, and they can delay gratification (McCrae & John, 1992; Goldberg, 1990). Gellatly (1996) reported that cognitive structure, order, and low impulsivity showed the highest loadings on conscientiousness.

There is a fair amount of empirical support for a relationship between conscientiousness and job satisfaction (Judge et al., 1999; Judge et al., 2002). Although conscientiousness was a strong correlate of job satisfaction in the meta-analysis by Judge et al. (2002), the 80% credibility interval included a zero and the unaccounted variance in correlations across studies was more than 50%. This suggests presence of moderators of this relationship (Hunter & Schmidt, 1990; Tett et al., 1991). I suggest job scope as a moderator in conscientiousness – satisfaction relationship. Jobs high in scope put fewer constraints on conformity, allowing for greater influence of conscientiousness in determining job satisfaction (Hackman & Oldham, 1980). Research shows that conscientious people are task oriented and draw satisfaction from achievement and task accomplishment rather than other factors such as economic rewards. Therefore, high scope jobs will allow conscientious people to draw a greater sense of achievement and accomplishment from high scope jobs, resulting in higher levels of satisfaction. On the contrary, seeing low scope jobs as unnecessarily constraining and limiting and not providing enough opportunities for achievement and growth, conscientious people will be less satisfied on such jobs.

Hypothesis 11: The relationship between conscientiousness and job satisfaction will be moderated by job scope such that it will be stronger when job scope is high.

Job stress is considered to be a result of person-environment misfit (French, 1963) or an imbalance between job demands and control latitude (Karasek, 1979). According to these definitions, the primary factors determining job stress will include a person's ability and skills to cope with situational demands, decision latitude, and the resources provided by the organization to the person. People with high conscientiousness are well planned and organized and hence are likely to be prepared for a variety of situations. Conscientious individuals are better performers (Barrick & Mount, 1991), and therefore, are expected to receive more attention from the organization, which can give them better access to resources and decision latitude. Therefore, better access to resources and greater organizational support will equip conscientious employees to cope with environmental demands more efficiently and effectively, leading to lower job stress and higher satisfaction. Penley and Tomaka (2002) recently reported a negative association between conscientiousness and job stress. The positive associations between conscientiousness and the negative correlates of job stress such as subjective well-being, happiness (DeNeve & Cooper, 1998), job satisfaction (Judge et al., 2002), coping ability, hope, and self control (Penley & Tomaka, 2002) also suggest that such people will experience low job stress. Conscientiousness individuals, therefore, are expected to experience less stress as compared to those who do not carefully manage a balance between their abilities and demands put on them from their job.

Furthermore, the relationship of conscientiousness to job stress would be more apparent when job scope is high. A high job scope will provide conscientious individuals

with the autonomy to plan well, greater task significance to bolster their internal motivation and fulfill their achievement needs, and greater feedback to enable them to constantly evaluate and improve their performance. It is expected that conscientious individuals will feel less stressed while performing on a high scope job. On the contrary, although a simple and restrictive job will contain greater situational clarity requiring less cognitive effort to perform at desired levels, such a job will not provide conscientious people with internal motivation and challenge. They will feel unable to use their potential fully, which is necessary to grow and develop. They might realize that the organization has not reciprocated their good performance by providing them with opportunities for achievement and growth. Therefore, low scope jobs can weaken the negative relationship between conscientiousness and job stress.

Hypothesis 12: Conscientiousness will be negatively related to job stress.

Hypothesis 13: Job scope will moderate the relationship between conscientiousness and job stress such that the relationship will be stronger when job scope is low.

Conscientiousness is usually believed to be a highly desirable trait in the organizational context (Tett et al., 1999). In fact it is considered to be one of the most consistent personality predictors of job performance across a variety of job and occupational settings (Barrick & Mount, 1991). According to Mount and Barrick (1995) it is the best personality predictor of performance and academic achievement. A high scope job will be internally motivating for those who are achievement oriented and are focused on growth and development. Conscientious people are achievement oriented and prepare themselves better for a variety of jobs and skills. Jobs high in scope can provide

conscientious individuals with enhanced autonomy, more achievement prospects, and challenge, resulting in improved performance. Barrick and Mount (1993) found that autonomy moderated the relationship between conscientiousness and performance such that conscientiousness resulted in better performance when job autonomy, a significant dimension of job scope, was high. Also, conscientious people are expected to see feedback regarding performance as an opportunity to improve performance and plan for future job requirements. The finding that conscientiousness is associated with performance motivation, a correlate of job scope (Judge & Ilies, 2002) provides further support for the argument that the effects of conscientiousness on performance will be enhanced when job scope is high. Overall, job scope will provide trait-relevant cues such that high scope job will be seen as positive resulting in strengthening the association between conscientiousness and job performance. On the contrary, low scope job will signal limited opportunities for achievement, and therefore, will weaken the association between conscientiousness and job performance.

Hypothesis 14: The positive relationship between conscientiousness and job performance will be moderated by job scope such that the relationship will be stronger when job scope is high.

Among the Big Five personality dimensions, conscientiousness is the best and the most consistent predictor of OCB (Organ & Ryan, 1995). In their meta-analysis, Organ and Ryan (1995) concluded that conscientiousness had almost the same magnitude of association with OCB as job satisfaction. However, this relationship did not hold well for studies using independent measures of OCB. The current study will explore how conscientiousness relates to independent measures of citizenship behavior. Unlike

extraversion or neuroticism, conscientiousness is not a socially-oriented trait (Goldberg, 1990). There is no reason to expect a relationship between conscientiousness and OCBI, a more interpersonal form of citizenship behaviors. Therefore, focusing only on the relationship between OCBO and conscientiousness will allow me to get rid of *excess baggage* (VanDyne et al., 1995) that could potentially dampen the effects of conscientiousness on OCB.

Conscientiousness has two major facets, achievement and dependability (Mount & Barrick, 1995), and people with high conscientiousness are efficient, organized, reliable, planful, thorough, responsible, and they can delay gratification (McCrae & John, 1992; Goldberg, 1990). Conscientious people are likely to exhibit behaviors that are defined as OCBOs. For example, a dependable, organized, and efficient person is likely to exhibit outstanding attendance, comply with norms, and be a responsible person in the organization. Conscientiousness shows strongest association with generalized compliance, the more impersonal form of OCB (Organ & Ryan, 1995). Therefore, I hypothesize that conscientiousness will be positively reated to OCBO.

In addition, I expect that perceptions of fairness will moderate the expected relationship between conscientiousness and OCBO. Conscientious people tend to form long-term relational contracts with their organizations and do not readily perceive breach (Raja et al., 2004). People forming relational contracts, as opposed to short-term transactional contracts, focus more on the relationship with the organization and are less susceptible to issues related to the distribution of rewards (Robinson, Rousseau, & Kraatz, 1994). Also, individuals having a high threshold for perceiving breach do not vigilantly monitor how well their psychological contract is being maintained by the

organization. This evidence suggests that they are not particularly sensitive to distributive justice issues. Research shows that people with high conscientiousness are more concerned with task accomplishment than outcomes such as economic rewards (Stewart, 1996). However, as conscientious individuals are concerned with the sanctity of rules and procedures in organizations, they will be sensitive to procedural justice issues. Instances of procedural injustice (e.g., rules not being followed for job assignments and promotions) are likely to provide trait-relevant cues to conscientious individuals. Realizing that the organization is not being honest in application of rules, they will reduce their extra efforts to help the organization. Therefore, the positive relationship between conscientiousness and OCBO will be stronger when perceived procedural justice is high.

Hypothesis 15: Conscientiousness will be positively related to OCBO.

Hypothesis 16: Perceptions of procedural justice will moderate the relationship between conscientiousness and OCBO such that the relationship will be stronger when perceived procedural fairness is high.

Tett et al. (1999) argued that under some situations, the very attributes that make conscientiousness a desirable trait could make it a liability. They suggested that the risk averse, methodical, and planful nature of highly conscientious employees could be a hindrance to high performance in situations that demand high tolerance for ambiguity and complexity. Gellatly (1996) found that conscientiousness was related to goal choice indirectly through expectancy. "Thus high conscientiousness will lead to higher goals only to the extent that individuals are certain that they can perform at higher performance levels" (Gellatly, 1996: 479). As creativity entails novelty, less structure, and greater

uncertainty, it is expected that conscientious individuals' desire for certainty of high performance, planning, control, and meticulousness will gain heightened importance under such circumstances. In an attempt to keep their control over the situation and reduce uncertainty, planning and risk avoidance will become more important for conscientious people than coming up with novel solutions. Feist (1998), in his meta-analytic study, found that musicians and artists, whose jobs are considered high on creativity, tended to be low in conscientiousness. It is therefore suggested that conscientious people will not exhibit high creativity.

Hypothesis 17: Conscientiousness will be negatively related to creativity.

2.4.3. Extraversion. Extraversion, like neuroticism and conscientiousness, is a widely researched trait from the Big Five taxonomy (Salgado, 1997). Ambition and sociability are the two primary components that characterize extraversion (Hogan, 1983). More recent research has, however, illustrated that it is a multifaceted dimension comprising several other components (Goldberg, 1990; Watson & Clark, 1997). Extraverts are described as sociable, talkative, aggressive, energetic, enthusiastic, assertive, and optimistic. They seek excitement (Costa & McCrae, 1992; Goldberg, 1990), are active and impulsive (Watson & Clark, 1997), and have a high desire for social recognition, praise, status, exhibition, and power (Costa & McCrae, 1988; Hogan & Hogan, 1992). Extraversion is closely related to positive affectivity (PA) (Costa & McCrae, 1980) and Holland's (1973) enterprising type.

Although Judge et al.'s (2002) meta-analysis revealed a positive relationship between extraversion and job satisfaction, the unaccounted variance in the personality –

satisfaction correlations across studies was more than 70%. This suggests presence of moderators of the extraversion- satisfaction relationship (Hunter & Schmidt, 1990). I suggest that job scope and the social aspects of the job are moderators that are expected to increase the predictive power of extraversion. High scope jobs are likely to present trait-relevant cues for the ambition aspect of extraverts. Extraverts, who focus on materialistic gains (Stewart, 1996) will see high scope jobs as an opportunity that could fulfill their desires for growth, achievement, and extrinsic rewards, and therefore, will draw high satisfaction from such jobs. Complex jobs will enhance PE fit for extraverts, who are energetic and ambitious and prefer challenge, leading to positive outcomes such as job satisfaction. It is expected that high job scope will strengthen the positive relationship between extraversion and job satisfaction.

In addition, the extent to which a job requires dealing with others will also provide trait-relevant cues for the sociability dimension of extraverts, compounding the moderating effects of job scope in the extraversion – job satisfaction relationship. Research shows that extraversion leads to higher performance in jobs that entail greater social interaction (Barrick & Mount, 1991) and poorer performance for jobs that are low on the social and complexity domains (e.g., accountants; Day & Silverman, 1989). This means that extraverts will fit better in a situation that provides greater opportunities for meeting other people. It is expected that in addition to job scope, the social content of a job will also determine PE fit for extraverts. High job scope and high DO will create a condition in which extraverts fit better, which will lead to improved job satisfaction. The fit will be best when the job is high in both complexity and social content, tapping both aspects of extraversion, ambition and sociability. They will be highly satisfied on jobs

that not only provide them opportunities for growth and economic gains, but also opportunities for socializing with other people. On the contrary, jobs with limited scope and DO will result in a poor fit for extraverts leading to job dissatisfaction. From the trait activation perspective (Tett & Burnett, 2003), a high scope job with greater social content will provide relevant situational cues that tap the ambition and sociability dimensions of extraverts, resulting in positive outcomes such as job satisfaction. Restrictive jobs with fewer opportunities to meet other people at work will send situational cues that go against the nature of extraverts, resulting in job dissatisfaction.

Hypothesis 18: Job scope will moderate the relationship between extraversion and job satisfaction such that the relationship will be stronger when job scope is high.

Hypothesis 19: There will be a three-way interaction among extraversion, job scope, and DO such that there will be a positive relationship between extraversion and job satisfaction when job scope and DO are high and negative when both are low.

In the job stress literature, social support is considered a moderator of the stressor - stress relationship such that greater support reduces the negative effect of stressors (Etzion, 1984; Ganster, Fusilier, & Mayes, 1986). The highly social and friendly nature of extraverts provides them with greater access to social support, which in turn, can lead to lower job stress. Penley and Tomaka (2002) reported a negative association between extraversion and job stress. Hayes and Joseph (2003) reported a positive relationship between extraversion and subjective well-being, which is negatively related to job stress. Also, extraverts strive for positions of power and status (Goldberg, 1990) and are likely to achieve such desires because of their high performance and social skills (Barrick & Mount, 1991; Penley & Tomaka, 2002). This provides them with easy access to

resources, which in turn, equips them to fulfill their job requirements more efficiently and easily, leading to reduced job stress. The effect of extraversion on job stress is likely to be enhanced when the job provides them with greater opportunities for economic gains and growth in the organization. Jobs that are more complex entail greater autonomy, skill variety, task significance, task identity and feedback (Hackman & Oldham, 1980). Such jobs are expected to provide extraverts with desired challenge and opportunities for growth and economic gains resulting in a good PE fit. On the contrary, a simple and restrictive job will be an environment that will be seen as lacking in opportunities for gain and achievement, leading to a less desired PE fit. We know from the stress literature that job stress stems form a misfit between person and environment (French, 1963). The better the person – environment fit, lower will be the stress. For extraverts, best fit will occur when job scope is high.

Hypothesis 20: Extraversion will be negatively related to job stress.

Hypothesis 21: Job scope will moderate the negative relationship between extraversion and job stress such that the relationship will be stronger when job scope is high.

Meta-analytic studies show that extraversion is positively related to performance in jobs that require interpersonal skills (e.g., Barrick & Mount, 1991; Salgado, 1997). Judge et al. (1999) reported a positive relationship between extraversion and extrinsic career success. Other studies have supported the relationship between this trait and performance in sales and managerial settings (e.g., Barrick, Stewart, & Piotrowski, 2002; Stewart, 1996). Results of the meta-analytic studies suggest the role of moderators in the relationship between extraversion and job performance (e.g., Barrick and Mount, 1991).

For example, Barrick and Mount (1991) found that extraversion was associated with performance only for managerial and sales occupational groups. The unaccounted variance in correlations across studies was 52% for the managerial group and 46% for the sales group. This clearly shows the presence of moderators in the relationship between extraversion and job performance. Tett et al. (1999) also made a similar assertion for the presence of moderators in the extraversion – performance relationship.

Barrick and Mount (1993) exhibited how greater autonomy, one of the components of job scope, interacted with extraversion to predict job performance. As extraverts strive for positions of power and status, they will see prospects of gaining greater social significance by performing on jobs that are important and have considerable influence on other people's lives. Extraverts are expected to perceive enriched jobs as an opportunity for growth and economic gain, resulting in improved performance. On the contrary, jobs low in scope might be seen as too restrictive and limiting by extraverts, leading to decreased performance. Job scope will influence the PE fit for extraverts such that the fit will be good when extraverts have challenging and complex jobs and bad when they have simple and repetitive jobs.

As discussed earlier, in addition to job scope, which determines the complexity and challenge inherent in a job, social aspects of a job will also influence the relationship between extraversion and performance. Research findings clearly show that extraverts perform better on jobs with high social content (Barrick & Mount, 1991; Barrick et al., 2002). Sociability inherent in jobs will further determine how well extraverts fit the environment. The social dimension of extraversion will fit well with the environment when a job offers high degree of social contact. On the contrary, a job low in sociability

will not suit extraverts' friendly and social nature resulting in poor performance. Extraverts will have the best conditions for performance when their job provides possibilities for achievement and growth, and in addition involves high levels of dealing with other people. Being highly ambitious and social in nature, performance of people with high extraversion will suffer if their job is simple and restrictive, and it does not provide enough opportunities for meeting other people.

Hypothesis 22: Job scope will moderate the relationship between extraversion and job performance such that the relationship will be positive when job scope is high and negative when job scope is low.

Hypothesis 23: There will be a three-way interaction among extraversion, job scope, and DO such that there will be a positive relationship between extraversion and job performance when job scope and DO are high and negative when both job scope and DO are low.

Available research on the dispositional causes of OCB does not support a clear link between extraversion and OCB. However, the finding that people with high PA, a trait closely associated with extraversion, perform more OCBs (George, 1991; Organ & Konovsky, 1989) provides some evidence for an association between OCB and extraversion. While it is difficult to extend strong arguments for a relationship between extraversion and citizenship behaviors directed toward the organization, a relationship between this socially based trait and citizenship behaviors directed toward other individuals in the organization is quite plausible. I argue that extraverts will engage in more OCBI to fulfill their desires for greater social interactions and enhanced status. Helping other people at work will not only provide them with opportunities to socialize,

but also, it will allow them to gain social significance. Therefore, it is expected that extraversion will be positively related to OCBI.

Although it is difficult to contemplate a direct relationship between extraversion and OCBO, it is suggested that extraversion and perceived justice will have combined effects on OCBO. Procedural justice, which refers to fair application of rules and procedures, is less likely to be the concern of extraverts. Being highly social, they might even not hesitate bending a few rules to help a friend. However, extraverts are highly susceptible to economic rewards and material gains (Stewart, 1996).Therefore, distributive justice will be a trait-relevant situational factor for extraverts. They are likely to react to perceived discrepancies in the distribution of rewards by withdrawing their citizenship behaviors that contribute toward the overall effectiveness of the organization. However, if extraverts perceive high distributive fairness, they might reciprocate by helping their supervisor, being punctual, and complying by the organizational norms.

Hypothesis 24: Extraversion will be positively related to OCBI.

Hypothesis 25: Distributive justice will moderate the relationship between extraversion and OCBO such that it will be positive when perceived distributive fairness is high and negative when distributive justice is low.

Meta-analytic results provide some evidence for a positive relationship between extraversion and creativity (Feist, 1998). Individual factors such as self-confidence and achievement striving, which predict creativity (Oldham & Cummings, 1996) are also major facets of extraversion (McCrae & John, 1992). Extroverts are expected to exhibit higher creative behaviors when job scope is high. Research on creativity reveals that contextual factors such as encouragement, autonomy, resources, and fewer pressures

facilitate creativity (Amabile, Conti, Coon, Lazenby, & Herron, 1996). Research also shows that in comparison to routine, repetitive, and restrictive jobs, extraverts perform better on tasks that promise greater freedom (Barrick & Mount, 1993), better rewards (Stewart, 1996), and are non-routine (Barrick & Mount, 1991). It is, therefore, expected that extraverts will perform more creatively when job scope is high.

Hypothesis 26: Extraversion will be positively related to creativity.

Hypothesis 27: Job scope will moderate the relationship between extraversion and creativity such that it will be stronger when job scope is high.

2.4.4. Agreeableness and openness to experience. Among the Big Five dimensions, agreeableness and openness to experience have unstable factor structures (Hough & Ones, 2001), and are rarely related to organizationally significant variables. For example, Barrick and Mount (1991: 21) note, "The results for agreeableness suggest that it is not an important predictor of job performance, even in those jobs containing a large social component (e.g., sales or management)." Agreeableness does not even exhibit a significant relationship with OCB (Organ & Ryan, 1995), an apparently logical correlate of this trait. Similarly, Judge and Bono (2000) mention that openness to experience is the least studied trait both inside and outside organizations. Its exact internal structure has been a subject of controversy among researchers (Hough & Ones, 2001). According to McCrae and Costa (1997: 826) "among personality psychologists, it is the most controversial of the five basic factors of personality." Due to their controversial structure, limited research history, and generally weak relevance to organizational behavior (e.g., Barrick & Mount, 1991; Judge & Bono, 2000; McCrae &

Costa, 1997), I will offer a limited number of hypotheses for agreeableness and openness to experience.

Agreeables are described as flexible, forgiving, cooperative, friendly, trusting, good natured, generous, and altruistic (Costa & McCrae, 1992; Goldberg, 1990; McCrae & John, 1992). Openness to experience is described by adjectives such as imaginative, cultured, curious, original, broad-minded, intelligent, and artistic (Goldberg, 1990). Although there is a good reason to expect a relationship of agreeableness with OCB, existing research has failed to support such a relationship (Organ & Ryan, 1995). I believe that this problem can, at least partially, be resolved by focusing on the relationship between agreeableness and the interpersonal dimension of citizenship behaviors. As agreeableness is considered a socially-based trait and people high on this trait are described as friendly, cooperative, altruistic, helping, and generous (Costa & McCrae, 1992), I expect that agreeableness will be positively related to OCBI. There is, however, no reason to believe that this trait would be related to organizationally focused OCBOs. Therefore, trying to relate agreeableness to overall OCB might not be a correct strategy. No study to the best of my knowledge has explored a relationship between agreeableness and OCBI, a more refined and logical correlate of agreeableness. Therefore, I propose that:

Hypothesis 28: Agreeableness will be positively related to OCBI.

A review of the literature on creativity indicates that creative individuals have esthetic qualities and broad interests, are attracted to complexity, and prefer greater autonomy (Woodman, Sawyer, & Griffin, 1993). As these terms are used to describe people high in openness, the link between creativity and openness seems clear (Judge &

Cable, 1997). It is also expected that the relationship between openness and creativity will be enhanced when job scope is high. Because high job scope entails greater autonomy and a variety of skills, it is likely to further nurture the creativity of people who prefer autonomy and have broad interests. High complexity associated with high scope jobs will attract people high in openness, and they will exhibit higher levels of creativity as compared to simplistic and restrictive jobs.

Hypothesis 29: Openness to experience will be positively related to creativity.

Hypothesis 30: Job scope will moderate the positive relationship between openness and creativity such that it will be stronger when job scope is high.

CHAPTER THREE

3. METHOD

3.1 Data collection and sample

The very nature of this study and the proposed hypotheses involving interactions warranted a sample promising enough power to successfully detect the proposed interaction effects. Use of job scope as a situational variable also demanded a sample representing a variety of occupations and organizations. Furthermore, as research in OB has been marred by problems associated with common method bias and social desirability issues (when only self reports are used to assess independent and dependent variables), I used independent measures (peer-reports) for behaviors such as job performance, creativity, and OCBs. In short, the study required a large and diverse sample with paired responses from respondents and their peers. Earlier research conducted in Pakistan that deployed similar methods and variables to this study showed promising results (Raja et al., 2004). Therefore, I decide to proceed with data collection for the current study in Pakistan.

Data was collected through onsite administration of a survey. To capture maximum variation in job scope, every effort was made to collect data from employees belonging to a wide variety of occupational groups and organizational settings. A cover letter explaining the purpose and scope of the study assured respondents of strict anonymity. Participation in the study was voluntary. Every respondent was provided with self- and peer-report versions of the survey. For clarity and to avoid errors, the self-report version of the survey was printed on blue paper and the peer-report version was printed on yellow paper. Respondents were reminded in the cover letter to pay attention to this color-

coding. They were asked to complete the self-report version and ask one of their peers, who was in a position to comment on their job behaviors, to fill out the peer-report version. Respondents were asked to hand in both completed copies to the researcher or his representative. Both the self-report and the peer-report versions of the survey were numbered similarly so that the responses (self and peer version) could be paired together. Both self- and peer-report surveys along with the covering letter are shown in appendix 3.

The survey was distributed among employees in eleven different organizations, ranging from small entrepreneur ventures to large multinational organizations. For example, three of the organizations were leading multinational companies concerned with paint production, production of a variety of consumer products, and cigarette manufacturing. Another one was a local conglomerate with its operations in petrochemicals, textiles, polyester, and financial sectors. Data was collected from employees at one of its urea processing plants and the corporate office. Two of the organizations were in the banking sector with one being a local semi government institution and the other being a branch of a well known foreign bank. Two were typical governmental organizations. One was a privately owned small software development company and another was a publicly owned engineering services company with inspection and testing as its core business. Total of 600 distributed questionnaires yielded 435 returns for a response rate of 72.5%. After removing incomplete questionnaires and ones with missing peer-reports, 383 complete useable pairs of responses (64% effective response rate) were available for analysis.

The sample represented a wide variety of occupations ranging from clerical staff, technicians, and accountants to professional engineers, software developers, marketing

professionals, and healthcare workers. Overall, more than 60 occupational trades were represented in the sample, with respondents belonging to all occupational levels ranging from entry level office work to top management. Educational qualification of the respondents ranged from high school (10 years of education) to doctoral degrees. Ninety three percent of the respondents were male. The mean age of the respondents was 35.6 (SD = 9.38) years with average experience of 9.72 (SD = 8.1) years.

3.2 Measures

English is taught as a compulsory course in school education and is the medium of instruction for all higher education. It is well understood by the majority of the working population in Pakistan. Also, no serious problems were encountered when data was collected for the earlier study in Pakistan using a questionnaire that was in English (Raja et al., 2004). Therefore, I did not translate the questionnaire into the native language. Further, I made every effort to employ well-established measures that were simple in language and easy to understand. In addition, representatives responsible for administration of the survey in every organization were asked to report any concerns associated with respondents' understanding of the items. As no problems of this nature arose, it is reasonable to assume that respondents were generally able to understand the questionnaire items.

3.2.1. Personality. To avoid the problems in data collection associated with lengthy surveys, only the shorter measures of the Big Five such as the 60-item NEO FFI (Costa & McCrae, 2002), the 50-item version of IPIP (scale developed from the

international personality item pool; Goldberg, 1999), the 44-item BFI (Big Five Inventory; John, Donahue, & Knetle, 1991), and the 100-item TDA (Trait Descriptive Adjectives; Goldberg, 1992) were considered. All these measures of the Big Five exhibit comparable reliability and validity indices (for details see Goldberg, *in press*; John & Srivastava, 1999). The NEO-FFI, which is derived from the NEO-PIR has become heavily commercialized resulting not only in high costs associated with its use, but also restrictions from the publisher on the inclusion of items in a research report. The language of the NEO FFI items can also be difficult and complicated to understand at times (John & Srivastava, 1999). Similarly, single-trait adjectives used in Goldberg's (1992, 1999) TDA and IPIP can be ambiguous in their meanings. Keeping in view the requirements of brevity and simplicity of language, I decided to use the BFI to measure the Big Five. This is a frequently used, robust self-report measure of the Big Five (e.g., John et al., 1991; John & Srivastava, 1999; Vaidya, Gray, Haig, & Watson, 2002; Watson, Suls, & Haig, 2002). It is shorter and easier to complete and exhibits high reliability and validity as compared to other measures of the Big Five such as the IPIP and the NEO-FFI (for details see John & Srivastava, 1999).

In the 44-item BFI, 8 items each measure neuroticism (N) and extraversion (E), 9 items each are for conscientiousness (C) and agreeableness (A), and 10 items measure openness to experience (O). All items had anchors of 1 = *strongly disagree* to 5 = *strongly agree*, and higher mean values reflected higher levels of the corresponding trait. Examples of the statements corresponding to each of the five included, (*I see Myself as Someone who...*) "Has a forgiving nature" and "Is generally trusting" for agreeableness, "Does a thorough job" and "Is a reliable worker" for conscientiousness, "Is talkative" and

"Is full of energy" for extraversion, "Can be tense" and "Gets nervous easily" for neuroticism, and "Is original, comes up with new ideas" and "Is inventive" for openness to experience.

Tests of reliability showed that removing three items each from the measures of agreeableness and openness resulted in substantial gains in reliability (.60 to .70 for agreeableness and .60 to .72 for the openness). The results of a confirmatory factor analysis (CFA) on the data to confirm the five-factor structure of the BFI also revealed that these six items did not load well on to their intended factors (factor loadings below .40). This was not surprising considering that these two dimensions have been reported to have weak factor structures and reliability indices (McCrae & Costa, 1997).Therefore, I removed three items each from the agreeableness and openness to experience scales and used a 38-item shortened version of the BFI for substantive analyses. The removed items included "Tends to find fault with others (reverse coded)," Can be cold and aloof (reverse coded)," and "Is sometimes rude to others (reverse coded)" for agreeableness. Similarly, the deleted items from the openness to experience scale included "Prefers work that is routine (reverse coded)," "Has few artistic interests (reverse coded)," and "Is sophisticated in art, music, or literature."

The CFA of the shortened 38-item BFI measure showed (χ^2 = 1851, *df* = 619, *CFI* = .62, *GFI* = .76, *AGFI* = .73, *RMSEA* = .08) significant improvement over the full 44-tiem model (χ^2 = 2511, *df* = 892, *CFI* = .56, *GFI* = .73, *AGFI* = .70, *RMSEA* = .07). The fit indices for the 38-item BFI still needed improvement. A further reduced model with a total of 30 items (five items for each of the Big Five dimensions) had significantly improved fit indices (χ^2 = 702.68, *df* = 289, *CFI* = .82, *GFI* = .87, *AGFI* = .85, *RMSEA* =

.06). These indices correspond to those reported by Benet-Martinez and John (1998) for a sample (N = 170) comprising Mexican employees. However, fit indices above the usually prescribed level of .90 were reported in the same study for a much larger sample of US and Mexican college students (N = 1605).

Although the 30-tiem measure yielded better fit for the Five Factor solution, it did not improve scale reliabilities for any of the five dimensions beyond what was achieved by the 38-item measure. To further assess if the 30-item measure made a difference in results of the regressions, I ran all tests using the shortened scales of the Big Five dimensions. Results in general were very similar to those obtained from the 38-item measure of the Big Five. This was not surprising considering that the correlations among the retained and the shorter sub-scales for agreeableness (r =.96), conscientiousness (r = .80), extraversion (r =.90), neuroticism (r = .92), and openness (r = .98). Therefore, I decided to measure personality with 38-items from the BFI where agreeableness was assessed with 6 items, conscientiousness with 9 items, extraversion and neuroticism with 8 items each, and openness with 7 items. The internal-consistency reliabilities were: .70 for agreeableness and neuroticism, .72 for conscientiousness and openness to experience .72, and .69 for extraversion. Although these reliabilities are low, they correspond to those reported for non-US samples in past (e.g., Benet-Martinez & John, 1998).

3.2.2. Job scope. Job scope was assessed with self-report and peer-report measures. Hackman and Oldham's (1976) Job Diagnostic Survey (JDS) was used to measure job scope via self-reports, and peer-ratings of job complexity were assessed with the Job Rating Form (JRF) (Hackman & Oldham, 1976). The JDS measures five job

characteristics – skill variety, task identity, task significance, autonomy, and feedback, and is the most commonly used self-report measure of job design (Fried & Ferris, 1987). The JRF contains the same items as the JDS except that the wording is changed to suit the peer response format. Sample items with anchors of 1 = *very little* and 7 = *very much*, included "How much variety is there in your job?" for skill variety, "To what extent does your job involve doing a job a 'whole' and identifiable piece of work?" for task identity, "In general how significant or important is your job?" for task significance, "How much autonomy is there in your job?" for autonomy, and "To what extent does doing the job itself provide you with information about your work performance?" for feedback.

Confirmatory factor analyses for both measures confirmed the structure suggested by Hackman and Oldham (1976). For both the JDS ($\chi^2 = 461.22$, $df = 125$, $CFI = .77$, $GFI = .87$, $AGFI = .83$, $RMSEA = .08$) and the JRF ($\chi^2 = 495.671$, $df = 125$, $CFI = .77$, $GFI = .86$, $AGFI = .81$, $RMSEA = .09$), the five-factor model was a superior fit of the data as compared to a single-factor model for the JDS ($\chi^2 = 730$, $df = 135$, $CFI = .59$, $GFI = .82$, $AGFI = .77$, $RMSEA = .11$) as well as the JRF ($\chi^2 = 743.68$, $df = 135$, $CFI = .62$, $GFI = .81$, $AGFI = .76$, $RMSEA = .11$). However, as the fit indices were much below the acceptable levels, I removed two items from the task identity subscale and one item each from the feedback from the job and feedback from the supervisor subscales. These items were not loading on their respective factors well (i.e., factor loading was less than .40). CFA of the resulting shortened measures revealed good results for JDS ($\chi^2 = 222.26$, $df = 67$, $CFI = .87$, $GFI = .91$, $AGFI = .88$, $RMSEA = .08$) and the JRF ($\chi^2 = 233.26$, $df = 67$, $CFI = .89$, $GFI = .91$, $AGFI = .89$, $RMSEA = .08$) scales. Once again I ran the regression analyses using the shortened version of JDS and JRF. No major differences were

observed in the results. The fact that the full and the shortened measures for JDS ($r = .96$, $p < .001$) and JRF ($r = .95, p < .001$) were highly correlated, supports this lack of difference in results.

Considering the suggestions of Evans and Ondrack (1991) and the conclusions drawn by Fried and Ferris (1987), I used the additive index in measuring job scope. This involved averaging the responses across the five dimensions. A high score reflected high job scope. To ensure that results did not differ for additive or the multiplicative index (MPS), I calculated MPS for the sake of comparison. Not only were the additive and the multiplicative indices of job scope were highly correlated ($r = .95$, $p < .001$), but also there were no significant differences in the results of the regression analyses. Therefore, I only used and reported the results of the regression analyses for the additive index. The reliabilities for the five dimensions (autonomy, feedback, skill variety, task identity, and task significance) ranged from .52 to .70 for JDS and .61 to .70 for JRF. Although the reliabilities of the five job dimensions were quite low, good reliability levels were achieved for JDS (a = .79) and JRF (a = .80). As an additive index where the mean score on all items combine to form the complexity score was used, low reliabilities of the individual dimensions does not pose any problems.

3.2.3. Dealing with others (DO). In the JDS and the JRF, Hackman and Oldham (1976) also measured the extent to which a job requires employees to work closely with other people in carrying out their work activities. This 3-item measure taps the social aspect of the job and the wording is altered to suit the self (JDS) or the peer-report (JRF) versions of the scale. Examples of the self-report scale included, "The job requires a lot

of cooperative work with other people" and "To what extent does your job require you to work closely with other people (either 'clients' or people in related jobs in your own organization)?" One item, "The job can be done adequately by a person working alone – without talking or checking with other people" was dropped, as doing so resulted in a substantial gain in reliability. The mean of the 2 items was, therefore, used as a measure of the extent to which one's job involves dealing with others (DO), such that a higher score reflected high DO. The shorter scale was highly correlated with the original scale for both self ($r = .85$, $p < .001$) and the peer-report ($r = .85$, $p < .001$) versions. Reliabilities of .62 and .60 were obtained for the self- and peer-report measures respectively.

3.2.4. Justice perceptions. Perceptions of procedural and distributive justice were assessed with self-reports to the scales developed and validated by Colquitt (2001). The measure for procedural justice comprised 7 items extracted from the Thibaut and Walker (1975) and Leventhal (1980) justice measures. Similarly, 4 items constituted the measure for distributive justice with items from Leventhal's (1976) scale. The rating scale for this measure had had anchors of 1 = *to a small extent* and 5 = *to a large extent,* and high scores reflected high perceived justice.

The exploratory factor analysis (EFA) on perceived justice items revealed a three-factor structure. Items for distributive and procedural justice perception clearly loaded on to separate factors when a forced two-factor solution was requested. However, when the number of factors was not specified, a third factor was evident. The items for the procedural justice loaded on two factors, where one factor contained four items for

perceived fairness of procedures, while the other factor contained three items concerning expression of views and feelings regarding procedures. I performed a CFA to compare the single-factor, two-factor, and the three-factor models. Results showed that the three-factor model ($\chi^2 = 69.14$, $df = 41$, $CFI = .98$, $GFI = .97$, $AGFI = .96$, $RMSEA = .04$) was a superior fit of the data as compared to the two-factor ($\chi^2 = 270.79$, $df = 43$, $CFI = .87$, $GFI = .86$, $AGFI = .79$, $RMSEA = .12$) or the single-factor models ($\chi^2 = 499.65$, $df = 44$, $CFI = .74$, $GFI = .76$, $AGFI = .64$, $RMSEA = .17$). This view of justice is in line with available literature on justice, and many researchers have operationalized voice and procedural fairness as separate and distinct dimensions of perceived justice (e.g., Brockner et al., 1998; Brotheridge 2003; Lind, Tyler, & Huo, 1997). Even Colquitt's (2001) derived scale for procedural justice included items representing voice. These were the same items that emerged as an independent factor in this study. Therefore, I decide to examine three perceived justice dimensions named distributive justice, procedural justice, and voice in subsequent analyses. Examples of the items from the three dimensional justice measures included:

Procedural Justice (PJ) and Voice (V)

The following items refer to the procedures used to arrive at your salary increases and promotion. To what extent:

- Have those procedures been free of bias? (PJ)
- Have those procedures been applied consistently? (PJ)
- Have you been able to express your views and feelings during those procedures? (V)
- Have you been able to appeal the outcomes arrived at by those procedures? (V)

Distributive justice

The following items refer to your salary increases and promotions. To what extent:

- Does your salary increase and promotions reflect the effort you have put into your work?
- Is your salary increase and promotion justified, given your performance?

Complete scales with respective factor loadings are provided in Appendix 1. Self-reports for each item were averaged to attain scores for each justice type such that a high score corresponded to higher perceived justice. The 4-item procedural justice scale had an internal consistency reliability of .80, the 3-item voice measure had a reliability of .76, and the distributive justice measure had a reliability of .91.

3.2.5. Job satisfaction. Job satisfaction was measured with self-reports to Hoppock's (1935) scale. The scale was successfully used in the previous study conducted in Pakistan, in which a reliability coefficient of .75 was obtained (Raja et al., 2004). The measure comprised four multiple-choice questions, each of which had seven answer options. Respondents were asked to mark the choice that best reflected their feelings. For example, for the question "Which one of the following shows how much of the time you feel satisfied with your job?" response options range from 1) *never* to 7) *all the time.* Scores on each item were averaged to form a job satisfaction score such that a higher score reflected high job satisfaction. Reliability of this measure in the current study was .80.

3.2.6. Job stress. Most of the available measures of job stress such as the Stress Diagnostic Survey (Ivancevich & Matteson, 1984), Work Environment Scale (Moos,

1981), Job Content Questionnaire (Karasek, 1985), and the Job Stress Survey (Spielberger, 1994) are too long and at times difficult to understand. Such lengthy measures are uncommon in OB research and pose a practical administration difficulty when the length of the survey is critical.

Therefore, I used the five-item, self-report measure developed by Parker and DeCotiis (1983) which captures short-term *job-related feelings of anxiety.* This measure has been frequently used to assess job stress (e.g., Jamal, 1999; Schaubroeck, Lam, & Xie, 2000; Xie & Johns, 1995) in research in OB. The measure had a 5-point rating scale, with anchors of 1 = *strongly disagree* and 5 = *strongly agree.* A high mean score reflected greater job stress. Examples of the items included "My job gets to me more than it should" and "There are lots of times when my job drives me right up the wall." The measure had a reliability of .62 in this study.

3.2.7. Job performance and citizenship behaviors. Job performance, OCBI, and OCBO were measured using peer-reports to a 21-item measure developed by Williams and Anderson (1991). Seven items each tapped into in-role performance, OCBI, and OCBO. The rating scale had anchors of 1 = *almost never* and 5 = *almost always,* and a high mean score reflected high performance, OCBI, or OCBO. Results of the EFA and the CFA revealed that four items did not load on to any of the factors above a modest cut-off point of .30. These items included "Engages in activities that will directly affect his/her performance evaluation" for job performance, "Passes along information to co-workers" for OCBI, and "Complains about insignificant things at work (reverse coded)" and "Adheres to informal rules devised to maintain order" for OCBO. These items, being

relatively unclear and confusing, had low factor loading in Williams and Anderson (1991) study also. Therefore, four items were removed to improve the factor structure and scale reliabilities. The CFA comparing various models clearly showed that the three-factor model ($\chi^2 = 355.01$, $df = 116$, $CFI = .88$, $GFI = .90$, $AGFI = .87$, $RMSEA = .07$) with four items removed fit the data better than the full 21-item three-factor model ($\chi^2 = 493.41$, $df = 167$, $CFI = .82$, $GFI = .88$, $AGFI = .85$, $RMSEA = .07$), a 2-factor model ($\chi^2 = 379.88$, $df = 118$, $CFI = .85$, $GFI = .89$, $AGFI = .86$, $RMSEA = .08$), and a single-factor model ($\chi^2 = 742.53$, $df = 189$, $CFI = .72$, $GFI = .81$, $AGFI = .77$, $RMSEA = .09$). A high correlation between the performance and OCBO scales ($r = .66$, $p < .01$) warranted caution. I performed a CFA to ascertain discriminability between the two measures. Results clearly showed that a two-factor model ($\chi^2 = 129.56$, $df = 43$, $CFI = .92$, $GFI = .93$, $AGFI = .90$, $RMSEA = .07$) was superior to a single-factor model ($\chi^2 = 150.51$, $df = 44$, $CFI = .90$, $GFI = .92$, $AGFI = .89$, $RMSEA = .08$).

All items of the retained scales with their respective factor loadings are provided in the Appendix 2. Sample items included, "Adequately completes assigned duties" and "Fulfills responsibilities specified in job description" for job performance, "Helps others who have been absent" and "Goes out of the way to help new employees" for OCBI, and "Gives advance notice when unable to come" and "Conserves and protects organizational property" for OCBO. The job performance and OCBI scales had a reliability of .76, while the reliability of the OCBO measure was .70.

3.2.8. Creativity. Creativity was assessed using peer ratings on the 3-item measure developed by Oldham and Cummings (1996). Ratings made on this scale with

anchors of 1 = *very little* to 7 = *very much* were averaged such that high values represented higher creativity. This measure provides definitions of creativity, adaptability, and practicality as part of each item. Example of the items included, "How CREATIVE is this person's work? (Creativity refers to the extent to which the employee develops ideas, methods, or products that are both original and useful to the organization)" and "How ORIGINAL and PRACTICAL is this person's work? (Original and practical refers to developing ideas, methods, or products that are both totally unique and especially useful to the organization)." The reliability of this scale was .88 in the current study.

3.2.9. Control variables. Individual differences in demographic variables such as gender, age, and job tenure have been found to be associated with commonly studied dependent variables in OB (Xie & Johns, 1995). Information about these variables were, therefore, collected through self-reports and included in the study as control variables. In addition, as shown in Table 1, one-way analysis of variance revealed significant differences across organizations in job satisfaction ($F = 2.47, p < .01$), job stress ($F = 6.10, p < .001$), job performance ($F = 4.41, p < .001$), creativity ($F = 3.05, p < .001$), and OCBO ($F = 5.07, p < .001$). A post-hoc test revealed that these differences were evident for four organizations, which included the national conglomerate, the engineering inspections company, the software development concern, and the government organization. The engineering (inspection and testing) company had a higher mean performance, while the software house and the government organizations had lower mean performance as compared to other organizations in the sample. Respondents from the

inspection company were more creative on average, and the national conglomerate employees tended to report lower job stress and job satisfaction as compared to respondents from other organizations. Finally, respondents from the national conglomerate and the government organization on average had lower OCBO scores as compared to the respondents from other organizations. Using dummy coding, I controlled for the effects of these four organizations in all analyses. Four dummy variables were created to represent the four organizations and the fifth category representing all other organizations.

In addition, past research suggests a curvilinear relationship between job scope and job stress such that both very high and very low levels of job scope led to high job stress (Xie & Johns, 1995). Presence of a curvilinear relationship can lead to false detection of moderators. For example, regression analyses might show that the job scope x personality term is significant for job stress or job satisfaction as a dependent variable. Based on this significant interaction term, my conclusion would be that job scope moderated the relationship between personality and job stress or satisfaction despite the possibility that the significant interaction was a result of a curvilinear relationship between job scope and the dependent variable. This is especially important when theoretical arguments I evoke to justify moderators are quite similar to those presented by Xie and Johns (1995) to hypothesize a curvilinear relationship between job scope and job stress (i.e., PE fit perspective). Therefore, I decided to perform analyses to rule out curvilinearity in the relationships among job scope and the dependent variables.

Following the procedures deployed by Xie and Johns (1995), I entered the controls in the first step followed by job scope. In the third step, a squared term of job

scope was entered in the equation, which if significant, would suggest a curvilinear relationship between job scope and the dependent variable. The results of the regressions revealed that the only self-reported job scope squared was actually significant for job satisfaction ($\beta = -1.27, p < .01$), job stress ($\beta = 1.49, p < .001$), and creativity ($\beta = 1.26, p < .03$). The curvilinear relationship of self-reported job scope with job satisfaction, job stress, and creativity is shown in Figures 1 through 3. Figure 1 shows an inverted U type relationship between job scope and job satisfaction such that satisfaction was highest for moderately high job scope and it is low when job scope is high or low. As shown in Figure 2, supporting the findings of Xie and Johns (1995), job stress had a U type relationship with job scope. Job stress was high when job scope was too low or too high, and it was low for moderate job scope. Figure 3 shows that surprisingly, job scope had a U type relationship with creativity such that creativity was low when job scope was moderate and it was high when scope was either low or high. I further checked if there were any curvilinear interactions between personality and job scope. None of the personality x job scope squared terms was significant for job satisfaction, job stress, or creativity. Therefore, I decided to control for the self-reported job scope squared in the analyses involving job satisfaction, job stress, and creativity.

CHAPTER FOUR

4. RESULTS

4.1 Hypotheses

The study tested the following hypotheses:

Hypothesis 1: Job scope will moderate the relationship between neuroticism and satisfaction such that the relationship will be more strongly negative when job scope is high.

Hypothesis 2: There will be a three-way interaction among neuroticism, job scope, and dealing with others such that the negative relationship between neuroticism and job satisfaction will be strongest when the job is high in scope and DO.

Hypothesis 3: Neuroticism will be positively related to job stress.

Hypothesis 4: Job scope will moderate the relationship between neuroticism and job stress such that the relationship will be stronger when job scope is high.

Hypothesis 5: The negative relationship between neuroticism and performance will be stronger for high scope jobs.

Hypothesis 6: There will be a three-way interaction among neuroticism, job scope, and dealing with others such that the negative relationship between neuroticism and performance will be strongest for high scope jobs that also require higher levels of social interaction.

Hypothesis 7: Neuroticism will be negatively related to OCBI.

Hypothesis 8: Distributive justice will moderate the relationship between neuroticism and OCBO such that it will be more strongly negative when perceived distributive fairness is low.

Hypothesis 9: Neuroticism will be negatively related to creativity.

Hypothesis 10: Job scope will moderate the relationship between neuroticism and creativity such that it will be stronger when job scope is high.

Hypothesis 11: The relationship between conscientiousness and job satisfaction will be moderated by job scope such that it will be stronger when job scope is high.

Hypothesis 12: Conscientiousness will be negatively related to job stress.

Hypothesis 13: Job scope will moderate the relationship between conscientiousness and job stress such that the relationship will be stronger when job scope is low.

Hypothesis 14: The positive relationship between conscientiousness and job performance will be moderated by job scope such that the relationship will be stronger when job scope is high.

Hypothesis 15: Conscientiousness will be positively related to OCBO.

Hypothesis 16: Perceptions of procedural justice will moderate the relationship between conscientiousness and OCBO such that the relationship will be stronger when perceived procedural fairness is high.

Hypothesis 17: Conscientiousness will be negatively related to creativity.

Hypothesis 18: Job scope will moderate the relationship between extraversion and job satisfaction such that the relationship will be stronger when job scope is high.

Hypothesis 19: There will be a three-way interaction among extraversion, job scope, and DO such that there will be a positive relationship between extraversion and job satisfaction when job scope and DO are high and negative when both are low.

Hypothesis 20: Extraversion will be negatively related to job stress.

Hypothesis 21: Job scope will moderate the negative relationship between extraversion and job stress such that the relationship will be stronger when job scope is high.

Hypothesis 22: Job scope will moderate the relationship between extraversion and job performance such that the relationship will be positive when job scope is high and negative when job scope is low.

Hypothesis 23: There will be a three-way interaction among extraversion, job scope, and DO such that there will be a positive relationship between extraversion and job performance when job scope and DO are high and negative when both job scope and DO are low.

Hypothesis 24: Extraversion will be positively related to OCBI.

Hypothesis 25: Distributive justice will moderate the relationship between extraversion and OCBO such that it will be positive when perceived distributive fairness is high and negative when distributive justice is low.

Hypothesis 26: Extraversion will be positively related to creativity.

Hypothesis 27: Job scope will moderate the relationship between extraversion and creativity such that it will be stronger when job scope is high.

Hypothesis 28: Agreeableness will be positively related to OCBI.

Hypothesis 29: Openness to experience will be positively related to creativity.

Hypothesis 30: Job scope will moderate the positive relationship between openness and creativity such that it will be stronger when job scope is high.

4.2 Descriptive Statistics and Bivariate Correlations

Frequency distributions were examined visually through the normality plots for each variable. This test showed that the distributions for agreeableness and dealing with others (both self- and peer-reported) were negatively skewed. Most of the focal respondents scored high on agreeableness and considered that their jobs involved considerable dealing with other people, and this trend was present in peer-reports too. Similarly, the distributions for job performance and OCBO were also slightly negatively skewed and voice was slightly positively skewed. Formal tests revealed that the skewness was only significant for agreeableness and dealing with others. Various transformations were tried to normalize the distributions of agreeableness and dealing with others. Although the cubic transformation for these variables did improve their distributions somewhat, using transformed variables did not alter any of the results using the original variables. Therefore, I did not use transformations in testing hypotheses.

Table 2(a) presents the descriptive statistics and the correlation matrix for all variables. All correlations above .10 were significant at $p < .05$ (2-tailed). The means for conscientiousness ($M = 3.91$, $SD = .59$), extraversion ($M = 3.34$, $SD = .63$), and openness to experience ($M = 3.80$, $SD = .59$) were similar to what Benet-Martinez and John (1998)

reported for US (n = 711) and Mexican (n = 894) samples. However, means for agreeableness and neuroticism departed slightly from the values reported by Benet-Martinez and John (1998). The mean for agreeableness (M = 4.28, SD = .62) was higher, while average neuroticism (M = 2.57, SD = .66) was slightly lower than the norms. These differences could be a manifestation of culture. The absolute average correlation among all the personality traits was .28, which is higher than the absolute average bivariate correlation of .20 (n = 1605) reported by Benet-Martinez and John (1998). The highest correlations obtained in the current study were between conscientiousness and agreeableness (r = .45), and conscientiousness and neuroticism (r = -.48). Neuroticism was negatively correlated with all other personality traits. The remaining four traits were all significantly positively correlated with the exception that the bivariate correlation between extraversion and agreeableness was not significant.

With respect to the associations between personality and outcome variables, agreeableness correlated significantly only with job satisfaction (r = .22). Conscientiousness had significant correlations with job satisfaction (r = .22), job performance (r = .16), OCBO (r =.13), OCBI (r = .12), and job stress (r = -.21). Extraversion had significant bivariate associations with job satisfaction (r = .16), job stress (r = -.12), and job performance (r = .11). Neuroticism correlated significantly with job satisfaction (r = -.13) and job stress (r = .31) only. Openness had significant associations with job satisfaction (r = .20), creativity (r = .20), OCBI (r = .17), and OCBO (r = .10).

The association between self-reported and peer-reported job scope was .42 and the means were 5.04 (SD = .73) and 4.97 (SD = .70) respectively. Self-reported job

complexity was slightly higher than the peer report ($t = 2.17$, $p < .03$). As the correlation between self- and peer-reported job scope was at the best moderate ($r = .42$) and the difference in their means was significant, I used both in subsequent analyses to test the hypotheses. Table 2(b) shows the descriptive statistics and the correlation matrix for the five dimensions of job scope and dealing with others. The correlations between self- and peer-reported job autonomy, skill variety, feedback, task identity, and task significance ranged from .18 to .42. These values correspond to those reported by others in the literature (e.g., Fried & Ferris, 1987). All the job dimensions were significantly correlated with the outcome variables in the expected directions.

As expected, job scope was significantly related to most of the outcomes. Self-reported job scope was negatively associated with job stress ($r = -.19$), and positively correlated with job satisfaction ($r = .43$), job performance ($r = .19$), creativity ($r = .18$), and OCBO ($r = .19$). Similarly, peer-reported job complexity was significantly positively correlated with job satisfaction ($r = .21$), job performance ($r = .44$), creativity ($r = .58$), OCBI ($r = .30$), and OCBO ($r = .39$).

The correlation between self- and peer-reported DO was .43. While self reported DO had a mean of 5.83 ($SD = 1.06$), peer-reported DO had a mean of 5.66 ($SD = 1.02$). The average self-reported DO was slightly higher than the peer-reported DO ($t = 2.84$, $p < .005$). As the correlations between the self- and peer-reported DO was only moderate ($r = .43$) and their difference was significant, both self- and peer-reported job scope were used in all subsequent analyses. Self- and peer-reported DO were significantly correlated with job satisfaction ($r_s = .27$, $r_p = .14$), job performance ($r_s = .21$, $r_p = .35$), creativity (r_s

= .14, r_p = .48), and OCBO (r_s = .22, r_p = .36). Only peer-reported DO was significantly associated with OCBI (r_p = .30).

Although the moderate correlation of .42 between self-reported and peer-reported scope corresponded with past research (e.g., Fried & Ferris, 1987; Judge et al., 2000), it deserved some attention. Regression analyses were performed to ensure that self- and peer-reported job scope exhibited similar relationships with the outcome variables. A similar pattern of relationships would suggest that although both self- and peer-reported job scope are only moderately correlated, they are similar enough to bear close correspondence in their relationships with the personal and organizational outcomes. If both are not related to the outcomes in similar directions, it would be difficult to argue that the incumbents and the independent raters perceived job scope in a similar manner.

Controls were entered in the first step followed by self- or peer-reported job scope. Results of these regressions are presented in Table 31. These results show that perceived job scope was significantly related to job satisfaction (β = .44, p < .001), job stress (β = .20, p < .001), job performance (β = .16, p < .002), OCBO (β = .16, p < .003), and creativity (β = .15, p < .004). Peer-reported job scope was significantly related to job satisfaction (β = .21, p < .001), job performance (β = .41, p < .001), OCBI (β = .31, p < .001), OCBO (β = .34, p < .001), and creativity (β = .59, p < .001). These results were in expected direction for both self- and peer-reported job scope and corresponded to general findings in past research in this area (e.g., Fried & Ferris, 1987).

To check the relative predictive capacity of the two measures of job complexity, both perceived and peer-reported scope were entered simultaneously in the regression after the controls. Results in Table 32 show that when both measures of scope were in a

single equation, perceived scope had a significant effect on more personal outcomes such as job satisfaction ($\beta = .42, p < .001$) and job stress ($\beta = -.20, p < .001$), while the independent measure of scope was more predictive of job performance ($\beta = .41, p < .001$), OCBI ($\beta = .34, p < .001$), OCBO ($\beta = .33, p < .001$), and creativity ($\beta = .62, p < .001$). These results are also in line with the theory and research in this area (e.g., Fried & Ferris, 1987). Although these results could be indicative of method bias, this matter does not raise serious concerns for two reasons. First, job scope is being used a moderator and method bias can only make it difficult to detect significant interactions. Second, both self- and peer-reported job scope were used sequentially to test all hypotheses.

The means for the three types of perceived justice were 3.01 ($SD = 1.17$) for distributive justice, 2.75 ($SD = .82$) for procedural justice, and 2.35 ($SD = .98$) for voice. All three dimensions of justice were significantly positively correlated. Distributive justice had a correlation of .54 with procedural justice and .27 with voice. Procedural justice and voice had a correlation of .31. As expected, both distributive and procedural justice were significantly associated with job satisfaction ($r_{dj} = .22$, $r_{pj} = .21$), job performance ($r_{dj} = .30$, $r_{pj} = .26$), creativity ($r_{dj} = .19$, $r_{pj} = .24$), OCBI ($r_{dj} = .14$, $r_{pj} = .20$), and OCBO ($r_{dj} = .30$, $r_{pj} = .26$). Voice did not have a significant association with any of the outcomes.

Among the dependent variables, job satisfaction ($M = 5.02$, $SD = .97$) was correlated with job stress ($r = -.18$), job performance ($r = .18$), creativity ($r = .19$), and OCBO ($r = .17$). Job stress ($M = 2.54$, $SD = .84$) was not correlated with any other outcome besides job satisfaction ($r = -.18$). Job performance ($M = 4.20$, $SD = .58$) was positively correlated with creativity ($r = .42$), OCBI ($r = .43$), and OCBO ($r = .66$).

Besides job performance and job satisfaction, creativity ($M = 4.83$, $SD = 1.27$) was positively associated with both OCBI ($r = .42$) and OCBO ($r = .42$). The bivariate association between OCBI ($M = 3.57$, $SD = .68$) and OCBO ($M = 3.97$, $SD = .68$) was .38.

4.3 Regression Analyses

Multiple linear regression analyses were used to test all hypotheses concerning the main effects of personality. A total of six different regression models with different dependent variables were tested by entering the control variables on the first step of the equation followed by simultaneous entry of the Big Five traits on the second step. Moderated regression analyses were conducted to test the hypotheses predicting the interaction effects of personality and situational variables on the outcomes. Following the procedures recommended by Baron and Kenny (1986), control variables were entered into the equation first, followed by the Big Five traits and the moderating variable of interest (e.g., job scope or justice perceptions). On the third step, the cross products of each of the Big Five traits and the moderator variable were added to the equation (e.g., conscientiousness x job scope). A significant interaction term confirmed the presence of an interaction between personality and the situational variable. For all significant interactions, plots showing their directions were obtained through the procedures recommended by Aiken and West (1991) described as follows. The following regression equation contains first order terms for an independent variable X, the moderator Z, and the linear interaction of X and Z.

$$Y = b_0 + b_1 X + b_2 Z + b_3 XZ \quad \text{.....(1.1)}$$

High and low values of the moderator variable Z were obtained by M ± 1 SD, where M refers to mean and SD refers to standard deviation. Replacing the Z with its high (Z_h) and low (Z_l) values in equation 1.1 gives the following two equations:

$$Y = b_o + b_1 X + b_2 Z + b_3 X Z_h \quad \text{.....(1.2)}$$

$$Y = b_o + b_1 X + b_2 Z + b_3 X Z_l \quad \text{.....(1.3)}$$

Plots of equation 1.2 and 1.3 give the direction of the XZ interaction term in equation 1.1.

Similarly, for a three-way interaction the main equation will be:

$$Y = b_o + b_1 X + b_2 Z + b_3 W + b_4 XZ + b_5 XW + b_6 ZW + b_7 XZW \text{.....(2.1)}$$

Replacing the high and low values of the moderators Z and W obtained by M ± 1 SD in equation 2.1 gives the following 4 equations.

$$Y = b_o + b_1 X + b_2 Z_h + b_3 W_h + b_4 XZ_h + b_5 XW_h + b_6 ZhW_h + b_7 XZ_hW_h \text{ ....(2.2)}$$

$$Y = b_o + b_1 X + b_2 Z_h + b_3 W_l + b_4 XZ_h + b_5 XW_l + b_6 Z_hW_l + b_7 XZ_hW_l \text{ .....(2.3)}$$

$$Y = b_o + b_1 X + b_2 Z_l + b_3 W_h + b_4 XZ_l + b_5 XW_h + b_6 Z_lW_h + b_7 XZ_lW_h \text{ .....(2.4)}$$

$$Y = b_o + b_1 X + b_2 Z_l + b_3 W_h + b4 XZ_l + b5 XW_h + b6 Z_lW_h + b7 XZ_lW_h \text{ .....(2.5)}$$

Plotting equations 2.2 and 2.3 together and 2.4 and 2.5 together shows the direction of the XZW interaction.

4.3.1. Job Satisfaction. Results of the regression analyses for main effects are shown in Table 3 through 8. Among the Big Five traits, extraversion ($\beta = .11, p < .04$) and agreeableness ($\beta = .13, p < .03$) were significantly related to job satisfaction, both in the positive direction. The Big Five traits explained 7% ($\Delta R^2 = .07, F = 6.03, p < .001$) of the variance in job satisfaction. Hypotheses 1, 11, and 18 predicted the combined effects

of personality (neuroticism, conscientiousness, and extraversion respectively) and job scope on job satisfaction. Tables 9 and 10 show the results of the moderated regression analyses using self- and peer-reported job scope as moderators. The analyses revealed that self-reported job scope interacted significantly with neuroticism (β = -.66, $p < .02$), conscientiousness (β = -1.03, $p < .07$), and agreeableness (β = -1.18, $p < .02$). These interactions explained 2% of the variance ($\Delta R^2 = .02$, $F = 4.12$, $p < .03$) in job satisfaction. Similarly, the regression involving personality and peer-reported job scope revealed two significant terms for neuroticism (β = -.95, $p < .01$) and agreeableness (β = -1.08, $p < .03$) with an R-square change of .03 ($F = 2.5$, $p < .05$).

The directions of the significant interactions involving neuroticism and self- and peer-reported job scope are shown in Figures 4 and 5. Both figures show that the neuroticism – satisfaction relationship was negative when job scope was high and positive when job scope was low. Therefore, Hypothesis 1 was fully supported. Figure 6 shows the direction of the marginally significant interaction for conscientiousness. Contrary to Hypothesis 11, conscientiousness was negatively related to job satisfaction when self-reported job scope was high and positively when self-reported job scope was low. Though not hypothesized, the significant interactions involving agreeableness are shown in Figures 7 and 8, which show that the positive association between agreeableness and job satisfaction was stronger when self-reported job scope was low. No support was found for Hypothesis 18, as the interaction term for extraversion was not significant.

Concerning job satisfaction, Hypothesis 2 predicted the three-way interaction among neuroticism, job scope and dealing with others, whereas Hypothesis 19 predicted

a similar three-way interaction for extraversion. To test these hypotheses, separate analyses were performed for each of the traits. This strategy was adopted to conserve degrees of freedom, because the sample size would have made it very difficult to detect a significant interaction term with multiple three-way interactions being introduced in a single equation. Similar to the procedures used for two-way interactions, the controls were introduced in the first step followed by the personality trait of interest, job scope, and dealing with others. Two-way interactions (DO x job scope, personality x job scope, and personality x DO) were introduced in the third step followed by the three-way interaction (personality x job scope x dealing with others) in the final step. Results in Tables 11 and 12 show that the three-way interaction for neuroticism was not significant for self- and peer-reported job scope. Therefore, Hypothesis 2 was not supported.

Results of the three-way interactions of job scope, DO, and extraversion are shown in Tables 13 and 14. Results show that only the interaction involving self-reported job scope and DO was significant ($\beta = -4.84, p < .05; \Delta R^2 = .01, F = 2.67, p < .05$) for job satisfaction. Figure 9 shows the direction of the significant interaction term involving self-reported job scope, self-reported DO, and extraversion. When job scope was high, DO did not have any influence on the extraversion – job satisfaction relationship. However, for low self-reported job scope, extraversion was positively related to job satisfaction when self-reported DO was high and negatively when self-reported DO was low. These results support Hypothesis 19.

4.3.2. Job Stress. As shown in Table 4, four of the Big Five traits were significantly related to job stress. Together the Big Five traits explained 11% of the

variance in stress ($\Delta R^2 = .11$, $F = 10.20$, $p < .001$). As hypothesized, both conscientiousness ($\beta = -.16$, $p < .009$) and extraversion ($\beta = -.11$, $p < .03$) were negatively related, and neuroticism ($\beta = .21$, $p < .003$) was positively related to job stress. These results provide solid support for Hypotheses 3, 12, and 20. Though not hypothesized, openness to experience ($\beta = .16$, $p < .003$) was significantly positively related to job stress. Agreeableness was not related to job stress.

Hypotheses 4, 13, and 21 predicted the interaction effects of personality and job scope on job stress. Results of the moderated regression analyses using self- and peer-reported job scope are presented in Tables 15 and 16. None of the interactions involving self-reported job scope and personality was significant. However, the interaction term for peer-reported job scope and extraversion ($\beta = -.89$, $p < .02$) was significant and it explained an incermental 2% of the variance in job stress ($F = 7.54$, $p < .006$). Figure 10 shows the direction of this interaction. The extraversion-job stress relationship was negative when peer-reported job scope was high and slightly positive when peer-reported job scope was low. These results support Hypothesis 21. Hypotheses 4 and 13 were not supported as none of the interactions involving neuroticism and conscientiousness was significant.

4.3.3. Job Performance. Table 5 shows the regression results for job performance as a dependent variable. Controlling for the effects of organization, tenure, age, and gender, conscientiousness ($\beta = .11$, $p < .05$) and extraversion ($\beta = .12$, $p < .02$) were significantly related to job performance, both in a positive direction ($\Delta R^2 = .024$, $F = 4.34$, $p < .01$). Neuroticism did not have a main effect on job performance.

The results of the moderated regression analysis are presented in Table 17 and 18. As shown in Table 17, self-reported job scope interacted significantly with conscientiousness ($\beta = 1.50, p < .03$) and agreeableness ($\beta = -1.75, p < .003$) to explain an incremental 3% of the variance in job performance ($\Delta R^2 = .03, F = 2.66, p < .02$). For peer-reported job scope, only one interaction term for neuroticism ($\beta = -1.13, \Delta R^2 = .02, F = 2.6, p < .03$) was significant (see Table 18). Figure 11 shows the direction of the significant interaction of neuroticism with peer-reported job scope. The neuroticism – performance relationship was slightly negative for high peer-reported job scope and positive when peer-reported job scope was low. These findings support Hypothesis 5. Figure 12 shows the direction of the interaction for conscientiousness and self-reported job scope. Conscientiousness had a stronger positive relationship with performance when scope was high as compared to when it was low. These findings provide support for Hypothesis 14 for self-reported job scope only. The direction of the significant term for agreeableness and self-reported job scope is shown in Figure 13. Agreeableness was negatively related to performance when scope was high and positively when scope was low. None of the interactions for extraversion was significantly related to performance and hence, Hypothesis 22 was not supported.

Hypotheses 6 and 23 predicted three-way interaction effects of personality (neuroticism and extraversion), job scope, and DO on job performance. Similar to the strategy adopted for job satisfaction, separate analyses were conducted for both traits. Controls were entered in the first step followed by the relevant personality traits, job scope, and DO. In the third step, DO x job scope, personality x job scope and personality x DO product terms were entered. Finally, in the fourth step the personality x job scope x

DO term was added to the equation. Tables 19, 20, 21, and 22 show the results for the three-way interactions for neuroticism and extraversion. As none of the three-way terms for neuroticism and extraversion was significant, Hypotheses 6 and 23 were not supported.

4.3.4. OCB. Hypotheses 7, 15, 24, and 28 predicted relationships between the Big Five traits and citizenship behaviors. Results in Table 6 show that only openness to experience ($\beta = .14, p < .04$; $\Delta R^2 = .03$, $F = 2.31, p < .04$) had a significant relationship with OCBI, an effect that was not hypothesized. Hypotheses 23 and 28 were not supported, as extraversion and agreeableness were not related to OCBI. As shown in Table 7, supporting Hypothesis 15, conscientiousness ($\beta = .10, p < .06$) was positively related to OCBO. Surprisingly, and contrary to Hypothesis 7, neuroticism ($\beta = .10, p < .05$) was also positively related to OCBO. Openness to experience ($\beta = .09, p < .07$) was positively significantly (marginally) related to OCBO. The R-square change of 2% ($F = 3, p < .09$) was only marginally significant. However, when the regression was run without the two non-significant traits (agreeableness and extraversion) the R-square change was significant ($\Delta R^2 = .02$, $F = 4.2, p < .05$).

Hypotheses 8, 16, and 25 postulated the combined effects of justice perceptions and personality on citizenship behaviors. Tables 23 through 28 show the results for interactive effects of the Big Five traits and the justice dimensions on OCBI and OCBO. These results show that distributive justice did not moderate the personality – OCBO relationship for neuroticism and extraversion. Therefore, Hypotheses 8 and 25 were not supported. Similarly, results in Tables 27 and 28 show that the conscientiousness –

OCBO relationship was not moderated by procedural justice or voice. Hence, Hypothesis 16 was also not supported.

Though not hypothesized, results in Table 23 show that distributive justice interacted with neuroticism (β = -.50, p < .03), agreeableness (β = -.78, p < .06), and openness to experience (β = 1.12, p < .01) to affect OCBI. These interactions explained 3% additional variance in OCBI (ΔR^2 = .03, F = 2.2, p < .05). Figure 14 shows the direction of the significant term for neuroticism. Surprisingly, neuroticism was negatively related to OCBI when perceived distributive justice was high and positively when perceived distributive justice was low. The direction of the marginally significant interaction term for agreeableness is shown in Figure 15. Almost identical to neuroticism, agreeableness was slightly negatively related to OCBI when distributive justice was high and positively when distributive justice was low. Figure 16 shows the interaction effects of openness to experience and distributive justice on OCBI. Openness was positively related to OCBI when perceived distributive justice was high and negatively when perceived distributive justice was low.

As shown in Table 24, none of the Big Five traits had combined effects with procedural justice on OCBI. However, Table 25 shows that voice interacted with neuroticism (β = -.42, p < .05), extraversion (β = .47, p < .08), and openness to experience (β = .60, p < .08) to affect OCBI, explaining 2% additional variance (ΔR^2 = .03, F = 4.0, p < .04). Directions of these significant interactions are shown in Figures 17 through 19. Surprisingly, Figure 17 shows that the negative relationship between neuroticism and OCBI was stronger when voice was high. Figure 18 shows that extraversion was slightly positively related to OCBI when voice was high and negatively

when voice was low. The positive relationship between openness to experience and OCBI was stronger when voice was high (see Figure 19). Results presented in Table 28 show that voice interacted with neuroticism (β = -.50, $p < .02$) to affect OCBO. The R-square change was not significant (ΔR^2 = .01, F = 1, $p < .44$). However, when the regression was run without the four non-significant interaction terms, the R-square change was significant (ΔR^2 = .01, F = 3.9, $p < .04$). As shown in Figure 20, once again, surprisingly, neuroticism was not related to OCBO when voice was high and positively related when voice was low.

4.3.5. Creativity. Hypotheses 9, 17, 26, and 29 predicted main effects of personality on creativity. Results presented in Table 8 show that only openness to experience (β = .22, $p < .01$) was a significant predictor of creativity (ΔR^2 = .04, F = 3.03, $p < .01$). Therefore, Hypothesis 29 was supported. As neuroticism, conscientiousness, and extraversion were not significantly related to creativity, Hypotheses 9, 17, and 26 were not supported.

Results of the moderated regression analysis to test the combined effects of personality and job scope on creativity are shown in Tables 29 and 30. Results in Table 29 show that self-reported job scope interacted with agreeableness (β = -1.09, $p < .05$), extraversion (β = 1.05, $p < .03$), and openness to experience (β = -1.09, $p < .06$) to affect creativity, explaining 3% of incremental variance in it (ΔR^2 = .03, F = 4, $p < .04$). As shown in Table 30, peer-reported job scope interacted with extraversion (β = -.74, $p <$ .03), neuroticism (β = -.64, $p < .04$), and openness (β = -.99, $p < .03$) to influence

creativity. Theses interactions explained 2% of the variance in creativity ($\Delta R^2 = .02$, $F = 2.5$, $p < .03$).

The directions of the significant interactions are shown in Figures 21 through 26. As shown in Figure 21, neuroticism was negatively related to creativity when peer-reported job scope was high and positively when it was low. These findings for neuroticism provide support for Hypothesis 10. The interaction term for extraversion was significant for both peer- and self-reported job scope. Figures 22 and 23 show that contrary to Hypothesis 27, for both self- and peer reported job scope, extraversion was slightly positively related to creativity when job scope was low and negatively when job scope was low. Figure 24 shows that agreeableness was positively related to creativity when self-reported job scope was low and negatively when self-reported job scope was high. Figures 25 and 26 show the directions of the significant interactions for openness to experience involving self- and peer-reported job scope. Surprisingly, in both cases, openness to experience was strongly positively related to creativity when job scope was low. These findings are contrary to Hypothesis 30.

4.4 Additional Analyses

I performed various regressions to investigate how the justice dimensions were linked to the outcomes individually and collectively. In this analysis, a justice dimension (or multiple dimensions) was entered following the controls. Table 33 shows that voice was only significantly related to OCBO ($\beta = .11$, $p < .03$). However, procedural fairness was significantly related to job satisfaction ($\beta = .16$, $p < .005$), job performance ($\beta = .24$, $p < .001$), OCBI ($\beta = .23$, $p < .001$), OCBO ($\beta = .27$, $p < .001$), and creativity ($\beta = .26$, p

< .001). When both voice and procedural justice were entered in the regression simultaneously, only procedural justice ($\beta = .25, p < .001$) emerged as a significant predictor of OCBO. Results presented in Table 34 show that distributive justice was significantly related to job satisfaction ($\beta = .19, p < .001$), job stress ($\beta = -.11, p < .05$), job performance ($\beta = .29, p < .001$), OCBI ($\beta = .13, p < .02$), OCBO ($\beta = .26, p < .001$), and creativity ($\beta = .18, p < .002$). The relative predictive capacity of distributive and procedural justice is a point of interest in the justice literature (e.g., Colquitt et al., 2000). Therefore, I entered both distributive and procedural justice simultaneously in a single regression model to test their relative predictive capacity. Results in Table 34 show that only distributive justice had significant effect on job satisfaction ($\beta = .15, p < .01$) and procedural justice emerged as a sole predictor of creativity ($\beta = .23, p < .001$) and OCBI ($\beta = .21, p < .001$). However, both types of justice were significantly related to job performance ($\beta_{pj} = .14, \beta_{dj} = .21, p < .001$) and OCBO ($\beta_{pj} = .19, \beta_{dj} = .16, p < .01$). These results correspond to the theoretical and empirical literature on perceived organizational justice (e.g., Cohen-Chashrash & Spector, 2001; Colquitt et al., 2000).

The data also allowed me to investigate how job satisfaction and job stress relate to job performance, creativity, and citizenship behaviors. Controls were entered in the first step followed to the Big Five traits to control for their effects too. In the third step job stress or job satisfaction was entered in the regression. Similar to the findings of Jamal (1984), job stress was had a significant negative linear relationship with job performance ($\beta = -.15, p < .008$; $\Delta R^2 = .02, F = 7.21, p < .008$). The idea of a curvilinear relationship between job stress and job performance was not borne by the data. Job stress was also not related to creativity and citizenship behaviors. Job satisfaction was related to

job performance ($\beta = .17, p < .002$; $\Delta R^2 = .02, F = 9.72, p < .002$), creativity ($\beta = .15, p < .007$; $\Delta R^2 = .02, F = 7.24, p < .007$), and OCBO ($\beta = .19, p < .001$; $\Delta R^2 = .03, F = 11.89, p < .001$). These findings support the earlier research in this area (e.g., Judge, Thoresen, Bono, & Patton, 2001; Organ & Ryan, 1995).

CHAPTER FIVE

5. DISCUSSION

5.1 Major Findings

5.1.1. Overview. In general, I found good support for many of the hypotheses. In all, twelve out of a total of thirty hypotheses were supported. Five of these were main effect hypotheses, six indicated two-way interactions between personality and job scope, and one indicated a three-way interaction among personality, job scope and dealing with others (DO). There were two significant findings that were contrary in direction to the hypotheses proposed. In addition, there were ten significant findings (mostly for agreeableness and openness to experience) that were not hypothesized. A summary of results pertaining to the hypotheses is provided in Table 35.

Two of the Big Five traits had a main effect on job satisfaction, explaining 7% of the variance in this work outcome. Both agreeables and extraverts reported higher job satisfaction. Conscientiousness and neuroticism were not related to job satisfaction. The presence of moderators in the relationship is one reason why a direct effect of these two traits failed to emerge. Moderated regression analyses testing the combined effects of personality and job scope on job satisfaction rendered seven significant interactions. Perceived scope interacted with agreeableness and neuroticism to affect job satisfaction. The interactions of peer-reported job scope with agreeableness and neuroticism were also significant. Among the three-way interactions with job scope and dealing with others (self- and peer reported) for neuroticism and extraversion, only one involving extraversion, self-reported job scope, and self-reported DO was significant.

Four of the Big Five personality dimensions, conscientiousness, extraversion, neuroticism, and openness to experience, had a significant relationship with job stress. These traits explained 11% of the variance in stress. With the exception of extraversion, job scope did not emerge as a moderator of the personality-job stress relationship. Probably, situational factors such as role conflict, role ambiguity, and role overload, which are established as stressors (Jackson & Schuler, 1985) would have been better choices as moderators of the association between personality and job stress. Another plausible reason for these null findings is that the relatively low reliabilities of the personality measures made the detection of significant product terms in moderated regression analysis difficult (Stone, 1988).

Two of the Big Five traits, conscientiousness and extraversion, were related positively to job performance, explaining 2% of its variance. No other trait from the Big Five had a direct relationship with job performance. Moderator analyses for self-reported job scope revealed significant terms for conscientiousness and agreeableness. Peer-reported job scope moderated the neuroticism – performance relationship. Three-way interactions of personality, job scope (self- and peer-reported), and dealing with others (self- and peer-reported) for neuroticism and extraversion were not significant.

None of the main effect hypotheses for OCBI was confirmed. Openness to experience was related to OCBI such that people high on this trait exhibited more helping behavior toward others. Distributive justice interacted with neuroticism, agreeableness, and openness to experience to affect OCBI. Voice interacted with neuroticism, extraversion, and openness to influence OCBI. Though the relationship of conscientiousness with OCBO was positive as expected, a finding that neurotic people

exhibit more OCBOs was very surprising and contrary to expectations. Neuroticism and voice had combined effects on OCBI and OCBO. Results concerning the moderating effects of justice perceptions in personality – OCBO relationship were generally disappointing. With exception of voice x neuroticism, none of the justice x personality interactions was significant for OCBO.

Hypotheses concerning the main effects of personality on creativity were not well supported in general. Only openness to experience was significantly related to creativity. The results show that people high on openness are more creative. However, results of the moderator analyses show that in the case of creativity, it is more useful to consider both individual and situational variables. Three significant personality x self-reported job scope interactions were observed for agreeableness, extraversion, and openness to experience. Three similar interactions for peer-reported job scope and personality were significant for extraversion, neuroticism, and openness to experience.

It was observed that, in general, job scope had stronger effects on outcomes as compared to personality. For example, plots of the significant personality x job scope interactions show that irrespective of the effects of personality, high job scope as compared to low scope was associated with higher job satisfaction, better job performance, creativity, and citizenship behaviors. Similarly, results show that high perceived justice led to higher OCBs as compared to low perceived justice. However, as was the case with job scope, the relationships varied for different personality traits.

The following sections discuss the findings of this study examining each trait at a time to facilitate clarity.

5.1.2. Neuroticism. Ten hypotheses were proposed for neuroticism, of which I found support for four. Neuroticism was not related to job satisfaction. Although Judge et al. (1997:171) argued that neuroticism "should display a direct, negative relationship to satisfaction, in addition to any indirect effects," an argument that was supported by Judge et al. (2002), the data in this study failed to support such a relationship. This may be attributed to the presence of moderators. People high on neuroticism are likely to be influenced more by circumstantial factors (e.g., situations and people) around them (Judge et. al., 1997). Being inversely related to self-esteem, neurotics are likely to exhibit more plasticity in attitudes and behaviors (Brockner, 1988). Therefore, it is possible that neurotics show a greater tendency of exhibiting changes in job satisfaction in response to situational cues.

Both perceived and peer-reported job scope interacted with neuroticism to influence job satisfaction. Figures 4 and 5 show that although job satisfaction was relatively high across all levels of neuroticism for high scope jobs (in comparison to low scope ones), it tended to decrease slightly as neuroticism increased. This relationship was not observed for low scope jobs; instead, job satisfaction increased with increasing neuroticism. This pattern of relationships not only corresponds to the JCM (Hackman & Oldham, 1980), but is also aligned with Tett and colleagues' idea of situation-trait relevance. That is, trait relevant cues define person-environment fit, which in turn influences trait – outcome relationships (Tett at al., 2003). For example, Kenrick and Funder (1988: 29) suggest that "Traits influence behaviors [and attitudes] only in relevant situations .... Anxiety, for example, shows up only in situations that the person finds threatening." This would suggest a mediating role of job stress in the relationship

between neuroticism and job satisfaction. However, a test for mediation was not possible using the present data because of the lack of a direct relationship between neuroticism and job satisfaction.

As expected, and in line with previous research (e.g., Gallangher, 1990; Penley & Tomaka, 2002), neuroticism was positively related to job stress, a finding that supports the argument that negative dispositional tendencies such as worry, mistrust, and anxiety lead to negative consequences such as depression and job stress (Judge et al., 1997). None of the interactions involving neuroticism and job scope (self- or peer-reported) was significant for job stress. As mentioned earlier, probably situational stressors such as role conflict, role overload, and role ambiguity would have been more relevant situational factors as compared to job scope.

A direct relationship between neuroticism and job performance was not borne out by the data. Barrick and Mount (1991) found that the neuroticism – performance relationship was unstable and varied among various occupational categories. Also, the unaccounted variance in the relationship between neuroticism and performance across studies was well above 25% in major meta-analytic studies (e.g., Barrick & Mount, 1991; Tett et al., 1991) suggesting the presence of moderators, which is supported by the results of the current study. Peer-reported job scope moderated the relationship between neuroticism and performance such that it was non-existent for high scope jobs, but positive for low scope jobs. In other words, when employees occupied high scope jobs, they performed consistently regardless of their level on neuroticism, but in low scope jobs, the performance of more neurotic employees improved relative to those low in neuroticism (see Figure 11). Once again, the situational trait-relevant cues concept (Tett

& Burnett, 2003) is supported by this finding. Although neuroticism has little effect on the positive outcomes of high job scope, the low performance associated with low job scope improves as neuroticism increases. The three-way interactions among neuroticism, job scope, and DO were not significant for satisfaction or performance. It is possible that the low reliabilities of personality traits and DO challenged the detection of significant three-way terms.

Although the literature on the dispositional causes of citizenship behaviors suggests a negative association between neuroticism and OCB (Organ & Konovsky, 1989), empirical support for such a relationship is not conclusive (Organ & Ryan, 1995). The hypothesized negative relationship between OCBI and neuroticism was not supported in this study. However, surprisingly, and contrary to expectations, neuroticism was positively related to OCBO. This suggests that individuals with high neuroticism exhibit helping behaviors directed toward the organization. One explanation is that neurotics indulge in such behaviors to compensate for their perceived lack of in-role performance. Helping a supervisor or giving advance notice when unable to come in might be seen as less cognitively demanding and a handy way to impress the boss as compared to achieving the same result by showing high in-role performance. Brockner's (1988) plasticity hypothesis suggests that neurotics, like low self-esteem individuals, are more conforming and their behavior is highly susceptible to peer group influence. It is possible that in a collectivist culture such as that of Pakistan, where showing loyalty and gratitude to one's boss is socially desirable, neurotics indulge in OCBO to conform to social norms regardless of their in-role performance.

Moderator analyses for the neuroticism – OCB relationship also revealed some very surprising results. Figure 14 shows that perceptions of distributive justice moderated the relationship between neuroticism and OCBI such that the relationship between neuroticism and OCBI was negative when perceived distributive justice was high, but was positive when distributive justice was low. It is possible that if neurotics have a perception that rewards are not being distributed fairly, they exhibit more OCBI to change their input versus outcome ratio without really showing any improvement in their in-role performance, which can be more difficult for them. Research shows that citizenship behaviors do influence supervisors' appraisals of employees (Allen & Rush, 1998). Perhaps neurotic individuals help others to change their impression on management so that it can lead to better rewards for them. Cropanzano et al. (2001: 184) suggested that "employees have at least some ability to distinguish those who treat them fairly from those who do not. .... A person may seek to build bridges with some, while seeking vengeance on others." Probably neurotics use behaviors like OCBI to build solidarity amongst their coworkers, so a collective voice can be used against the organization that has done them injustice.

Voice interacted with neuroticism in predicting OCBI and OCBO (see Figures 17 and 20). Once again, contrary to expectations and the general notion in literature, the negative relationship between neuroticism and OCBI was stronger when voice was low (Figure 17). Similarly, neuroticism had no relationship with OCBO when voice was high and was positively related to OCBO when voice was low (Figure 20). Voice or process control refers to the perceived control one has over the procedures that determine rewards and promotions in organizations. It is possible that neurotics when faced with an unfair

situation start being more helping toward others as an impression management technique. Similarly, the tendency of neurotics to exhibit OCBO when voice is low can be an effort of reaching out to managers. Confronted with a situation where neurotics believe that they have little or no say in the procedures adopted to arrive at salary increases and promotions, they exhibit more OCBs (both individually and organizationally directed) as relationship building measures so that they can have more say in the decision-making process pertaining to salary increases and promotions.

None of the interactions involving neuroticism and procedural justice was significant for OCBs. This is not surprising for two reasons. First, neuroticism is a socially-based trait (McCrae & John, 1992) and hence, voice or process control are more likely to be trait relevant cues for them as compared to perceptions of fair application of rules. Second, research shows that neurotic individuals form limited psychological contracts with an economic focus (Raja et al., 2004). Therefore, they are more likely to be susceptible to distributive fairness than procedural fairness.

Feist (1998) reported that neuroticism was negatively related to creativity. This main effect finding for neuroticism was not supported in the current study. It is possible that the neuroticism – creativity relationship is prominent only under specific situations, an assertion that is supported by the results of the moderator analysis. Although the self-reported job scope x neuroticism interaction failed to achieve significance, peer-reported job scope interacted with neuroticism in predicting creativity. Figure 21 shows that neuroticism was negatively related to creativity when peer-reported job scope was high and positively related to creativity when the job was rated as low in scope. Although creativity tends to decline slightly as neuroticism increases, this is the case only for high-

scope jobs. Therefore, the obtained results for performance and creativity highlight that neuroticism is not detrimental under all situations, an argument raised by Tett et al. (1999). This idea finds some indirect support in the literature. For example, George and Zhou (2002) found evidence of a positive relationship between bad mood, a correlate of neuroticism, and creativity.

5.1.3. Conscientiousness. Seven hypotheses were proposed for conscientiousness, of which I found support for three. Although conscientiousness is considered a strong predictor of job satisfaction (Judge et al., 2002), this study failed to failed to show such an effect. Moderator analysis revealed that conscientiousness interacted with self-reported job scope to predict job satisfaction. Figure 6 shows that job satisfaction was higher for high scope jobs as compared to low scope jobs. However, surprisingly, job satisfaction declined with increasing conscientiousness when job scope was high and it improved as conscientiousness increased when self-reported job scope was low. Conscientious people avoid uncertainty and have a high desire to be in control of situations (Goldberg, 1990). Probably, as the job scope increases, the increased complexity and relative uncertainty as compared to low scope jobs results in a decrease in job satisfaction for conscientious individuals. When the job is simple and it is easy to plan and control the situation, job satisfaction increases as a function of conscientiousness.

Similar to the findings of Penley and Tomaka (2002), conscientiousness was negatively related to job stress. This can be explained from both the person-environment fit perspective (French, 1963), and the demands versus control perspective (Karasek,

1979) of job stress. First, people with high conscientiousness make better career choices and choose jobs that fit their abilities, resulting in a better person – environment fit, leading to lower experienced job stress. Second, organizations recognize conscientious individuals as better performers and provide them with more resources and autonomy, which leads to low job stress. Further tests revealed that among the Big Five traits, conscientiousness ($\beta = .14, p < .01$) and extraversion ($\beta = .10, p < .05$) predicted reported job autonomy. Mediator analyses revealed that job autonomy had a weak partial mediation effect in the conscientiousness – stress relationship. Controlling for job autonomy, the effect size of conscientiousness decreased to -.12 ($p < .03$) from an independent effect size of -.16 ($p < .009$). Neither self-reported job scope nor peer-reported job scope moderated the relationship between conscientiousness and job stress. It seems that conscientious individuals are less influenced by changes in situational factors such as job complexity. Being task focused and high performers their job stress remains unaffected by the level of job complexity. Possibly, other factors such as managerial support or decision-making requirements of a job would provide situational cues relevant for conscientious individuals in the context of job stress.

Supporting the available meta-analytic findings in the literature (e.g., Barrick & Mount, 1991; Tett et al., 1991), conscientiousness was positively related to job performance. However, the relationship was much below the .20 level, suggesting that its strength is dependent on situational factors (Tett et al., 1999). As shown in Figure 12, conscientiousness and self-perceived scope had combined effects on job performance such that conscientious people exhibited higher performance when perceived scope was high. The relationship tended to be slightly negative when self-reported job scope was

low. These findings support the idea that conscientious people, being achievement oriented and high performers, view self-perceived complex jobs as an opportunity, and therefore perform better on such jobs. Simple and repetitive jobs do not provide them with challenge and opportunities for achievement, resulting in lowered job performance.

As expected, and in line with the findings in the available research (e.g., Organ & Ryan, 1995), conscientiousness was positively related to OCBO. This means that, being more concerned with task accomplishment and career advancement than economic rewards and interpersonal relationships (Stewart, 1996), conscientious people exhibit more helping behaviors directed toward the organization. However, the results of this study are unique in that conscientiousness was related to an independent peer measure of OCBO. Most studies examining personality in relation to OCB rarely use independent measures of OCB, and even the handful of studies that do so have found little support for this relationship (Organ & Ryan, 1995; Podsakoff, MacKenzie, Paine, & Backrach, 2000). As demonstrated in the present study, personality is likely to have differential relationships with OCBO and OCBI. Future research may benefit from distinguishing between individually and organizationally directed citizenship behaviors when examining this construct's association with personality.

The prediction concerning the joint effects of procedural justice and conscientiousness on OCBO was not supported. It is possible that people with high conscientiousness are more tolerant of small procedural injustices and hence have a high threshold for perceiving injustice. This is supported by the findings of Raja et al. (2004) who reported that conscientious people tend to form relational contracts and have a high threshold for perceived breach. In addition, the items for procedural justice asked

respondents to rate how fair the procedures were in deciding their promotions and salary increases. As conscientious people are more concerned with task accomplishment than economic gains (Stewart, 1996), their citizenship behaviors directed toward the organization were not influenced by perceived injustice in the procedures used to decide promotions and salary gains.

The hypothesis contending a negative relationship between conscientiousness and creativity was not borne by the data. Perhaps, attributes of conscientious individuals such as being planful, methodical, and task-focused are not as important in predicting creativity, as argued, and more narrow and focused traits are better suited for this purpose.

5.1.4. Extraversion. People with high extraversion reported high job satisfaction. This finding was a replication of earlier findings in the literature (e.g., Judge et al., 2002). The small effect size of the relationship between extraversion and job satisfaction ($\beta = .11, p < .04$) suggested the presence of moderators of this relationship. However, neither self-reported nor peer-reported job scope moderated this relationship. One potential reason for the lack of findings in this case could be that job scope combined with the social aspects of the job provides facilitating situational cues for extraverts. This argument is supported by significant three-way interactions among extraversion, self-reported job scope, and self-reported DO when job satisfaction was examined as the outcome.

As shown in Figure 9, when self-reported job scope was high, the extraversion – job satisfaction relationship was near zero. However, for low self-reported job scope,

extraversion was positively related to job satisfaction when DO was high and negatively when DO was low. Past research shows that extraverts perform better in job with high social content (e.g., Barrick & Mount, 1991). It seems that extraverts' desire for being with other people has an influence on their job satisfaction when the job is not challenging and internally satisfying. When a job is restrictive and does not provide opportunities for meeting other people, the situation becomes constraining for extraverts, evoking negative reactions such as low job satisfaction.

Individuals scoring high on extraversion reported lower job stress. This finding supports earlier research (Penley & Tomaka, 2002). Extraverted people, being highly social, have more social support available to them, which buffers against job stress or contributes directly to a low stress environment. Extraversion is positively related to PA, happiness, and positive emotions, which are all negatively related to job stress (DeNeeve & Cooper, 1998; Gallagher, 1990). In addition, extraverts are expected to be better performers and have better relationships with their peers and managers, providing them with better access to organization resources and more job autonomy, which leads to lower job stress. Extraversion was positively related to job autonomy ($\beta = .10, p < .05$). However, data failed to support a mediating role of job autonomy in the extraversion – stress relationship. Extraversion and peer-reported job scope had joint effects on job stress. Although reported stress was higher for high job scope, it declined as extraversion increased. The extraversion – stress relationship remained unaffected for low job scope. When self-reported job scope was low, extraverts experienced low stress.

Extraversion was positively related to job performance. Similar to the extraversion – job satisfaction relationship, none of the two-way interactions between

extraversion and job scope (self- and peer-reported) was significant in predicting job performance. Also, the three-way interactions among extraversion, job scope, and DO did not predict performance. However, results in Table 22 show that extraversion interacted with peer-reported DO to predict job performance. The combined effects of extraversion and DO on performance were such that extraverts performed better when DO was high. This finding supports earlier research suggesting a positive association between extraversion and performance in sales jobs (e.g., Barrick & Mount, 1991).

Extraversion was not related to OCBI. This means that the sociability and friendliness of extraverts does not lead to helping behavior toward others. It is possible that their relationship with colleagues is at a more personal and emotional level such that their support and help to friends is not tapped by the measures of OCBI. For example, extraverts might be more interested in helping a friend get access to a social club or to make arrangements for a party at home rather than helping him or her at work. This can be taken into consideration in future research and a measure can be developed that taps into the helping behavior people exhibit that does not constitute citizenship behaviors. None of the interactions involving extraversion and the different facets of justice was significantly related to OCBO. However, voice and extraversion had combined effects on OCBI. Extraverts exhibited higher OCBI when voice was high and lower OCBI when voice was low (see Figure 18). Evidently, when extraverts perceive that they have a say in the process that determines their salary increases and promotions, they reciprocate by exhibiting greater OCBIs.

The interactions between extraversion and both self- and peer-reported job scope had significant effects on creativity. Figures 22 and 23 show these interactions.

Consistent with the general findings regarding the effects of job scope on outcomes, high job scope resulted in higher levels of creativity in both cases. The impact of job scope on personality is most noticeable for introverts, because these individuals tend to be most creative in high scope jobs, and least in low scope jobs. Maintaining creativity on a job with increasing scope is, perhaps, more difficult for extraverts (who are generally talkative and sociable in nature), because of the greater concentration and focus required in such jobs. These same individuals, however, tend to be more creative than introverts in low scope jobs. Perhaps, extraverts tend to cope better with such situations than their introverted counterparts, resulting in increased creativity in low scope jobs.

5.1.5. Agreeableness. Agreeableness has a limited research history and generally weak relevance to attitudes and behaviors of interest in OB (Barrick & Mount, 1991; Judge & Bono, 2000; McCrae & Costa, 1997). My results also showed that as compared to other Big Five traits, agreeableness showed relatively weak relevance to variables of interest. For example, agreeableness was the only trait not related to job stress. Penley and Tomaka's (2002) results also showed that agreeableness was the only trait among the Big Five that was not related to perceived stress. Similar to the findings in available research (e.g., Organ & Ryan, 1995), agreeableness was also not related to any of the dimensions of OCB. It was especially disappointing to note that agreeableness did not relate to OCBI, which theoretically is one of its most natural and obvious correlates. This finding might be related to easy-going and laid-back nature of agreeables. Citizenship behaviors usually require initiative and energy, and perhaps agreeable individuals do not feel the urge to put in that extra effort and energy that leads to OCBs.

Although meta-analytic evidence does not support a relationship between agreeableness and job satisfaction (Judge et al., 2000), results of this study provide consistent evidence for a positive relationship between agreeableness and job satisfaction. In addition, this trait interacted with self- and peer-reported job scope in predicting job satisfaction. An examination of the interactions (see Figures 7 and 8) suggests, overall, that individuals low in agreeableness are most suitably-placed in high scope jobs. However, the relatively weak, almost null, relationship between agreeableness and job satisfaction in high scope jobs suggest that such jobs are not overly detrimental to the satisfaction of highly agreeable persons. It seems that low scope jobs are more conducive to the passive tendencies of agreeables (Judge & Cable, 1997), resulting in them feeling more satisfied in such jobs compared to those low in agreeableness.

Similar to the findings of Barrick and Mount (1991) and Fiest (1998), agreeableness was not related to job performance and creativity. However, the interaction between agreeableness and self-reported job scope was significant in predicting job performance and creativity. The interaction effects for job performance were such that agreeable persons exhibited high performance when self-reported job scope was low, and they tended to show poor performance when self-reported job scope was high (see Figure 13). Judge and Cable (1997) found that agreeable persons are more attracted to supportive cultures and less attracted to aggressive, outcome oriented, and decisive cultures. Someone who prefers such situations would dislike challenging situations created by high job scope. Therefore, it is possible that being passive and easy going, agreeable individuals perform better when their job is simple and less challenging. Figure 24 shows that interaction effects of agreeableness and self-reported job scope on

creativity were very similar to those for job satisfaction. People high in agreeableness were more creative when job scope was high, but creativity declined as agreeableness increased. For low scope jobs the low creativity improved with increasing agreeableness.

Distributive justice interacted with agreeableness to predict OCBI. As shown in Figure 15, the agreeableness – OCBI relationship was positive when perceived distributive justice was low and negative when perceived distributive fairness was high. Agreeable persons are described by adjectives such as friendly, cooperative, selfless, and altruistic (McCrae & John, 1992). They are considered to have a giving nature and be low in equity sensitivity, that is, they are not disturbed if they perceive their own input to outcome ratio to be less than others people in the organization. It seems that these qualities of agreeable persons come into play when distributive fairness is low and the negative impact of injustice declines for people high on agreeableness.

5.1.6. Openness to experience. Similar to the findings of Judge et al. (2002), openness to experience was not related to job satisfaction. However, openness to experience was related to job stress, OCBI, and creativity. Penley and Tomaka (2002) reported a negative association between openness and perceived stress. Contrary to their finding, my results show that people scoring high on openness to experience tend to perceive high job stress. Openness had neither direct nor combined effects with job scope on job performance. It seems that characteristics such as being artistic, thrill seeking, and open to new experiences have little to do with in-role performance.

Although Organ and Ryan (1995) did not find a relationship between openness and citizenship behaviors, results of this study show that openness is positively related to

OCBI. In addition, openness to experience interacted with distributive justice and voice to predict OCBI. As shown in Figure 16, open individuals exhibited higher levels of OCBI when perceived distributive justice was high. They were less inclined to help others if they perceived distributive injustice. Similarly, voice moderated the positive relationship between openness and OCBI such that it was stronger when voice was high (Figure 19). When open individuals perceive that their input is considered while deciding their promotions and salary increases, they tend to exhibit more individually directed citizenship behaviors. The results show that people high on openness to experience, being more creative, are willing to help others to create an environment where they can share information and work with others to come up with new ideas. When open individuals think that their organization is fair in the distribution of rewards and they have a say in the procedures that determine their promotions and salary increases, they are even more helping to others for improved innovation and creativity.

As expected and established in earlier research (Feist, 1998), openness to experience was positively related to creativity. The results show that not only do open individuals tend to be more creative, but also their creativity behavior is susceptible to contextual influences produced by the nature of job. Figures 25 and 26 show that both self- and peer-reported job scope moderated the relationship between openness and creativity in way that there was almost no relationship between openness to experience and creativity when job scope was low and a positive relationship existed between the two when job scope was low. Interestingly, less open individuals were most creative when job scope was high and least creative when job scope was low. This finding is contrary to expectations and difficult to explain. Probably, when the situation itself

demands creativity (i.e., high job scope), an open person does not see a lot of room for being more creative and hence his or her creativity remains unaffected. However, a person with high openness to experience work harder to make the best out of the situation that in itself does not guide a creative behavior (i.e., low job scope). Overall, results for openness to experience are quite encouraging, suggesting that this trait deserves greater attention in future research.

5.2 Limitations

One of the issues that deserves attention is the relatively low reliabilities of the personality and job stress measures. Low reliabilities can severely undermine the possibility of finding significant interactions in moderated regressions (Stone, 1988). The results of an earlier study conducted in Pakistan (Raja et al., 2004) showed that the reliabilities of the personality dimensions using the NEO FFI were not very high (i.e., less than .80). In order to achieve better reliabilities I decided to use the BFI, which has items that are shorter and easier to understand as compared to NEO-FFI items (Benet-Martinez & John, 1998). However, reliabilities of various measures suggest that the difficulty or simplicity of instruments did not play a big role in influencing measure reliabilities. Most of the personality measures, developed and validated in North America or Europe, have rarely been applied in countries such as Pakistan, India, or Bangladesh. It is possible that there are cultural manifestations in the expression of self which make the use of the Big Five measures, developed mostly in the US, relatively less reliable in Pakistan. For example, the mean score for agreeableness was much higher than the norms reported for this trait by Benet-Martinez and John (1998). In a collectivist

culture where a religion that values collectivism and discourages individualism plays a central role in shaping norms and values, people may be more inclined to report being more agreeable due to social influences. Also, items such as "I am a person who has an assertive personality" would be susceptible to social biases in a culture where being assertive is seen as highly undesirable. However, overall, the reliabilities, despite being low, were acceptable, and the results did not show any sign that would signal a problem or a threat to the results of the study.

Similarly, the low reliability of the job stress measure can perhaps be attributed to cultural influence. In a culture where seeking help for psychological problems is considered a sign of weakness and dysfunction, acknowledging feeling stressed on the job might be seen as a sign of weakness or failure. This makes acknowledging being stressed socially undesirable resulting in a distorted response for the job stress measure in which most report low job stress. Despite the low reliability of the job stress measure, the results for this dependent variable were all in the expected direction, with no unusual findings.

Hackman and Oldham (1975) reported a median correlation of .65 between self- and peer-reported measures of job scope and .61 for the two measures of dealing with others. In this study, these correlations were .42 and 43. Although Hackman and Oldham (1975) contended that employees were able to provide rather accurate descriptions of the characteristics of their jobs, this issue has remained controversial in the literature. Fried and Ferris (1987) in their meta-analysis reported a median correlation of .54 between JDS and JRF measures of job scope. The results of factor analysis showed the same factor structure for both the JDS and the JRF indicating that both measures were similar. In

addition, regression analyses clearly showed that both self- and peer-reported job scope had similar relationships with the dependent variables and these relationships corresponded closely to those reported by Fried and Ferris (1987). Similar to the meta-analytic findings of Fried and Ferris (1987), the JDS showed stronger associations with self-reported outcomes such as job satisfaction, and the JRF had stronger relationships with peer-reported outcomes such as performance and creativity. This could potentially be indicative of common method bias. Fried and Ferris (1987) concluded that the problems potentially associated with self- rated data are less serious than initially believed and that their review increased the confidence in the substance of such data at least for job design.

5.3 Implications for Research

Despite the tremendous growth of research on personality and work in the past fifteen years, the interactionist perspective has largely been ignored in the literature. The biggest contribution of this study is that it addresses this weakness by shedding light on the contextual parameters that can help us enhance the usefulness of Big Five traits in predicting personal and organizational outcomes of interest.

This study contributes to the interactionist perspective, which calls for studying the joint effects of person and situation on behaviors. The detection of simultaneous multiple moderation effects controlling for other variables is very difficult using regression analysis. No study to the best of my knowledge has ever examined the moderating role of job scope on the relationship between the Big Five traits and personal and organizational outcomes.

The use of independent measures of in-role performance, OCBs, creativity, and job scope rule out some problems associated with method or response bias, adding further strength and credibility to the results. A field study with 383 paired responses (self- and peer-reports) with respondents belonging to a wide variety of occupational groups, levels, and organizations, is very rare in OB. Also, the use of a range of personal and organizational outcomes simultaneously has provided a unique opportunity for exploring how the Big Five map on to them. For example, the results show that, as commonly believed, neuroticism is not bad under all circumstances and results in improving performance when job scope is low. Similarly, the results demonstrate how important the social aspects of a job are for extroverts. In line with available research in the area, three of the Big Five traits, namely neuroticism, conscientiousness, and extraversion, emerged as stronger and more consistent predictors of all outcomes. Although agreeableness did not generally emerge as an important predictor of attitudes and behaviors, the results for openness to experience were very encouraging. The obtained significant effects of openness to experience on job stress, creativity, and OCBI will not only improve our understanding of this trait but also help direct future researchers in developing better theoretical and empirical models. The results of this study clearly indicate that openness to experience should get more attention in empirical research in the future.

Future research should focus on developing more elaborate models similar to the one examined in this study. The inclusion of other situational factors at the group and organizational level can direct focus to the person – situation fit issue. For example, exploring how organizational structure or group pressures influence the personality – outcomes relationship can result in useful and interesting findings. As the interactions of

the Big Five and job scope did not prove very useful in predicting job stress, considering other situational factors such role conflict, role demands, and resource availability might prove much more useful in examining the effects of person and situation on job stress. In the future collecting data from North America with the same instrument will help compare the trends in the two cultures and explore how similar or different they are with regard to personal and organizational outcomes studied.

Another area that requires attention in the future is the use of narrow traits along with broad personality factors to determine their relative importance as predictors. For example, Raja et al. (2004) studied how personality influenced the type of contract people form and the dispositional sources of perceived breach and felt violation. They considered the Big Five traits along with narrower traits such as equity sensitivity, locus of control, and self-esteem. Such studies on one hand allow researchers to explore the relative usefulness of the Big Five against narrower traits. On the other hand, such research can provide useful insights into the interactions among the Big Five and narrow traits. Examining interactions among the Big Five and the narrower traits such as self-esteem or equity sensitivity can be especially useful in future research. For example, one could explore how the attitudes and behaviors of extraverts with high equity sensitivity differ from extraverts with low equity sensitivity. Similarly, examining interactions among the Big Five traits can also be fruitful area of research. For example, investigating the interactive effects of conscientiousness and extraversion on personal and organization outcomes can help us understand how conscientious people with better social skills would behave in organizations. In addition, longitudinal design studies will also help

examine the influence of time on the strength of a predictor thought to influence personal and organizational outcomes.

To conclude, the interactionist view of personality has not received deserved attention from researchers in recent years. I provide some empirical evidence for the usefulness of job scope, social aspects of the job, and justice perceptions in enhancing the predictive capacity of personality variables, opening new possibilities for research in this area.

5.4 Implications for Managers

General cognitive ability tests are used by HR professionals for selection and placement decisions. Hough and Oswald (2000) argued that although general cognitive ability predicts outcomes such as job knowledge acquisition, training performance, and job proficiency well, it is less useful for prediction in less complex jobs or in later stages of complex learning. Similarly, Gellatly et al. (1991) reported that personality measures predicted variance in some criteria not accounted for by cognitive ability predictors. Results of this study indicate that the Big Five taxonomy can be a useful predictor of performance in such conditions in order to facilitate various managerial decisions.

Findings of this study can improve the decisions of managers in a variety of human resource areas – selection, promotion, development and succession planning. Negative stereotypes about neuroticism portray this trait as undesired and bad in all circumstances. The findings of this study clearly show that in certain situations neuroticism can be a useful trait as compared to other personality types. For example, results show that while low job scope results in low job satisfaction and performance in

general, its negative effects on outcomes are less for people high on neuroticism as neuroticism is positively related to satisfaction and performance when job scope is low. The results indicate that managers can improve the utility of enriched jobs by ensuring a better PE fit while choosing individuals for jobs (e.g., promotion decisions). Managers should develop systems that take into consideration both personal and situational factors in improving employee satisfaction and performance.

Managers can also select individuals depending on the outcome desired. Hough and Oswald (2000) suggested that conscientious individuals may not do well in situations requiring high levels of creativity. This could not be confirmed or rejected solely on the basis of the present findings. Results show that job satisfaction resulting from high job scope declines as conscientiousness increases. This indicates that maximum benefits can be achieved by placing conscientious people in jobs that provide them with a clear growth path and entail moderately complex jobs. For example, they might be more suited for maintenance engineering departments as compared to design and product development sections. Similarly, if managers want improved performance on restrictive and simple jobs they should try to place people high on agreeableness and neuroticism on such jobs. For jobs entailing significant social aspects (e.g., public relations or customer service) extraverts can be a better choice.

Tokar, Fischer, and Subich (1998) reviewed the literature on vocational behavior and personality and found that personality did shape individual career choices. Findings from this study can similarly aid managers in succession planning decisions. Perhaps some individuals can be developed and directed toward certain career paths, to improve P-E fit. For example, managers could direct extraverts toward career paths that provide

moderately challenging jobs with high social content. Similarly, they could assign agreeables and neurotics to paths that provide simple jobs.

Even though research suggests the utility of personality as a predictor in selection and placement processes, managers should be aware of some important issues. Kichuk and Wiesner (1998) argued that HR managers need to ensure that personality tests do not discriminate against ethnic/minority groups. Thus, managers have to keep in mind the legal considerations when incorporating personality tests for placement and promotion decisions. They need to ensure identified personality criteria for certain jobs are subject to the same legal standards as other selection procedures. More studies like this one can help fulfill this requirement by identifying the conditions under which certain personality characteristics are important to organizational outcomes.

5.5 Conclusion

Despite some of the limitations of the present study, the results do provide answers to the larger questions posed in the introduction: *who* is most likely to produce certain outcomes and *when*? Given the large number of outcomes examined in this study, these questions can be answered in relation to a variety of different outcomes and situational factors. In addition, the explicit examination of and findings pertaining to agreeableness and openness to experience, factors that have been relatively ignored in comparison to the other Big Five, attests to the utility of these traits in accounting for organizational behavior. Taken together, the design characteristics of this study and its findings contribute to an improved understanding of person-environment fit.

Table 1. One-way analysis of variance for all dependent variables across organizations

Dependent Variable		Sum of Squares	df	Mean Square	F	Sig.
Job Satisfaction	Between Groups	22.523	10	2.252	2.468	.007
	Within Groups	338.641	371	.913		
	Total	361.164	381			
Job Stress	Between Groups	38.390	10	3.839	6.102	.000
	Within Groups	233.424	371	.629		
	Total	271.815	381			
Job Performance	Between Groups	13.746	10	1.375	4.405	.000
	Within Groups	115.783	371	.312		
	Total	129.529	381			
OCBI	Between Groups	7.203	10	.720	1.560	.117
	Within Groups	171.288	371	.462		
	Total	178.491	381			
OCBO	Between Groups	21.329	10	2.133	5.069	.000
	Within Groups	156.100	371	.421		
	Total	177.429	381			
Creativity	Between Groups	46.811	10	4.681	3.048	.001
	Within Groups	571.383	372	1.536		
	Total	618.194	382			

Table 2a. Means, standard deviations, correlations, and reliabilities for the main variables of interest in this study

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. Agreeableness	4.28	.62	(.70)																				
2. Conscientiousness	3.91	.59	.45	(.72)																			
3. Extraversion	3.34	.63	.06	.20	(.69)																		
4. Neuroticism	2.57	.66	-.22	-.48	-.21	(.70)																	
5. Openness	3.80	.59	.34	.36	.31	-.25	(.72)																
6. Job scope (self)	5.05	.73	.25	.34	.28	-.22	.35	(.79)															
7. Job scope (peer)	4.96	.70	.04	.14	.06	-.03	.14	.42	(.80)														
8. Self-reported DO	5.83	1.06	.16	.20	.22	-.06	.20	.39	.23	(.62)													
9. Peer-reported DO	5.66	1.02	.08	.12	.19	-.03	.13	.23	.47	.43	(.60)												
10. Creativity	4.83	1.27	.03	.08	.04	-.02	.20	.18	.58	.14	.48	(.88)											
11. Distributive justice	3.01	1.17	.08	.16	.08	.00	.09	.19	.20	.17	.21	.19	(.91)										
12. Procedural Justice	3.05	1.02	.05	.10	.13	.00	.09	.24	.20	.21	.28	.24	.54	(.80)									
13. Voice	2.35	.98	-.21	-.04	.11	-.01	.04	.11	.08	.04	.10	.10	.27	.31	(.76)								
14. Job satisfaction	5.02	.97	.22	.21	.16	-.13	.20	.43	.21	.27	.14	.18	.22	.21	.09	(.80)							
15. Job stress	2.54	.84	-.03	-.21	-.12	.31	.06	-.19	-.08	-.05	.04	.01	.02	.09	.07	-.17	(.62)						
16. Job performance	4.20	.58	.06	.16	.11	-.02	.06	.19	.44	.21	.35	.42	.30	.25	.07	.18	-.12	(.76)					
17. OCBI	3.57	.68	.06	.12	.05	-.09	.17	.07	.30	.06	.30	.42	.14	.20	.09	.05	-.01	.43	(.76)				
18. OCBO	3.97	.68	.03	.13	.03	.02	.10	.19	.38	.22	.36	.42	.30	.26	.10	.17	-.03	.66	.38	(.70)			
19. Age	35.38	9.32	-.04	.07	-.09	-.04	-.06	.16	.17	-.03	-.04	.07	.00	.00	.07	.05	-.10	.03	.04	.12	-		
20. Tenure	9.46	7.89	-.10	.06	-.04	-.13	-.05	.11	.11	-.08	-.08	.08	-.07	-.07	.11	.05	-.16	.03	.05	.09	.84	-	
21. Gender	1.07	.26	.02	.00	.06	.12	-.01	.02	.04	.10	.03	.01	.00	.08	-.04	.04	.03	.12	-.09	-.04	-.18	-.14	-

Note: N = 383; alpha reliabilities given in parentheses; for gender 1 = male, 2 = female; DO = dealing with others.

$p < .05$ at $r \geq .10$.

Table 2b. Means, standard deviations, correlations, and reliabilities for self- and peer-reported job scope dimensions

		Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	**Job Scope (self-reported)**	**5.05**	**0.73**	**(.79)**															
2	Autonomy	4.89	1.20	.66	(.60)														
3	Feedback from others	4.82	1.21	.64	.27	(.67)													
4	Feedback from job	5.17	1.01	.67	.25	.43	(.49)												
5	Skill variety	5.10	1.01	.62	.38	.25	.25	(.59)											
6	Task identity	4.77	1.17	.61	.32	.23	.28	.21	(.52)										
7	Task significance	5.54	1.10	.64	.28	.23	.43	.31	.26	(.62)									
8	Dealing with others	5.83	1.06	.39	.36	.21	.24	.24	.14	.32	(.62)								
9	**Job Scope (peer-reported)**	**4.96**	**0.70**	.42	.41	.16	.20	.33	.22	.30	.23	**(.80)**							
10	Autonomy	4.85	1.13	.34	.42	.08	.12	.25	.21	.20	.27	.66	(.61)						
11	Feedback from others	4.91	1.16	.15	.13	.18	.11	.07	-.02	.10	.07	.53	.14	(.68)					
12	Feedback from job	5.04	1.00	.31	.26	.14	.28	.23	.06	.24	.19	.69	.32	.37	(.50)				
13	Skill variety	4.85	1.21	.30	.32	.07	.09	.41	.14	.10	.13	.62	.41	.11	.37	(.70)			
14	Task identity	4.60	1.09	.15	.11	-.01	-.02	.11	.29	.09	.00	.54	.26	.11	.16	.24	(.51)		
15	Task significance	5.32	1.25	.33	.27	.10	.18	.23	.16	.33	.19	.64	.37	.12	.38	.43	.22	(.67)	
16	Dealing with others	5.66	1.02	.23	.26	.14	.11	.16	.05	.14	.43	.47	.30	.22	.32	.41	.05	.46	(.60)

Note: $N = 383$; alpha reliabilities given in parentheses

$p < .01$ at $r \geq .10$.

Table 3. Regression analysis for the main effects of personality on job satisfaction

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.08***	
Step 2:			
Agreeableness	.13*		
Conscientiousness	.07		
Extraversion	.11*		
Neuroticism	-.04		
Openness to experience	.08	.15***	.07***

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 4. Regression analysis for the main effects of personality on job stress

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.12***	
Step 2:			
Agreeableness	-.02		
Conscientiousness	-.16**		
Extraversion	-.11**		
Neuroticism	.21***		
Openness to experience	.16**	.23***	.11***

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 5. Regression analysis for the main effects of personality on job performance

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.09***	
Step 2:			
Agreeableness	.01		
Conscientiousness	.11*		
Extraversion	.12*		
Neuroticism	.06		
Openness to experience	.00	.11***	.02**

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 6. Regression analysis for the main effects of personality on OCBI

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.03†	
Step 2:			
Agreeableness	-.01		
Conscientiousness	.06		
Extraversion	.02		
Neuroticism	-.02		
Openness to experience	.14**	.06**	.03*

Note: $N = 383$; control variables are age, tenure, gender, and organization.

†$p < .10$.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 7. Regression analysis for the main effects of personality on OCBO

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.10***	
Step 2:			
Agreeableness	-.04		
Conscientiousness	.10*		
Extraversion	.04		
Neuroticism	.10*		
Openness to experience	.09†	.12***	.02†

Note: $N = 383$; control variables are age, tenure, gender, and organization.

†$p < .10$.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 8. Regression analysis for main effects of personality on creativity

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.04*	
Step 2:			
Agreeableness	-.05		
Conscientiousness	.00		
Extraversion	-.02		
Neuroticism	.01		
Openness to experience	.22***	.08**	.04*

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 9. Regression analysis showing the moderating effects of self-reported job scope on the relationship between personality and job satisfaction

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.08***	
Step 2:			
Agreeableness (A)	.09		
Conscientiousness (C)	.02		
Extraversion (E)	.04		
Neuroticism (N)	-.02		
Openness to experience (O)	.01		
Self-reported Job Scope (JS_S)	1.71***		
JS_S squared	-1.33**	.28***	.20***
Step 3:			
A x JS_S	-1.18*		
C x JS_S	-1.03†		
E x JS_S	-.53		
N x JS_S	-.66*		
O x JS_S	.93	.30***	.02**

Note: $N = 383$; control variables are age, tenure, gender, and organization.

†$p < .10$.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 10. Regression analysis showing the moderating effects of peer-reported job scope on the personality - job satisfaction relationship

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.08***	
Step 2:			
Agreeableness (A)	.14**		
Conscientiousness (C)	.05		
Extraversion (E)	.10*		
Neuroticism (N)	-.46		
Openness to experience (O)	.05		
Peer-reported Job Scope (JS_P)	.18***	.18***	.10***
Step 3:			
A x JS_P	-1.08*		
C x JS_P	-.12		
E x JS_P	.43		
N x JS_P	-.95**		
O x JS_P	-.57	.21***	.03*

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 11. Regression analysis testing the combined effects of self-reported job scope and self-reported DO on the neuroticism-job satisfaction relationship

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.08***	
Step 2:			
Neuroticism (N)	-.05		
Self-reported Job Scope (JS_S)	1.63***		
JS_S squared	-1.24**		
Self-reported Dealing with others (DO_S)	.10*	.28***	.20***
Step 3:			
JS_S x DO_S	-1.26**		
N x JS_S	-.29		
N x DO_S	.31	.30***	.02**
Step 4 :			
N x JS_S x DO_S	.74	.30***	.00

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 12. Regression analysis testing the combined effects of peer-reported job scope and peer-reported DO on the neuroticism-job satisfaction relationship

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.08***	
Step 2:			
Neuroticism (N)	-.14**		
Peer-reported Job Scope (JS_P)	.19***		
Peer-reported Dealing with others (DO_P)	.03	.14***	.06***
Step 3:			
JS_P x DO_P	-.68		
N x JS_P	-.97**		
N x DO_P	.72*	.16***	.02**
Step 4 :			
N x JS_P x DO_P	-1.50	.16***	.00

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 13. Regression analysis testing the combined effects of self-reported job scope and self-reported DO on the extraversion-job satisfaction relationship

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.08***	
Step 2:			
Extraversion (E)	.03		
Self-reported Job Scope (JS_S)	1.64***		
JS_S squared	-1.26**		
Self-reported Dealing with others (DO_S)	.10*	.28***	.20***
Step 3:			
JS_S x DO_S	-1.76***		
E x JS_S	-.06		
E x DO_S	.72*	.30***	.02**
Step 4 :			
E x JS_S x DO_S	-4.84*	.31***	.01*

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 14. Regression analysis testing the combined effects of peer-reported job scope and peer-reported DO on the extraversion-job satisfaction relationship

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.08***	
Step 2:			
Extraversion (E)	.13**		
Peer-reported Job Scope (JS_P)	.19***		
Peer-reported Dealing with others (DO_P)	-.00	.14***	.06***
Step 3:			
JS_P x DO_P	-.77		
E x JS_P	.56		
E x DO_P	-.15	.15***	.01
Step 4 :			
E x JS_P x DO_P	-2.01	.15***	.00

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 15. Regression analysis showing moderating effects of self-reported job scope on the personality - job stress relationship

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.12***	
Step 2:			
Agreeableness (A)	-.01		
Conscientiousness (C)	-.15**		
Extraversion (E)	-.08*		
Neuroticism (N)	.20***		
Openness to experience (O)	.18		
Self-reported Job Scope (JS_S)	-1.47**		
JS_S squared	1.32**	.26***	.14***
Step 3:			
A x JS_S	.53		
C x JS_S	.55		
E x JS_S	-.24		
N x JS_S	.13		
O x JS_S	-.23	.27***	.01

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 16. Regression analysis testing peer-reported job scope as moderator of the personality - job stress relationship

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.12***	
Step 2:			
Agreeableness (A)	-.03		
Conscientiousness (C)	-.16*		
Extraversion (E)	-.11***		
Neuroticism (N)	.22***		
Openness to experience (O)	.17**		
Peer-reported Job Scope (JS_P)	-.07	.24***	.12***
Step 3:			
A x JS_P	.82		
C x JS_P	-.43		
E x JS_P	-.89*		
N x JS_P	-.58		
O x JS_P	-.66	.26***	.02**

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 17. Moderated regression analysis for self-reported job scope as a moderator of the relationship between personality and job performance

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.09***	
Step 2:			
Agreeableness (A)	.00		
Conscientiousness (C)	.09		
Extraversion (E)	.09		
Neuroticism (N)	.07		
Openness to experience (O)	-.03		
JS_S	.13*	.13***	.04*
Step 3:			
A x JS_S	-1.80**		
C x JS_S	1.50*		
E x JS_S	.65		
N x JS_S	.09		
O x JS_S	-.74	.16***	.03*

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 18. Moderated regression analysis for peer-reported job scope as a moderator of the relationship between personality and job performance

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.09***	
Step 2:			
Agreeableness (A)	.03		
Conscientiousness (C)	.08		
Extraversion (E)	.10*		
Neuroticism (N)	.05		
Openness to experience (O)	-.06		
Peer-reported job scope (JS_P)	.40***	.26***	.17***
Step 3:			
A x JS_P	-.48		
C x JS_P	-.78		
E x JS_P	-.42		
N x JS_P	-1.30**		
O x JS_P	.62	.28***	.02*

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 19. Regression analysis for the combined effects of self-reported job scope and dealing with others on the neuroticism-job performance relationship

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.09***	
Step 2:			
Neuroticism (N)	.05		
Self-reported Job Scope (JS_S)	1.62***		
JS_S squared	-1.24**		
Self-reported Dealing with others (DO_S)	.10*	.28***	.17***
Step 3:			
JS_S x DO_S	-1.26**		
N x JS_S	-.29		
N x DO_S	.31	.30***	.02**
Step 4 :			
N x JS_S x DO_S	.74	.30***	.00

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 20. Regression analysis showing the combined effects of peer-reported job scope, neuroticism, and dealing with others on job performance

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.08***	
Step 2:			
Neuroticism (N)	-.14**		
Peer-reported Job Scope (JS_P)	.19***		
Peer-reported Dealing with others (DO_P)	.03	.14***	.06***
Step 3:			
JS_P x DO_P	-.68		
N x JS_P	-.97**		
N x DO_P	.72*	.16***	.02*
Step 4:			
N x JS_P x DO_P	-1.49	.16***	.00

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 21. Regression analysis testing the combined effects of self-reported job scope, dealing with others, and extraversion on job performance

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.09***	
Step 2:			
Extraversion (E)	.07		
Self-reported Job Scope (JS_S)	.09		
Self-reported Dealing with others (DO_S)	.14**	.14***	.05***
Step 3:			
JS_S x DO_S	-.66		
E x JS_S	.69		
E x DO_S	.11	.14***	.00
Step 4 :			
E x JS_S x DO_S	.45	.14***	.00

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 22. Regression analysis testing the combined effects of peer-reported job scope, dealing with others, and extraversion on job performance

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.09***	
Step 2:			
Extraversion (E)	.07		
Peer-reported Job Scope (JS_P)	.33***		
Peer-reported Dealing with others (DO_P)	.16**	.27***	.18***
Step 3:			
JS_P x DO_P	-1.73***		
E x JS_P	.01		
E x DO_P	1.07**	.31***	.04***
Step 4:			
E x JS_P x DO_P	-2.01***	.31***	.00

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 23. Results Regression analysis for distributive justice as a moderator of the personality – OCBI relationship

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.03	
Step 2:			
Agreeableness (A)	.01		
Conscientiousness (C)	.06		
Extraversion (E)	-.00		
Neuroticism(N)	-.01		
Openness to experience (O)	.13*		
Distributive Justice (JUS_D)	.12*	.07**	.04*
Step 3:			
A x JUS_D	-.78†		
C x JUS_D	-.31		
E x JUS_D	-.47		
N x JUS_D	-.50*		
O x JUS_D	1.12**	.10**	.03*

Note: $N = 383$; control variables are age, tenure, gender, and organization.

†$p < .10$.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 24. Regression analysis for procedural justice as a moderator of the personality – OCBI relationship

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.04	
Step 2:			
Agreeableness (A)	.02		
Conscientiousness (C)	.07		
Extraversion (E)	-.02		
Neuroticism (N)	.01		
Openness to experience (O)	.14*		
Procedural Justice (JUS_P)	.22***	.11***	.07***
Step 3:			
A x JUS_P	.35		
C x JUS_P	-.47		
E x JUS_P	-.23		
N x JUS_P	-.25		
O x JUS_P	.29	.11***	.00

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 25. Regression analysis for voice as moderator of the personality – OCBI relationship

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.03	
Step 2:			
Agreeableness (A)	.01		
Conscientiousness (C)	.07		
Extraversion (E)	.00		
Neuroticism (N)	-.01		
Openness to experience (O)	.13*		
Voice	.08	.07**	.04*
Step 3:			
A x Voice	-.47		
C x Voice	-.61		
E x Voice	.47†		
N x Voice	-.43*		
O x Voice	.60†	.10**	.03*

Note: $N = 383$; control variables are age, tenure, gender, and organization.

†$p < .10$.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 26. Regression analysis for distributive justice as a moderator of the personality – OCBO relationship

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.09***	
Step 2:			
Agreeableness (A)	-.04		
Conscientiousness (C)	.09		
Extraversion (E)	.02		
Neuroticism (N)	.10*		
Openness to experience (O)	.08		
Distributive Justice (JUS_D)	.25***	.16***	.07***
Step 3:			
A x JUS_D	.18		
C x JUS_D	-.36		
E x JUS_D	-.40		
N x JUS_D	-.23		
O x JUS_D	-.16	.17***	.01

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 27. Regression analysis for procedural justice as a moderator of the personality – OCBO relationship

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.10***	
Step 2:			
Agreeableness (A)	-.05		
Conscientiousness (C)	.13*		
Extraversion (E)	.01		
Neuroticism (N)	.12*		
Openness to experience (O)	.09		
Procedural Justice (JUS_P)	.26***	.18***	.08***
Step 3:			
A x JUS_P	.04		
C x JUS_P	-.67		
E x JUS_P	-.07		
N x JUS_P	-.20		
O x JUS_P	-.55	.19***	.01

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 28. Regression analysis for voice as a moderator of the personality – OCBO relationship

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.09***	
Step 2:			
Agreeableness (A)	-.04		
Conscientiousness (C)	.12*		
Extraversion (E)	.03		
Neuroticism (N)	.10		
Openness to experience (O)	.09		
Voice	.10*	.12***	.03*
Step 3:			
A x Voice	-.27		
C x Voice	-.22		
E x Voice	-.04		
N x Voice	-.50*		
O x Voice	.01	.13***	.01

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 29. Regression analysis for self-reported job scope as a moderator of the relationship between personality and creativity

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.04*	
Step 2:			
Agreeableness (A)	-.06		
Conscientiousness (C)	-.02		
Extraversion (E)	-.04		
Neuroticism (N)	.01		
Openness to experience (O)	.18		
Self-reported Job Scope (JS_S)	-.92†		
JS_S squared	1.05*	.10***	.06**
Step 3:			
A x JS_S	-1.09*		
C x JS_S	.41		
E x JS_S	1.06*		
N x JS_S	-.09		
O x JS_S	-1.09†	.13***	.03†

Note: $N = 383$; control variables are age, tenure, gender, and organization.

†$p < .10$.

*$p < .05$.

**$p < .01$.

***$p < .01$.

Table 30. Regression analysis showing peer-reported job scope as a moderator of the relationship between personality and creativity

Predictors	β	R^2	ΔR^2
Step 1:			
Controls		.04*	
Step 2:			
Agreeableness (A)	-.03		
Conscientiousness (C)	-.05		
Extraversion (E)	-.04		
Neuroticism (N)	-.01		
Openness to experience (O)	.14**		
Peer-reported job scope (JS_P)	.57***	.38***	.34***
Step 3:			
A x JS_P	.21		
C x JS_P	-.43		
E x JS_P	-.74*		
N x JS_P	-.64*		
O x JS_P	-1.00*	.40***	.02*

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 31. Regression analyses showing the main effects of self- and peer-reported job scope on all dependent variables

	Dependent Variables											
	Job Satisfaction		Job Stress		Job Performance		OCBI		OCBO		Creativity	
Predictors	β	$R^2/\Delta R^2$	β	$R^2/\Delta R^{22}$	β	$R^2/\Delta R^2$	β	$R^2/\Delta R^2$	β	$R^2/\Delta R^2$	β	$R^2/\Delta R^2$
Model 1:												
Step 1:												
Controls		.08***		.12***		.09***		.03†		.10***		.04*
Step 2:												
Job scope (Self-reported)	.44***	.26 / .18***	-.20***	.04***	.16**	.12 / .03**	.08	.03 / .00	.16**	.12 / .02**	.15**	.06 / .02**
Model 2:												
Step 1:												
Controls		.08***		.12***		.09***		.03†		.10***		.04*
Step 2:												
Job scope (Peer-reported)	.21***	.12 / .04***	-.08	.12 / .00	.41***	.25 / .16***	.31***	.12 / .09***	.34***	.21 / .11***	.59***	.07 / .03***

Note: $N = 383$; control variables are age, tenure, gender, and organization.

†$p < .10$.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 32. Regression analysis showing the relative main effects of self-reported and peer reported job scope on all dependent variables

	Dependent Variables											
	Job Satisfaction		Job Stress		Job Performance		OCBI		OCBO		Creativity	
Predictors	β	$R^2/\Delta R^2$	β	$R^2/\Delta R^2$	β	$R^2/\Delta R^2$	β	$R^2/\Delta R^2$	β	$R^2/\Delta R^2$	β	$R^2/\Delta R^2$
Step 1:												
Controls		.08***		.12***		.09***		.03†		.10***		.04*
Step 2:												
Job scope (Self-reported)	.42***		-.20***		.00		-.06		.02		.09	
Job scope (Peer-reported)	.04	.26 / .18***	.01	.16 / .04***	.41***	.25 / .16***	.34***	.13 / .10***	.33***	.21 / .11***	.62***	.35 / .31***

Note: $N = 383$; control variables are age, tenure, gender, and organization.

†$p < .10$.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 33. Regression analyses for the main effects of the three justice dimensions on all dependent variables using different equations

	Dependent Variables											
	Job Satisfaction		Job Stress		Job Performance		OCBI		OCBO		Creativity	
Predictors	β	$R^2/\Delta R^2$	β	$R^2/\Delta R^2$	β	$R^2/\Delta R^2$	β	$R^2/\Delta R^2$	β	$R^2/\Delta R^2$	β	$R^2/\Delta R^2$
Model 1:												
Step 1: Controls		.08***		.12***		.09***		.03		.09***		.05*
Step 2: Voice	.00	.09 / .01	.09	.00	.09	.09 / .00	.08	.04 / .01	.11*	.10 / .01*	.09	.06 / .01
Model 2:												
Step 1: Controls		.08***		.12***		.09***		.03		.09***		.05*
Step 2: Procedural Justice	.16**	.10 / .02**	-.03	.00	.24***	.14 / .05***	.23***	.07 / .04***	.27***	.15 / .06***	.26***	.10 / .05***
Model 2:												
Step 1: Controls		.08***		.12***		.09***		.03		.09***		.05*
Step 2: Distributive Justice	.19***	.11 / .03***	-.11*	.01*	.29***	.16 / .07***	.13*	.04 / .01*	.26***	.15 / .06***	.18**	.08 / .03**

Note: $N = 383$; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 34. Summary Regression analyss for the main effects of distributive and procedural justice on all dependent variables in a single equation

	Dependent Variables											
	Job Satisfaction		Job Stress		Job Performance		OCBI		OCBO		Creativity	
Predictors	β	R^2 / ΔR^2	β	R^2 / ΔR^2	β	R^2 / ΔR^2	β	R^2 / ΔR^2	β	R^2 / ΔR^2	β	R^2 / ΔR^2
Step 1:												
Controls		.08***		.12***		.09***		.03		.09***		.05*
Step 2:												
Procedural Justice	.09		.02		.14*		.21***		.19**		.23***	
Distributive Justice	.15**	.14 / .06***	-.10	.13 / .01	.21***	.17 / .08***	.03	.07 / .04***	.16**	.16 / .07***	.06	.11 / .06***

Note: N = 383; control variables are age, tenure, gender, and organization.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 35. Summary of findings pertaining to proposed hypotheses

Hyp.	IV	Dir.	DV	Moderator(s)	Result
1	N	-	Job satisfaction	JS	Confirmed
2		-	Job satisfaction	JS + DO	Not confirmed (ns)
3		+	Job stress	None	Confirmed
4		+	Job stress	JS	Not confirmed (ns)
5		-	Job performance	JS	Confirmed
6		-	Job performance	JS + DO	Not confirmed (ns)
7		-	OCBI	None	Not confirmed (ns)
8		-	OCBO	DJ	Not confirmed (ns)
9		-	Creativity	None	Not confirmed (ns)
10		-	Creativity	JS	Confirmed
11	C	+	Job satisfaction	JS	Not confirmed, opposite effects observed
12		-	Job stress	None	Confirmed
13		-	Job stress	JS	Not confirmed (ns)
14		+	Job performance	JS	Confirmed
15		+	OCBO	None	Confirmed
16		+	OCBO	PJ	Not confirmed (ns)
17		-	Creativity	None	Not confirmed (ns)
18	E	+	Job satisfaction	JS	Not confirmed (ns)
19		+	Job satisfaction	JS + DO	Confirmed
20		-	Job stress	None	Confirmed
21		-	Job stress	JS	Confirmed
22		+	Job performance	JS	Not confirmed (ns)
23		+	Job performance	JS + DO	Not confirmed (ns)
24		+	OCBI	None	Not confirmed (ns)
25		+	OCBO	DJ	Not confirmed (ns)
26		+	Creativity	None	Not confirmed (ns)
27		+	Creativity	JS	Confirmed
28	A	+	OCBI	None	Not confirmed (ns)
29	O	+	Creativity	None	Confirmed
30		+	Creativity	JS	Not confirmed, opposite effect observed

Note: Hyp. = Hypothesis; IV = Independent variable; DV = Dependent variable; Dir. = Direction of relationship; N = neuroticism; C = Conscientiousness; E = Extraversion; A = Agreeableness; O = Openness to experience; JS = Job scope; DO = Dealing with others; DJ = Distributive justice; PJ = Procedural justice

FIGURE 1

Curvilinear relationship between self-reported job scope and job satisfaction

FIGURE 2

Curvilinear relationship between self-reported job scope and job stress

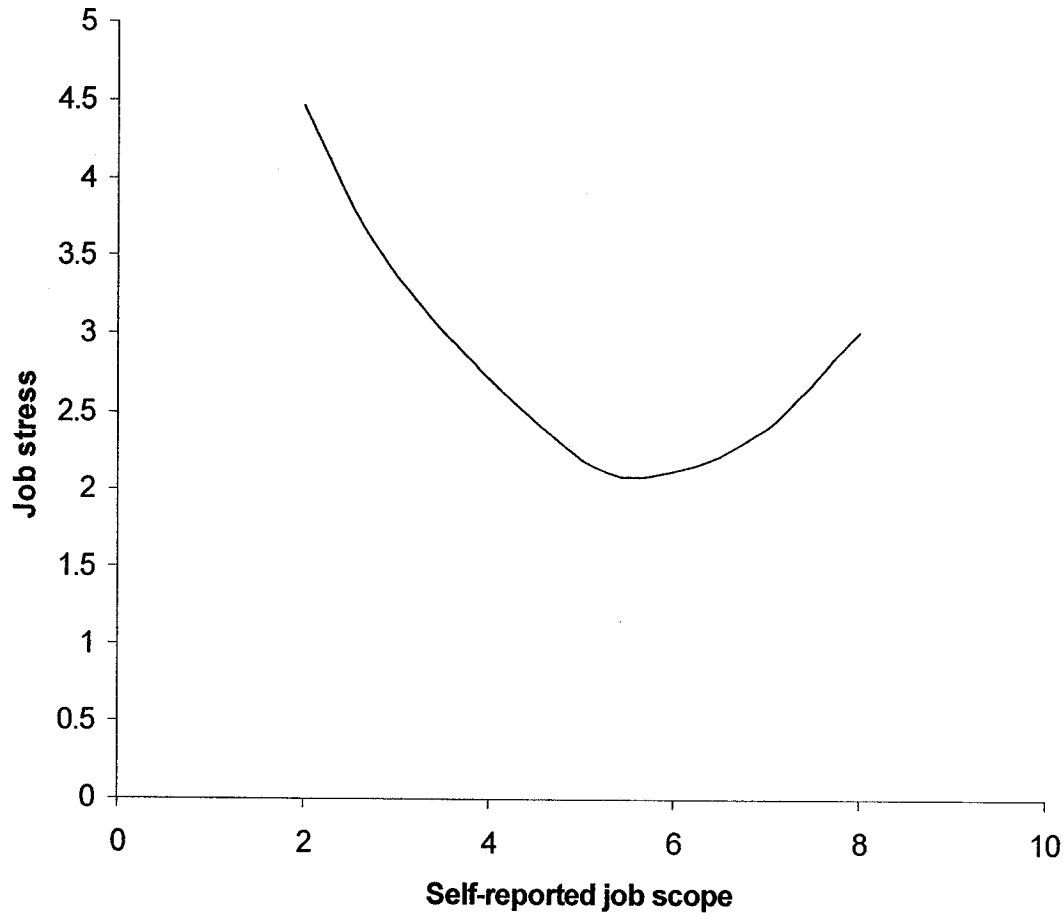


FIGURE 3

Curvilinear relationship between self-reported job scope and creativity

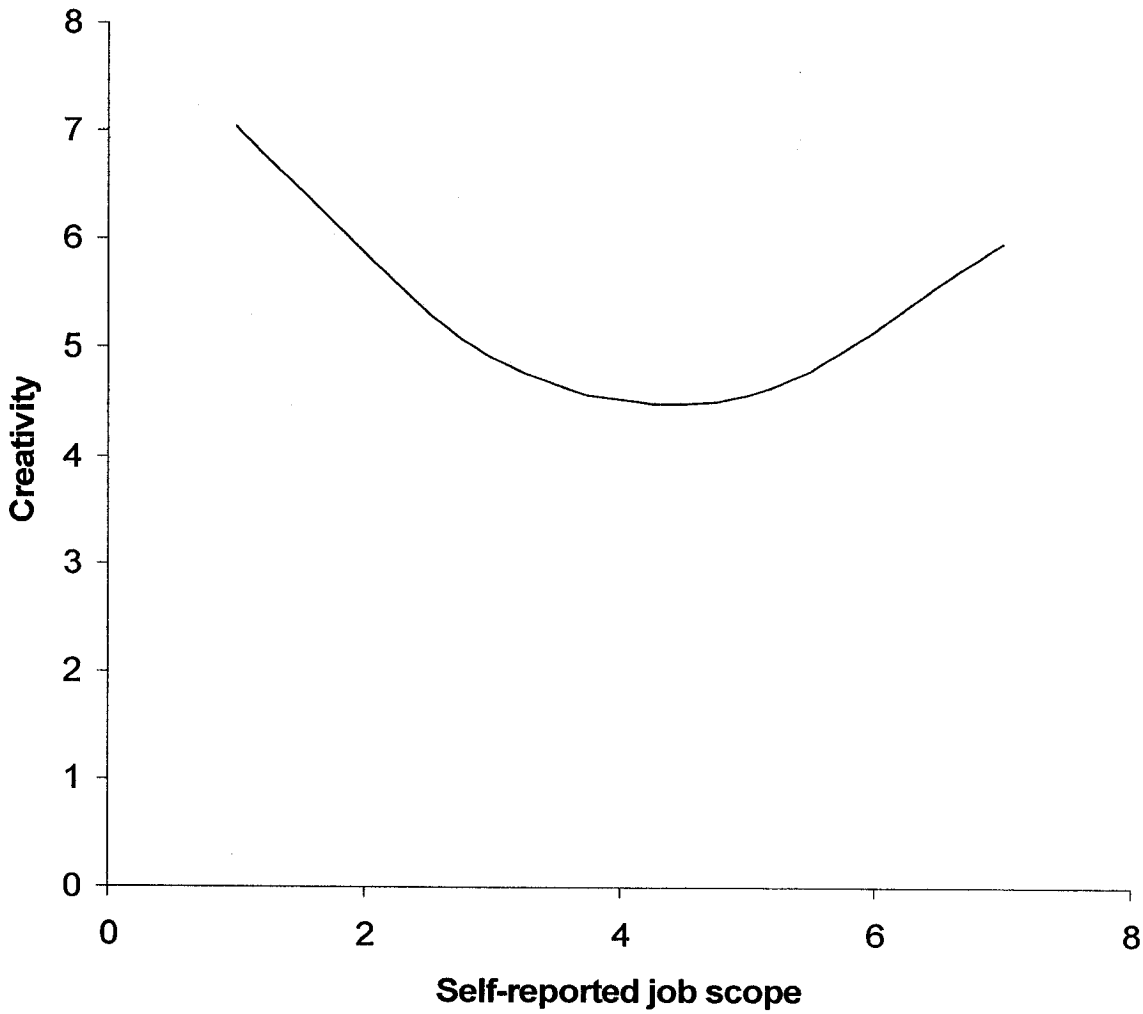


FIGURE 4
Moderating effects of self-reported job scope on the neuroticism – job satisfaction relationship

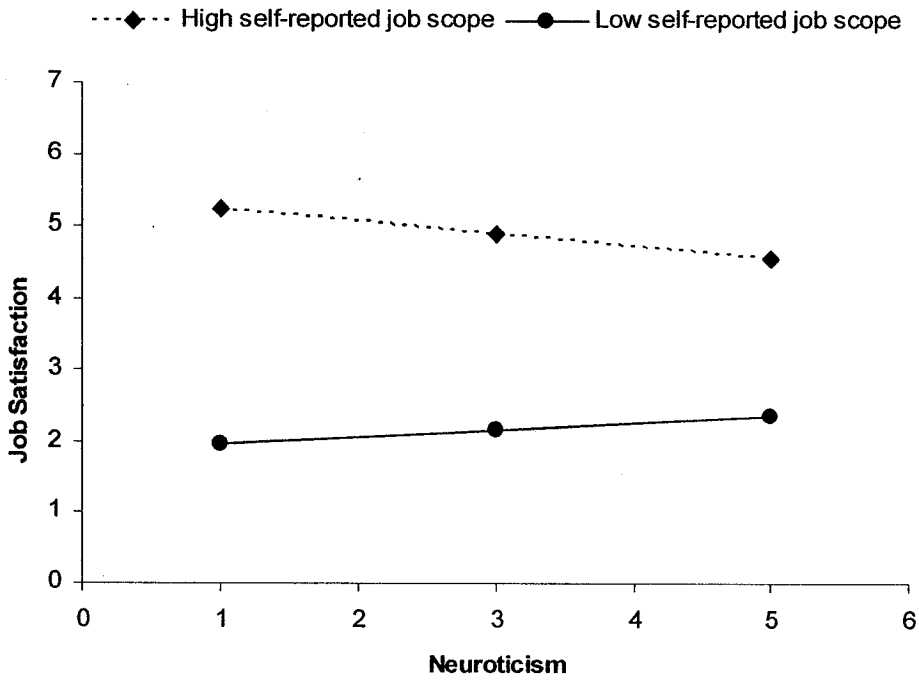


FIGURE 5
Moderating effects of peer-reported job scope on the neuroticism – job satisfaction relationship

FIGURE 6
Moderating effects of self-reported job scope on the relationship between conscientiousness and job satisfaction

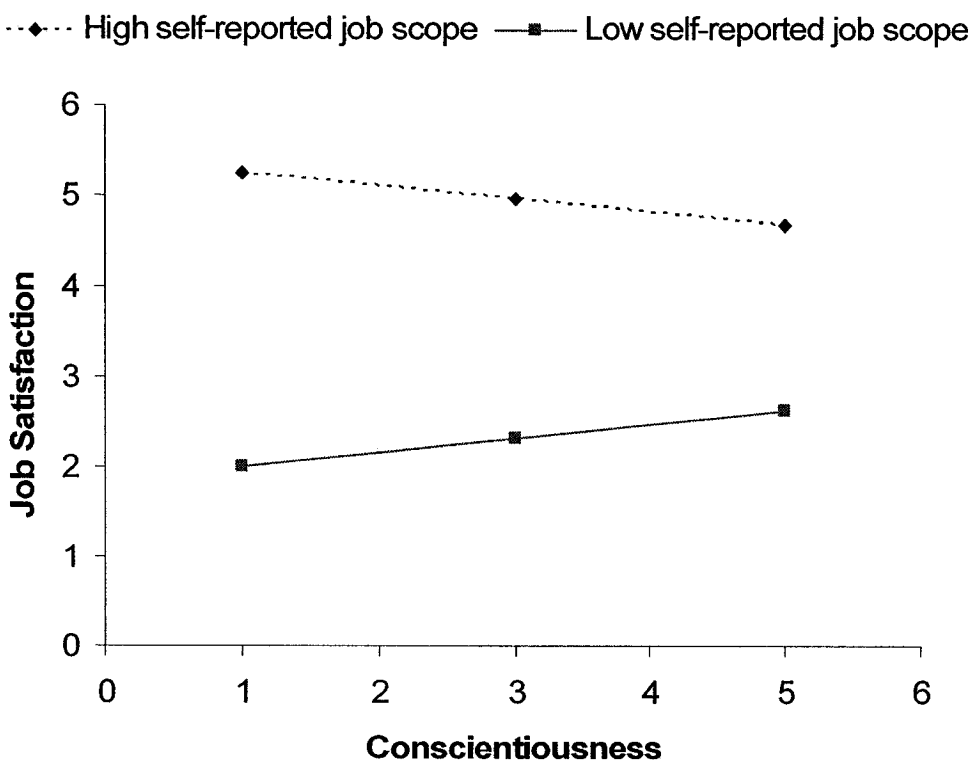


FIGURE 7
Moderating effects of self-reported job scope on the relationship between agreeableness and job satisfaction

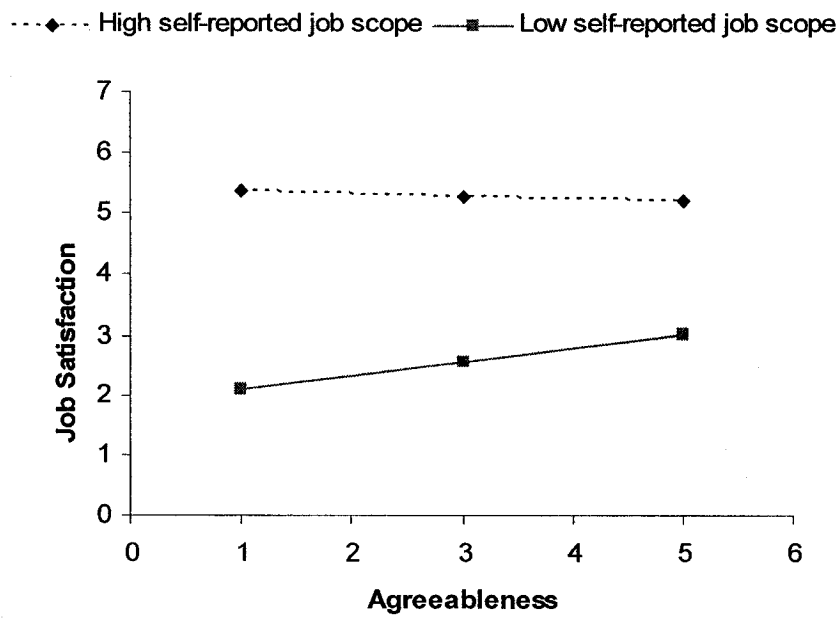


FIGURE 8
Moderator effects of peer-reported job scope on the agreeableness-job satisfaction relationship

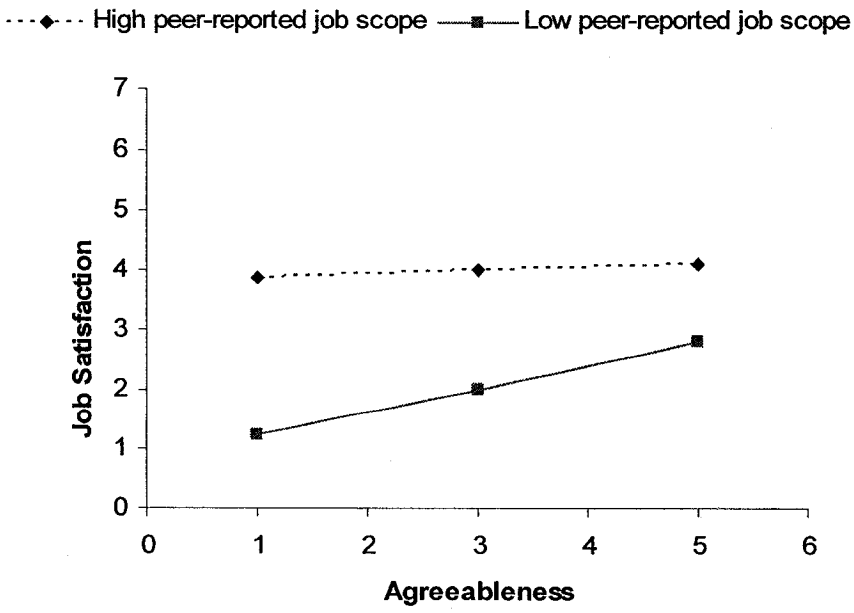


FIGURE 9

Combined effects of self-reported job scope, DO, and extraversion on job satisfaction

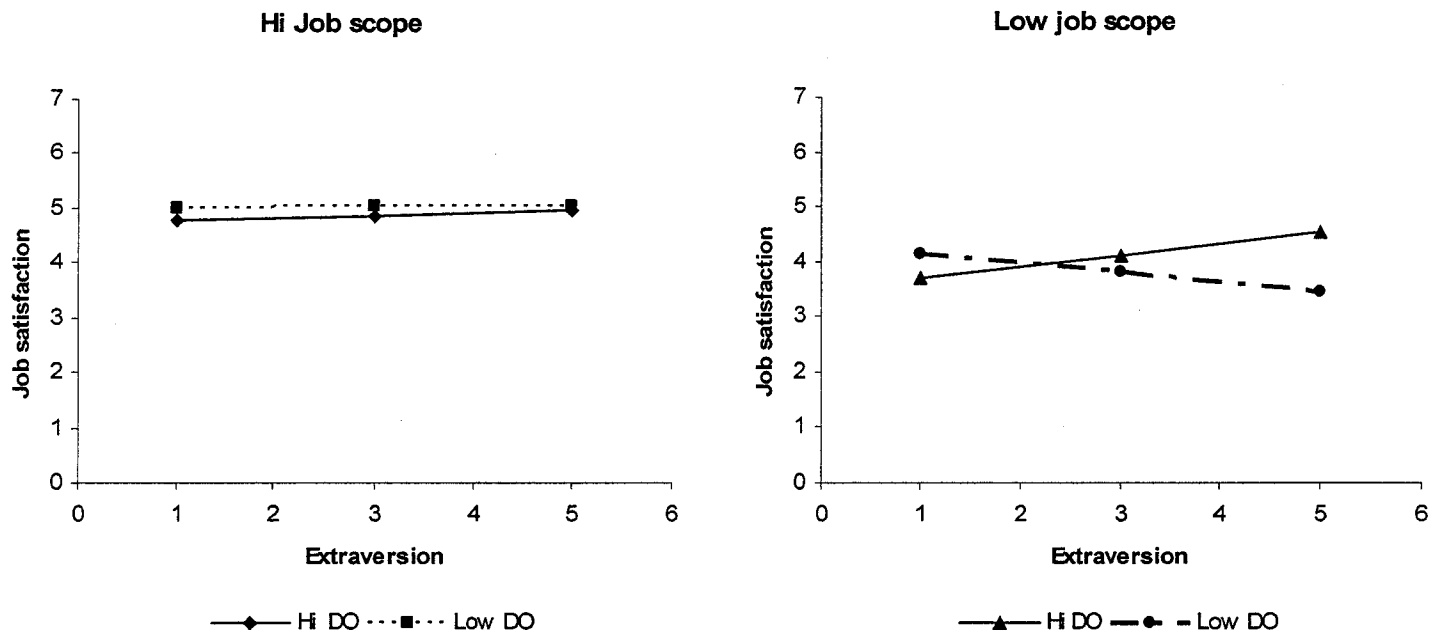


FIGURE 10

Peer-reported job scope as a moderator of the relationship of extraversion to job stress

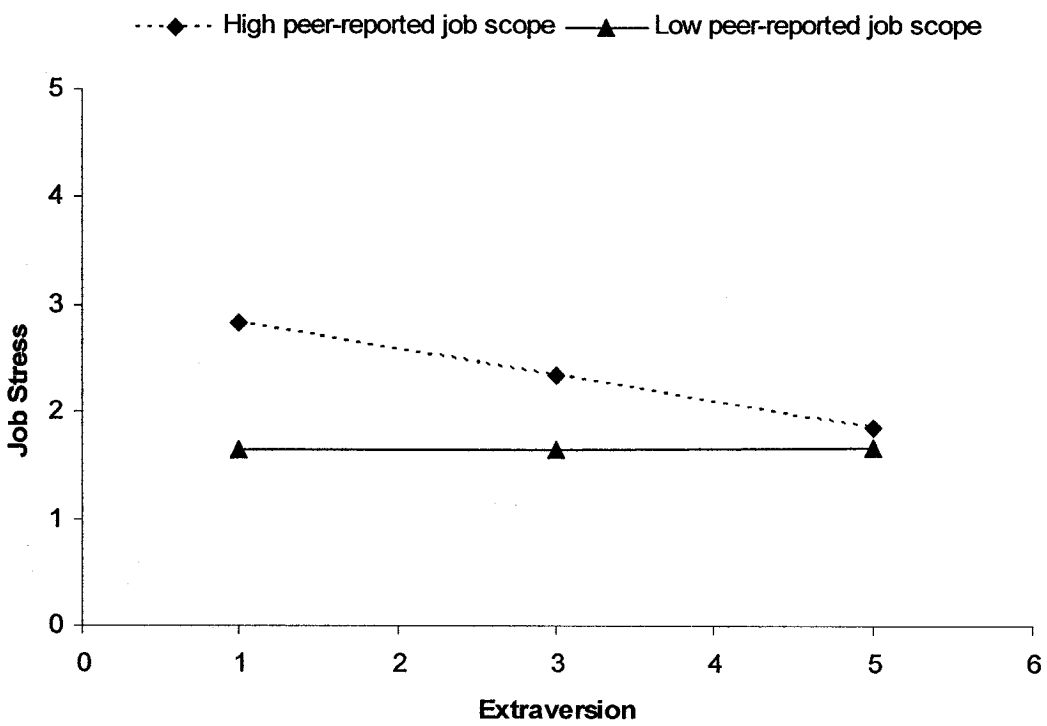


FIGURE 11

Interaction effects of neuroticism and peer-reported job scope on job performance

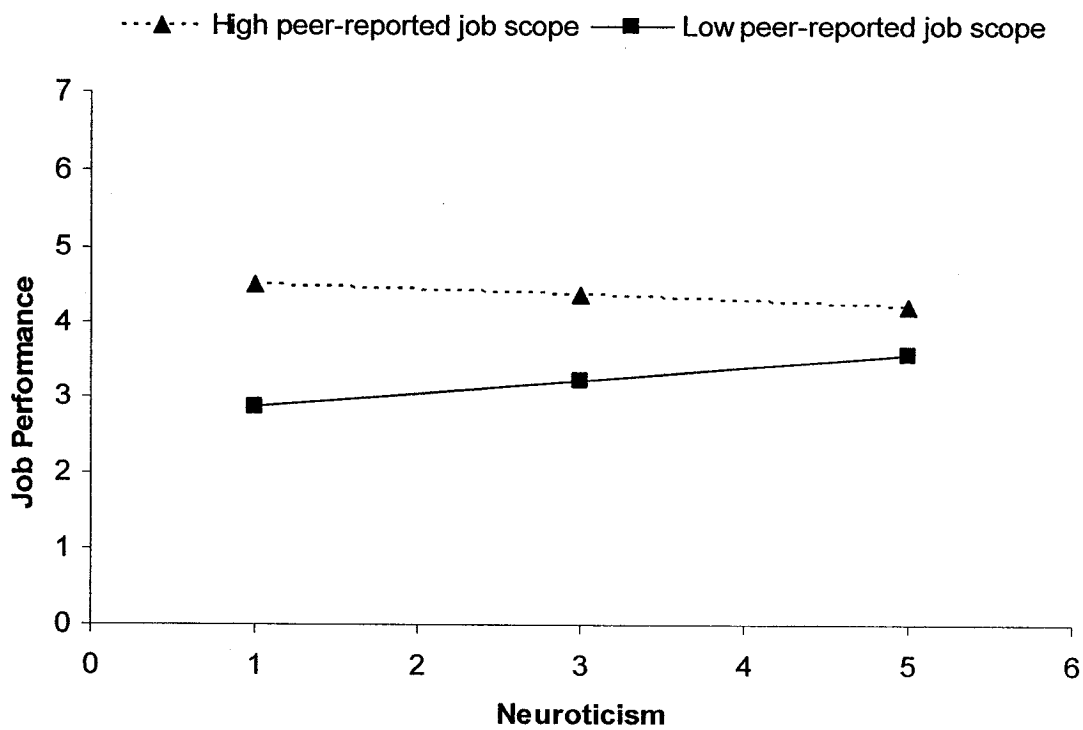


FIGURE 12

Combined effects of conscientiousness and self-reported job scope on job performance

FIGURE 13

Combined effects of agreeableness and self-reported job scope on job performance

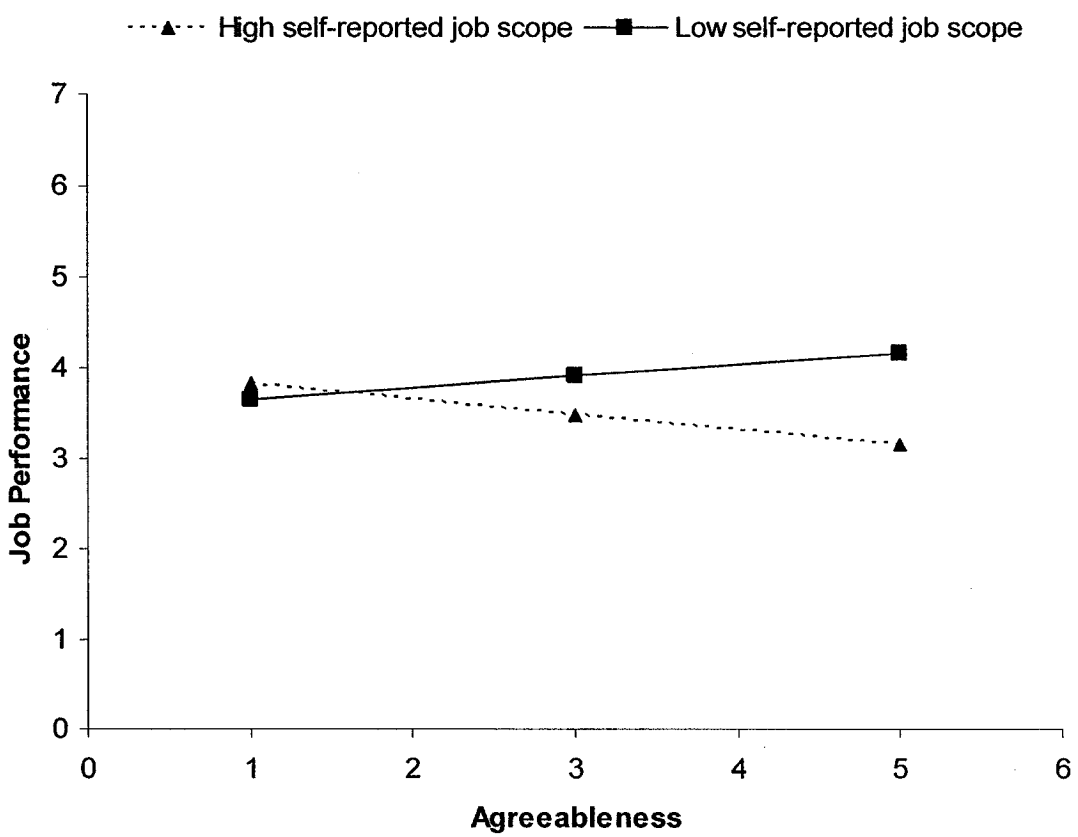


FIGURE 14

Moderating effects of perceived distributive justice on the neuroticism-OCBI relationship

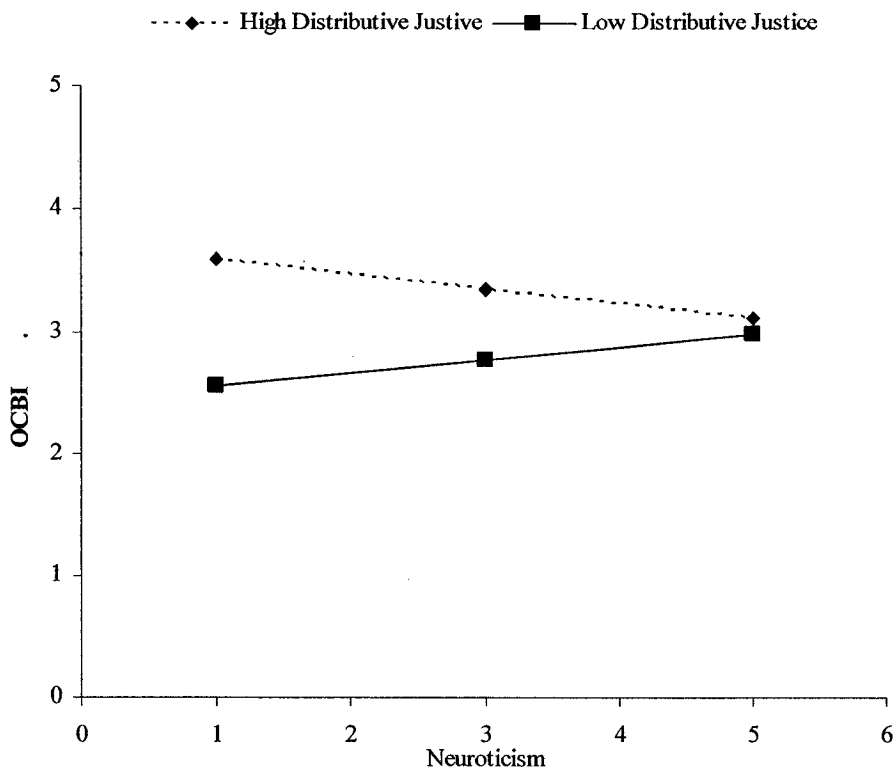


FIGURE 15

Moderating effects of perceived distributive justice on the agreeableness-OCBI relationship

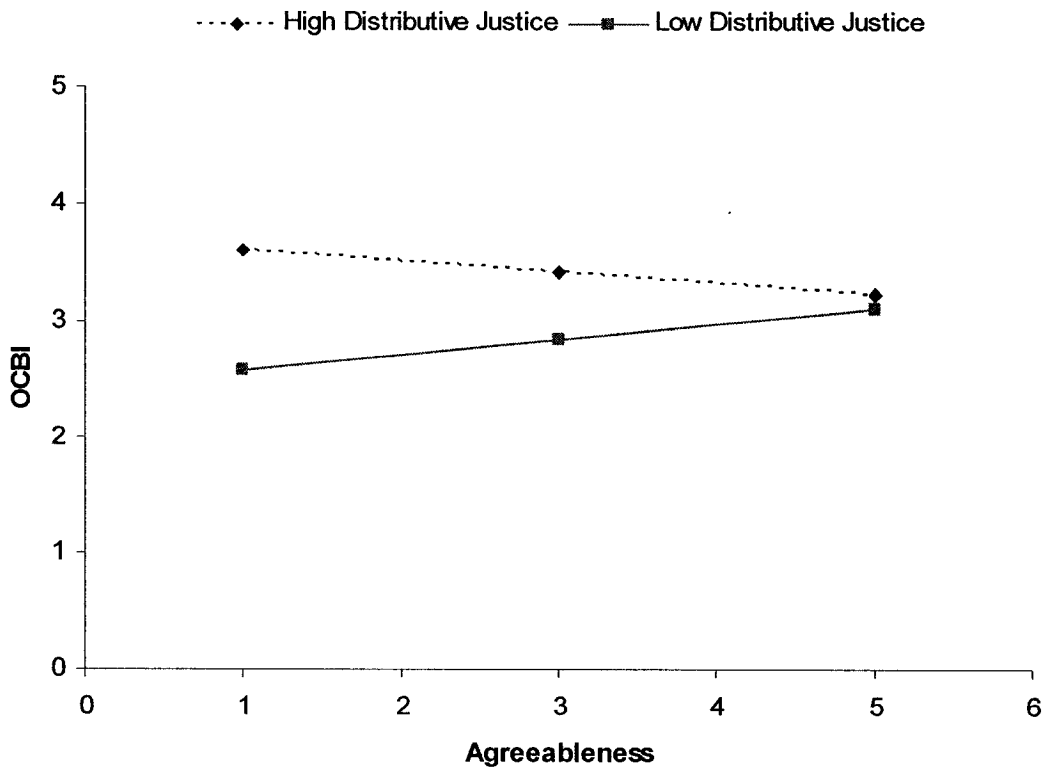


FIGURE 16

Combined effects of openness to experience and perceived distributive justice on OCBI

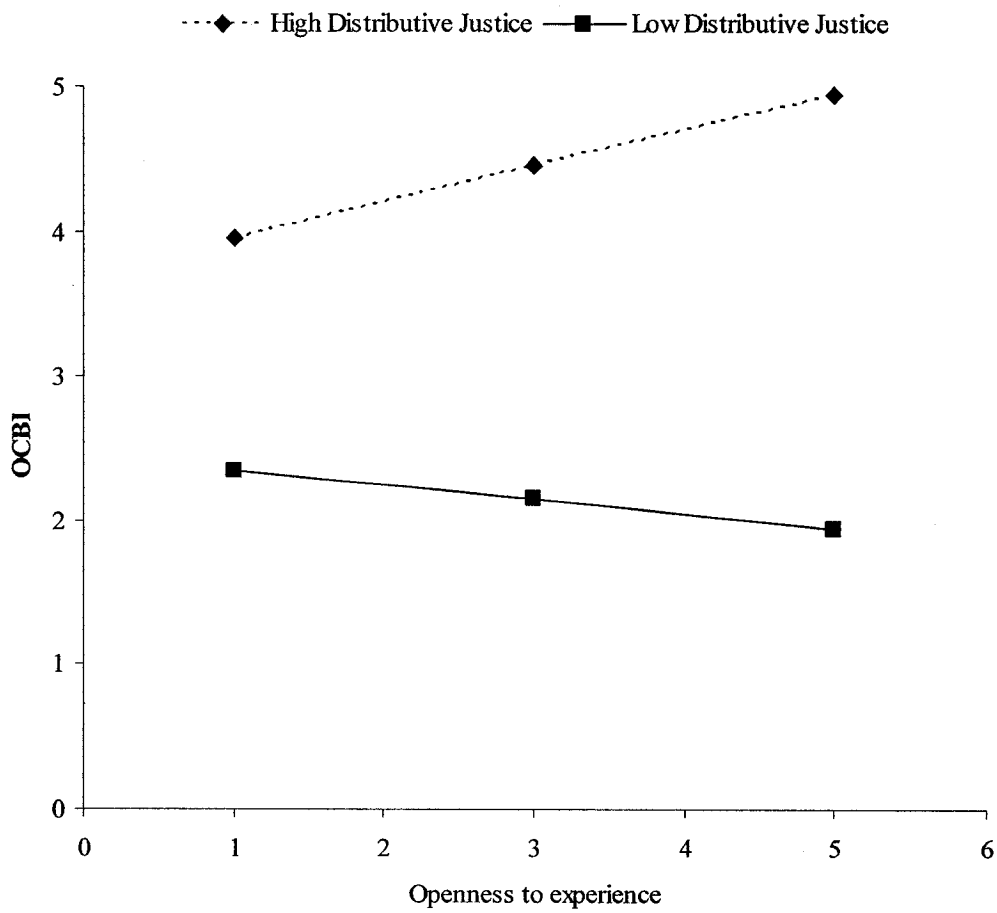


FIGURE 17

Combined effects of neuroticism and voice on OCBI

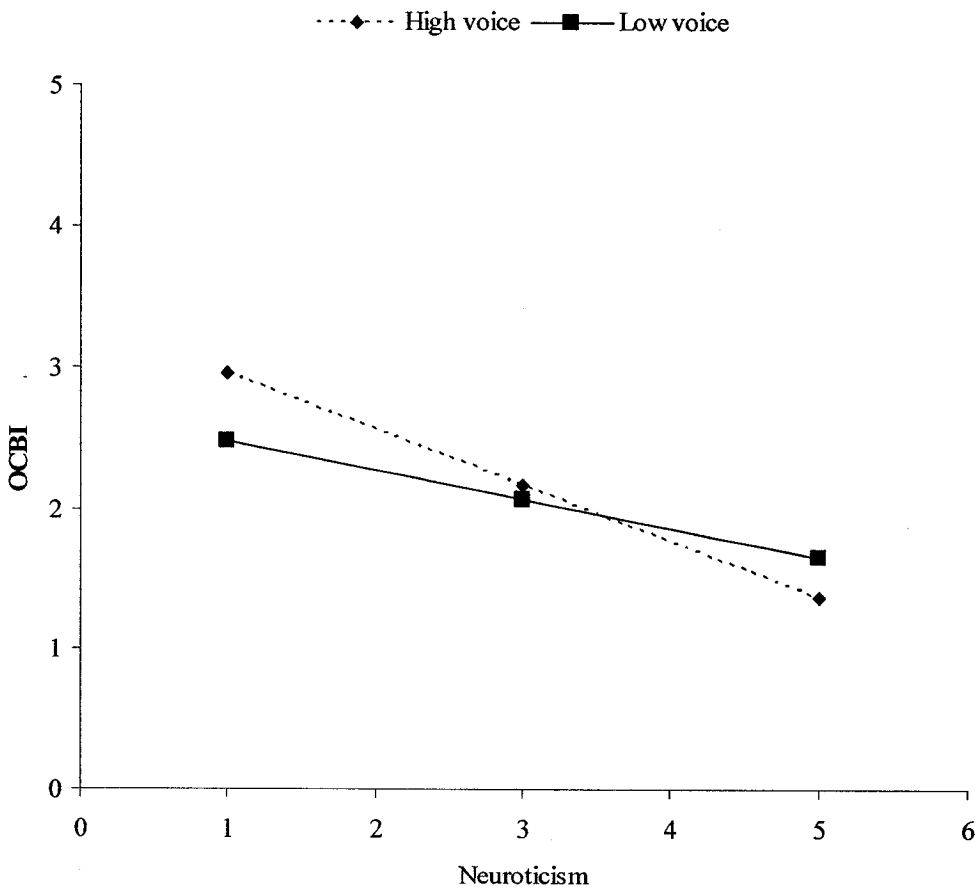


FIGURE 18

Combined effects of extraversion and voice on OCBI

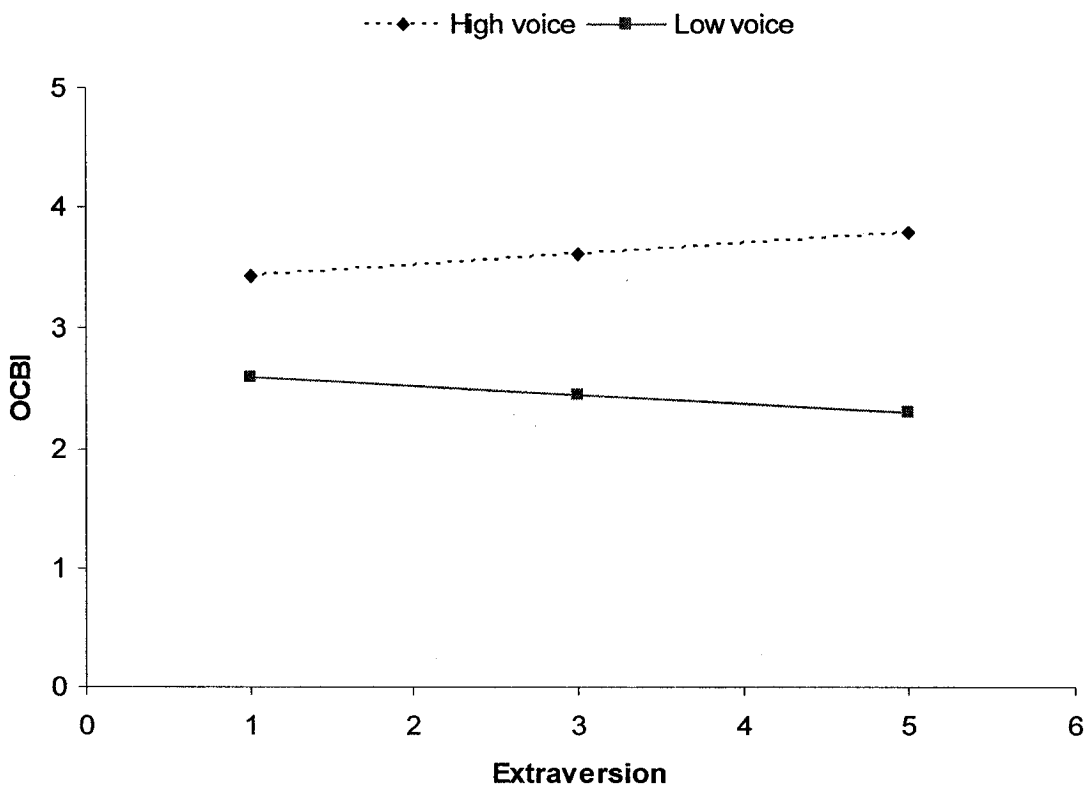


FIGURE 19

Combined effects of openness to experience and voice on OCBI

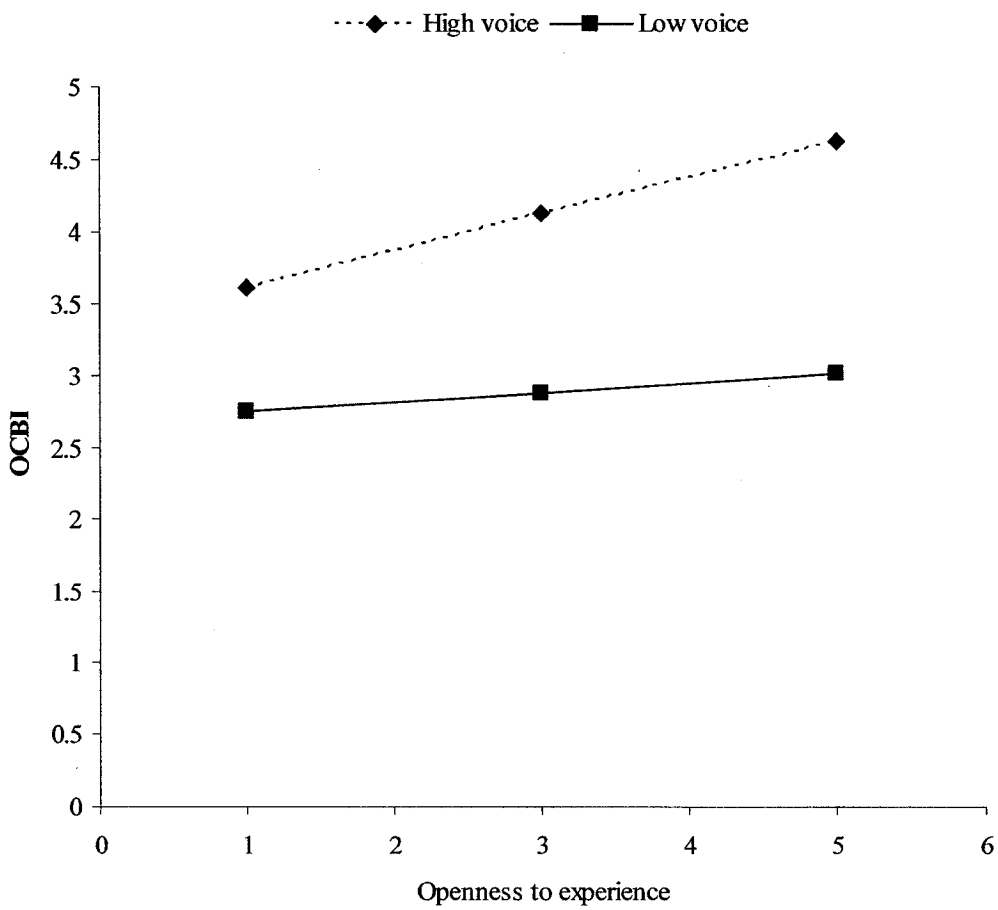


FIGURE 20

Combined effects of neuroticism and voice on OCBO

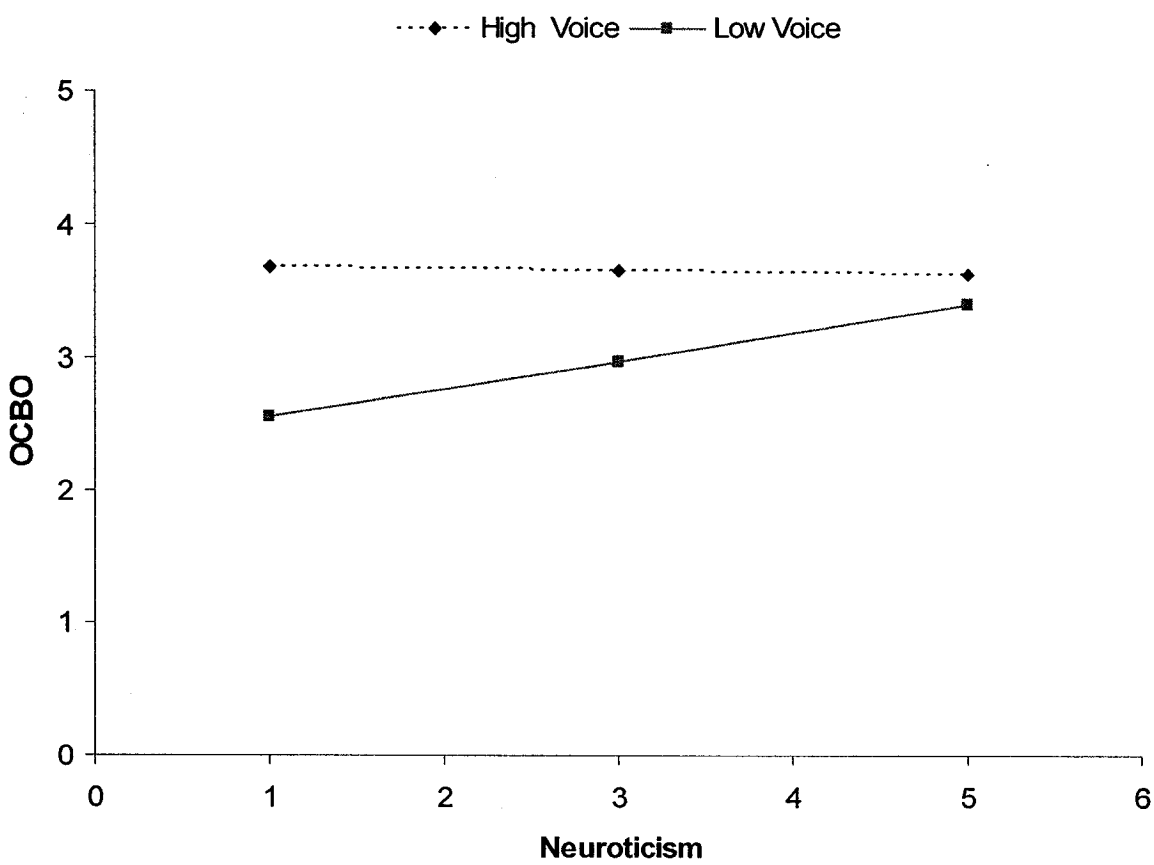


FIGURE 21

Relationship between neuroticism and creativity moderated by peer-reported job scope

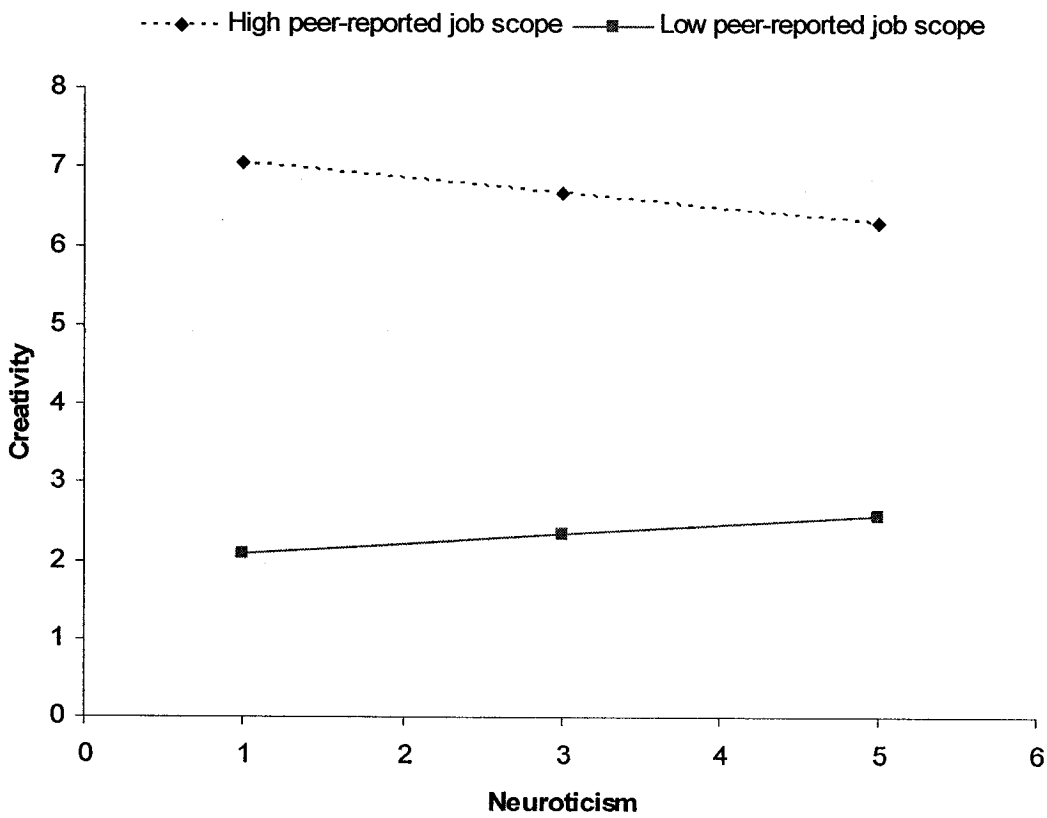


FIGURE 22

Interactive effects of extraversion and self-reported job scope on creativity

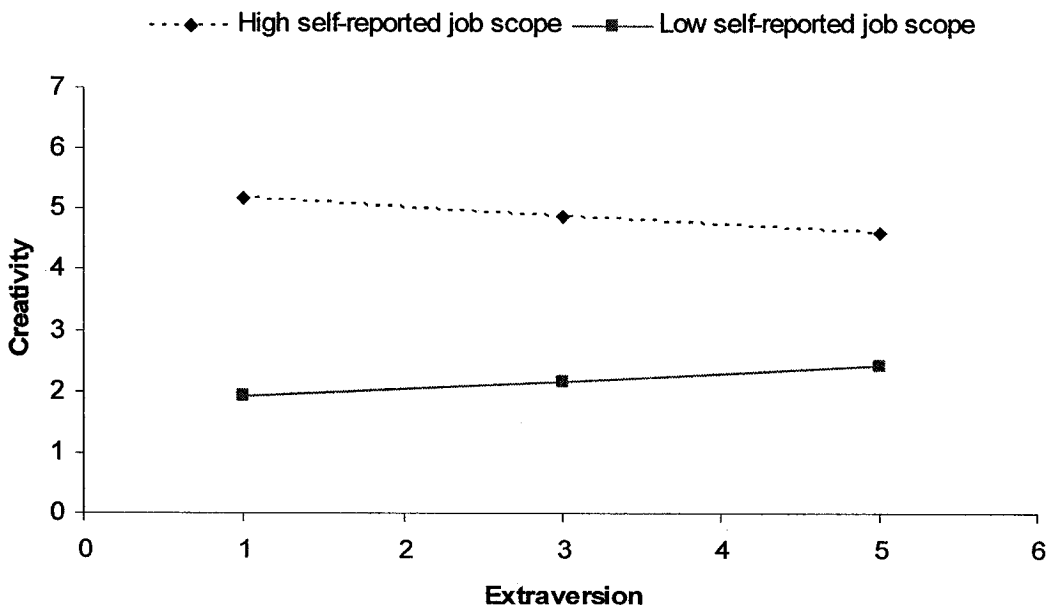


FIGURE 23

Joint effects of peer-reported job scope and extraversion on creativity

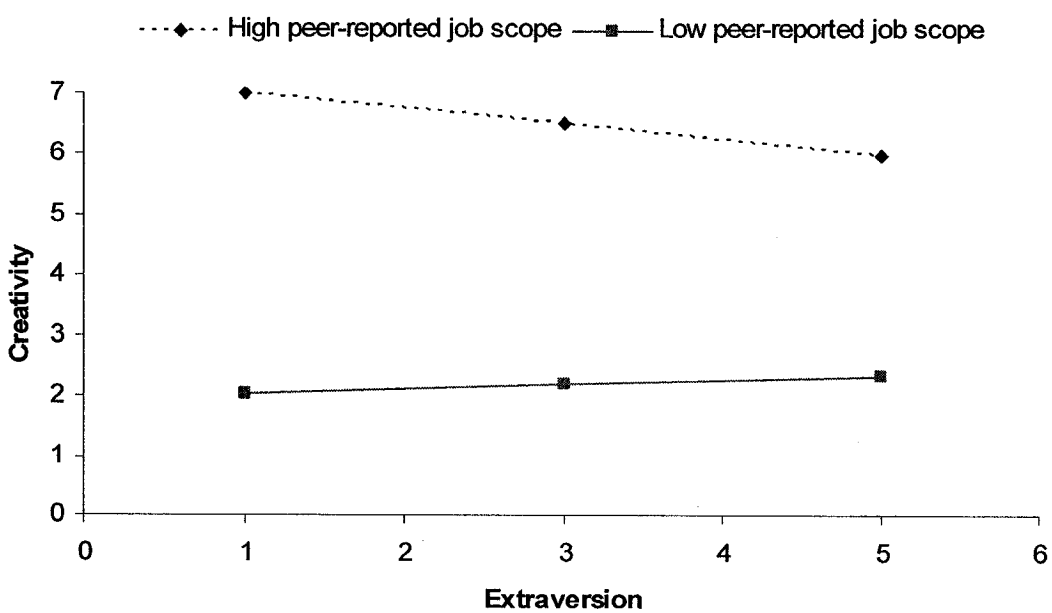


FIGURE 24

Combined effects of agreeableness and self-reported job scope on creativity

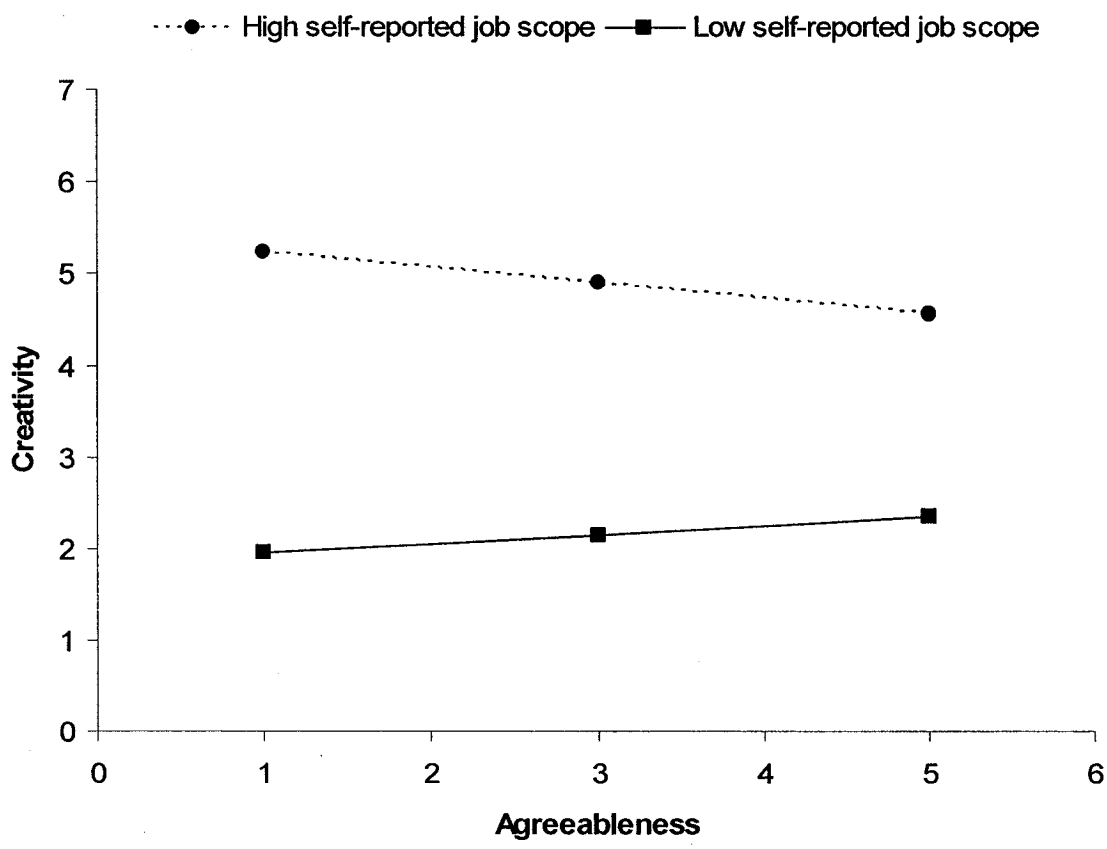
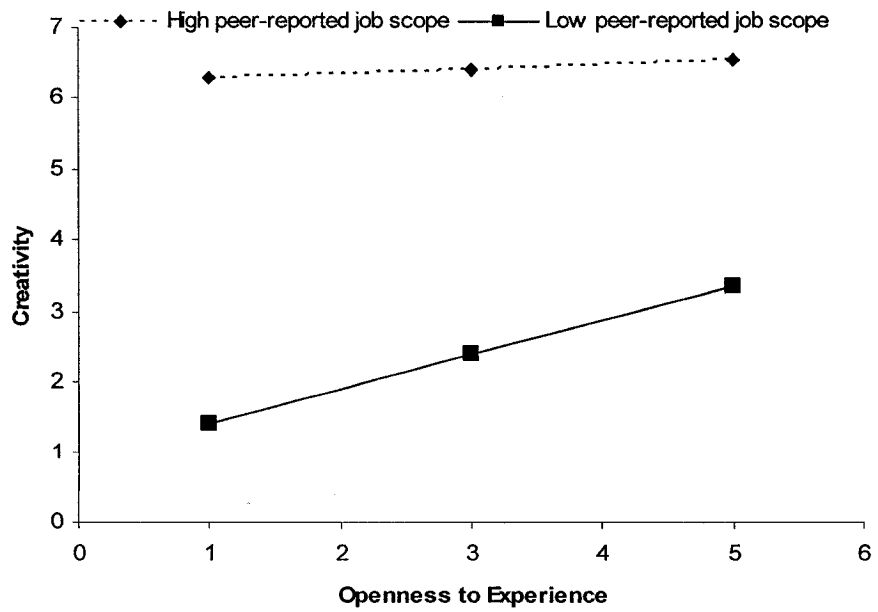


FIGURE 25
Combined effects of openness to experience and self-reported job scope on creativity

FIGURE 26
Combined effects of openness to experience and peer-reported job scope on creativity



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Appendix 1. Summary of CFA of justice measures showing factor loadings of the items on justice dimensions

	Item	Loadings Voice	Procedural Justice	Distributive Justice
1.	Have you been able to express your views and feelings during those procedures?	**.68**		
2.	Have you had influence over the salary increases and promotions arrived at by those procedures?	**.76**		
3.	Have you been able to appeal the salary increases and promotions arrived at by those procedures?	**.71**		
4.	Have those procedures been applied consistently?		**.67**	
5.	Have those procedures been free of bias?		**.75**	
6.	Have those procedures been based on accurate information?		**.75**	
7.	Have those procedures upheld ethical and moral standards?		**.64**	
8.	Does your salary increase and promotions reflect the effort you have put into your work?			**.87**
9.	Is your salary raise and promotion appropriate for the effort you have put into your work?			**.84**
10.	Does your salary increases and promotions reflect what you have contributed to the organization?			**.89**
11.	Is your salary increase and promotion justified, given your performance?			**.78**

Appendix 2. Retained items with their factor loadings for the performance and OCB measures

Items	Factor Loadings		
	Job Perf.	OCBI	OCBO
1. Adequately completes assigned duties	.64		
2. Fulfils responsibilities specified in job description	.67		
3. Performs tasks that are expected of him/her	.78		
4. Meets formal performance requirements of the job	.50		
5. Neglects aspects of the job he/she is expected to perform (R)	.55		
6. Fails to perform essential duties (R)	.51		
7. Helps others who have been absent		.62	
8. Helps others who have heavy workloads		.75	
9. Assists supervisor with his/her work (without being asked to)		.47	
10. Takes time to listen to co-workers' problems and worries		.62	
11. Goes out of the way to help new employees		.58	
12. Takes a personal interest in other employees		.46	
13. Has work attendance above the norm			.53
14. Gives advance notice when unable to come to work			.67
15. Takes undue work breaks (R)			.47
16. Spends a great deal of time on personal phone conversations (R)			.57
17. Conserves and protects organizational property			.57

APPENDIX 3

QUESTIONNAIRES

SECTION I

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who *likes to spend time with others*? Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement

I See Myself as Someone Who…..

1 Disagree strongly	2 Disagree a little	3 Neither agree nor disagree	4 Agree a little	5 Agree strongly

_____	1.	Is talkative
_____	2.	Tends to find fault with others
_____	3.	Does a thorough job
_____	4.	Is depressed, blue
_____	5.	Is original, comes up with new ideas
_____	6.	Is reserved
_____	7.	Is helpful and unselfish with others
_____	8.	Can be somewhat careless
_____	9.	Is relaxed, handles stress well
_____	10.	Is curious about many different things
_____	11.	Is full of energy
_____	12.	Starts quarrels with others
_____	13.	Is a reliable worker
_____	14.	Can be tense
_____	15.	Is ingenious, a deep thinker
_____	16.	Generates a lot of enthusiasm
_____	17.	Has a forgiving nature
_____	18.	Tends to be disorganized
_____	19.	Worries a lot
_____	20.	Has an active imagination
_____	21.	Tends to be quiet
_____	22.	Is generally trusting
_____	23.	Tends to be lazy
_____	24.	Is emotionally stable, not easily upset
_____	25.	Is inventive
_____	26.	Has an assertive personality
_____	27.	Can be cold and aloof
_____	28.	Perseveres (keeps trying) until the task is finished
_____	29.	Can be moody
_____	30.	Values artistic, aesthetic experiences
_____	31.	Is sometimes shy, inhibited
_____	32.	Is considerate and kind to almost everyone
_____	33.	Does things efficiently
_____	34.	Remains calm in tense situations
_____	35.	Prefers work that is routine

_____	36.	Is outgoing, sociable
_____	37.	Is sometimes rude to others
_____	38.	Makes plans and follows through with them
_____	39.	Gets nervous easily
_____	40.	Likes to reflect, play with ideas
_____	41.	Has few artistic interests
_____	42.	Likes to cooperate with others
_____	43.	Is easily distracted
_____	44.	Is sophisticated in art, music, or literature

SECTION II

This part of this questionnaire asks you to describe your job as objectively as possible.
Please do not use this part of the questionnaire to show how much you like or dislike your job. Try to make your descriptions as accurate and as objective as you possibly can.

A sample question is given below.

To what extent does your job require you to work with mechanical equipment?

1----------2----------3----------4----------5----------(6)----------7

Very little: the job requires almost no contact with equipment of any kind.

Moderately:

Very much: the job requires almost constant work with mechanical equipment.

You are to circle the number, which is the most accurate description of your job.

If, for example, your job requires you to work with mechanical equipment a good deal of time - but also requires some paper or office work - you might circle the number 6, as was done in the example above.

1. To what extent does your job require you to work with other people (either clients or people in related jobs within the organization)?

1----------2----------3----------4----------5----------6----------7

Very little: dealing with other people is not at all necessary in doing the job.

Moderately: some dealing with others is necessary.

Very much: dealing with other people is an absolutely essential and crucial part of doing the job.

2. How much autonomy is there in your job? That is, to what extent does your job permit you to decide on your own how to go about doing the work?

1----------2----------3----------4----------5----------6----------7

Very little: the job gives me almost no say about how and when the work is done.

Moderate autonomy: many things are standardized and not under my control, but I can make some decisions about the work

Very much: the job gives me almost complete responsibility for deciding how and when the work is done.

3. To what extent does your job involve doing a whole and identifiable piece of work? That is, is the job a complete piece of work that has an obvious beginning and end? Or is it only a small part of the overall piece of work, which is finished by other people or by automatic machines?

1	2	3	4	5	6	7
My job is only a tiny part of the overall piece of work: the results of my activities cannot be seen in the final product or service.			My job is a moderate-sized chunk of the overall piece of work: my own contribution can be seen in the final outcome.			My job involves doing the whole piece of work from scratch to finish: the results are easily seen in the final product.

4. How much variety is there in your job? That is, to what extent does your job require you to do many different things at work using a variety of your skills and talents?

1	2	3	4	5	6	7
Very little: the job requires me to do the same routine things over and over again.			Moderate variety.			Very much: the job requires me to do many different things using a number of different skills and talents.

5. In general, how significant or important is your job? That is, are the results of your work likely to significantly affect the lives or well-being of other people?

1	2	3	4	5	6	7
Not very significant: the outcomes of my work are not likely to have important effects.			Moderately significant.			Highly significant: the outcomes of my work can affect other people in very important ways.

6. To what extent do managers or co-workers let you know how well you are doing on your job?

1	2	3	4	5	6	7
Very little: people almost never let me know how well I am doing.			Moderately: sometimes people may give me feedback, other times they may not.			Very much: managers or co-workers provide me with almost constant feedback about how well I am doing.

7. To what extent does doing the job itself provide you with information about your work performance? That is, does the actual work itself provide clues about how well you are doing - aside from any feedback co-workers or supervisors may provide?

1	2	3	4	5	6	7
Very little: the job itself is set up so I could work for ever without finding out how well I am doing.			Moderately: sometimes doing the job provides feedback to me, sometimes it does not.			Very much: the job is set up so that I get almost constant feedback about how well I am doing as I work.

SECTION III

Listed below are a number of statements, which could be used to describe your job.
You are to indicate whether each statement is an accurate or an inaccurate description of your job.

Once again, please try to be as objective as you can in deciding how accurately each statement describes your job - regardless of whether you like or dislike your job.

Write a number in the blank beside each statement, based on the following scale:

How accurate is the statement describing your job?

1	2	3	4	5	6	7
Very inaccurate	Mostly inaccurate	Slightly inaccurate	Uncertain	Slightly accurate	Mostly accurate	Very accurate

_____	1.	The job requires me to use a number of complex or high level skills.
_____	2.	The job requires a lot of cooperative work with other people.
_____	3.	The job is arranged so that I do not have the chance to do an entire piece of work from beginning to end.
_____	4.	Just doing the work required by the job provides many chances for me to figure out how well I am doing.
_____	5.	The job is quite simple and repetitive.
_____	6.	The job can be done adequately by a person working alone - without talking or checking with other people.
_____	7.	The supervisors and co-workers on this job almost never give me any feedback about how well I am doing in my work.
_____	8.	This job is one where a lot of other people can be affected by how well the work gets done.
_____	9.	The job denies me any chance to use my personal initiative or judgment in carrying out the work.
_____	10.	Supervisors often let me know how well they think I am performing the job.
_____	11.	The job provides me the chance to completely finish the pieces of work I begin.
_____	12.	The job itself provides very few clues about whether or not I am performing well.
_____	13.	The job gives me considerable opportunity for independence and freedom in how I do the work.
_____	14.	The job itself is not very significant or important in the broader scheme of things.

SECTION IV

This part of the questionnaire asks you various questions about your job, how you feel about it, and your perceptions of fairness in the workplace. Please respond to each statement as honestly and as objectively as possible according to the provided scales.

Please write a number beside each statement to indicate the extent to which you agree or disagree with that statement.

1 Disagree strongly	2 Disagree a little	3 Neither agree nor disagree	4 Agree a little	5 Agree strongly

_____ 1. I have felt fidgety (uneasy) or nervous as a result of my job
_____ 2. I will probably look for a new job in the next year
_____ 3. My job gets to me more than it should
_____ 4. There are lots of times when my job drives me right up against the wall
_____ 5. I often think about quitting
_____ 6. Sometimes when I think about my job, I get a tight feeling in my chest
_____ 7. I feel guilty when I take time off my job
_____ 8. It is highly likely that I will look for a new job in the next year

Please circle one choice (from a to g) that best expresses your opinion about your job.

1. Which one of the following shows how often you feel satisfied with your job?
   a. Never.
   b. Seldom.
   c. Occasionally.
   d. About half of the time.
   e. A good deal of the time.
   f. Most of the time.
   g. All the time.

2. Choose the one of the following statements which best tells how well you like your job.
   a. I hate it.
   b. I dislike it.
   c. I don't like it.
   d. I am indifferent to it.
   e. I like it.
   f. I am enthusiastic about it.
   g. I love it.

3. Which one of the following best tells how you feel about changing your job?
   a. I would quit this job at once if I could.
   b. I would take almost any other job in which I could earn as much as I am earning now.
   c. I would like to change both my job and my occupation.
   d. I would like to exchange my present job for another one.
   e. I am not eager to exchange my job, but I would do so if I could get a better job.
   f. I cannot think of any jobs for which I would exchange my job.
   g. I would not exchange my job for any other.

4. Which one of the following shows how you think you compare with other people?
   a. No one dislikes his or her job more than I dislike mine.
   b. I dislike my job much more than most people dislike theirs.
   c. I dislike my job more than most people dislike theirs.
   d. I like my job about as well as most people like theirs.
   e. I like my job better than most people like theirs.
   f. I like my job much better than most people like theirs.
   g. No one likes his or her job better than I like mine.

Please write an appropriate number beside each statement that best describes your situation on the job.

In your present job, how often do you have to ask permission....

1 Never	2 Rarely	3 Sometimes	4 Quite Often	5 Extremely often or always

_____ 1. to take a rest break?
_____ 2. to take a lunch/meal break?
_____ 3. to leave early for the day?
_____ 4. to change your working hours?
_____ 5. to leave your office or workstation?
_____ 6. to come late to work?
_____ 7. to take time off?

How often do the following events occur in your present job?

1 Never	2 Once or twice	3 Once or twice per month	4 Once or twice per week	5 Every day or always

_____ 8. How often does someone tell you what you are to do?
_____ 9. How often does someone tell you when you are to do your work?
_____ 10. How often does someone tell you how you are to do your work?

Please write a number in the blank space beside each statement using the following scale.
The following items refer to the procedures used to arrive at your salary increases and promotions.

To what extent:

1 Not at all	2 To a small extent	3 To a moderate extent	4 Frequently	5 To a large extent or always

_____ 1. Have you been able to express your views and feelings during those procedures?
_____ 2. Have you had influence over the salary increases and promotions arrived at by those procedures?
_____ 3. Have those procedures been applied consistently?
_____ 4. Have those procedures been free of bias?
_____ 5. Have those procedures been based on accurate information?
_____ 6. Have you been able to appeal the salary increases and promotions arrived at by those procedures?
_____ 7. Have those procedures upheld ethical and moral standards?

The following questions refer to your salary increases and promotions.

To what extent:

1 Not at all	2 To a small extent	3 To a moderate extent	4 Frequently	5 To a large extent or always

_____	8.	Does your salary increase and promotions reflect the effort you have put into your work?
_____	9.	Is your salary raise and promotion appropriate for the effort you have put into your work?
_____	10.	Do your salary increases and promotions reflect what you have contributed to the organization?
_____	11.	Is your salary increase and promotion justified, given your performance?

SECTION V

Please provide your best estimates for the following.

1. During the past six (6) months, how many days have you been absent from scheduled work for any reason, including illness and personal reasons? _____
2. Currently about how many days in six months does the average employee in your work group miss due to absenteeism? _____
3. All things considered, how many days do you think would be "normal" or "typical" for someone doing your kind of work to be absent during six months? _____

PERSONAL DATA

Please circle the appropriate response or fill in the blanks.

4. Gender: Male Female
5. Marital status: Single Married Divorced Widowed
6. Age: _____
7. Education (degree or certificate attained): _____
8. Area of specialization: _____
9. How long have you been working with your present company? Years _____ Months _____
10. How long have you been working in your present job? Years _____ Months _____
11. What is your current designation / grade / rank? _____
12. What department are you currently working in? _____
13. Total working experience? Years _____ Months _____
14. Nature of employment? Contract Permanent / Regular

On the following pages you will find several different kinds of questions about the job of the person for whom you are filling out this survey. Specific instructions are given at the start of each section. Please read them carefully, answer all questions, and move through quickly.

SECTION I

This part of the questionnaire asks you to describe the job of the person (who has asked you to fill this questionnaire out) as objectively as possible. Try to make your description as accurate and as objective as you possibly can.

A sample question is given below.

To what extent does the person's job require him/her to work with mechanical equipment?

1----------2----------3----------4----------5----------(6)----------7

Very little: the job requires almost no contact with equipment of any kind.

Moderately

Very much: the job requires almost constant work with mechanical equipment.

You are to circle the number, which is the most accurate description of the person's job.
If, for example, the job requires him/her to work with mechanical equipment a good deal of time - but also requires some paper or office work - you might circle the number 6, as was done in the example above.

1. To what extent does the job require a person to work with other people (either clients or people in related jobs within the organization)?

1----------2----------3----------4----------5----------6----------7

Very little: dealing with other people is not at all necessary in doing the job.

Moderately: some dealing with others is necessary.

Very much: dealing with other people is an absolutely essential and crucial part of doing the job.

2. How much autonomy is there in the job? That is, to what extent does the job permit a person to decide on his/her own how to go about doing the work?

1----------2----------3----------4----------5----------6----------7

Very little: the job gives a person almost no say about how and when the work is done.

Moderate autonomy: many things are standardized and not under the control of the person, but one can make some decisions about his/her work.

Very much: the job gives almost complete responsibility for deciding how and when the work is done.

3. To what extent does the job involve doing a whole and identifiable piece of work? That is, is the job a complete piece of work that has an obvious beginning and end? Or is it only a small part of the overall piece of work, which is finished by other people or by automatic machines?

1	2	3	4	5	6	7
The job is only a tiny part of the overall piece of work: the results of his/her activities cannot be seen in the final product or service.			The job is a moderate-sized chunk of the overall piece of work: the person's own contribution can be seen in the final outcome.			The job involves doing the whole piece of work from scratch to finish: the results are easily seen in the final product.

4. How much variety is there in the job? That is, to what extent does the job require him/her to do many different things at work using a variety of his/her skills and talents?

1	2	3	4	5	6	7
Very little: the job requires him/her to do the same routine things over and over again.			Moderate variety.			Very much: the job requires him/her to do many different things using a number of different skills and talents.

5. In general, how significant or important is the job? That is, are the results of his/her work likely to significantly affect the lives or well-being of other people?

1	2	3	4	5	6	7
Not very significant: the outcomes of his/her work are not likely to have important effects on other people.			Moderately significant.			Highly significant: the outcomes of his/her work can affect other people in very important ways.

6. To what extent do managers or co-workers let him/her know how well he/she is doing on the job?

1	2	3	4	5	6	7
Very little: people almost never let the person know how well he/she is doing.			Moderately: sometimes people may give feedback, other times they may not.			Very much: managers or co-workers provide almost constant feedback about how well he/she is doing.

7. To what extent does doing the job itself provide the person with information about his/her work performance? That is, does the actual work itself provide clues about how well the person is doing - aside from any feedback co-workers or supervisors may provide?

1	2	3	4	5	6	7
Very little: the job itself is set up so the person could work for ever without finding out. how well he/she is doing.			Moderately: sometimes doing the job provides feedback, sometimes it does not.			Very much: the job is set up so that the person gets almost constant feetback about how well he/she is doing.

SECTION II

Listed below are a number of statements, which could be used to describe a job.

You are to indicate whether each statement is an accurate or an inaccurate description of the job of the person you are describing.

Please write a number in the blank beside each statement based on the following scale:

How accurate is the statement describing the job of the person you are rating?

1	2	3	4	5	6	7
Very inaccurate	Mostly inaccurate	Slightly inaccurate	Uncertain	Slightly accurate	Mostly accurate	Very accurate

_____	1.	The job requires him/her to use a number of complex or high level skills.
_____	2.	The job requires a lot of cooperative work with other people.
_____	3.	The job is arranged so that he/she does not have the chance to do an entire piece of work from beginning to end.
_____	4.	Just doing the work required by the job provides many chances for the person to figure out how well he/she is doing.
_____	5.	The job is quite simple and repetitive.
_____	6.	The job can be done adequately by a person working alone - without talking or checking with other people.
_____	7.	The supervisors and co-workers on this job almost never give the person any feedback about how well he/she is doing the work.
_____	8.	This job is one where a lot of other people can be affected by how well the work gets done.
_____	9.	The job denies a person any chance to use his/her personal initiative or judgment in carrying out the work.
_____	10.	Supervisors often let the person know how well they think he/she is performing the job.
_____	11.	The job provides the person with the chance to completely finish any work he/she starts.
_____	12.	The job itself provides very few clues about whether the person is performing well.
_____	13.	The job gives a person considerable opportunity for independence and freedom in how he/she does the work.
_____	14.	The job itself is not very significant or important in the broader scheme of things.

SECTION III

Here are a number of items that ask you about the job performance and other work behaviors of the person you are responding about. Please try to respond to each item as accurately and as precisely as possible.

Using the following scale, please write a number beside each statement that best expresses his/her work behavior.

He/She is a person who

1	2	3	4	5
Almost Never	Rarely	Sometimes	Quite Often	Almost Always

_____	1.	Adequately completes assigned duties
_____	2.	Helps others who have been absent
_____	3.	Has work attendance above the norm
_____	4.	Fulfils responsibilities specified in the job description
_____	5.	Helps others who have heavy workloads
_____	6.	Gives advance notice when unable to come to work
_____	7.	Performs tasks that are expected of him/her
_____	8.	Assists the supervisor with his/her work (without being asked to)
_____	9.	Takes undue work breaks
_____	10.	Meets formal performance requirements of the job
_____	11.	Takes time to listen to co-workers' problems and worries
_____	12.	Spends a great deal of time on personal phone conversations
_____	13.	Engages in activities that will directly affect his/her performance evaluation
_____	14.	Goes out of the way to help new employees
_____	15.	Complains about insignificant things at work
_____	16.	Neglects aspects of the job he/she is expected to perform
_____	17.	Takes a personal interest in other employees
_____	18.	Conserves and protects organizational property
_____	19.	Fails to perform essential duties
_____	20.	Passes along information to co-workers
_____	21.	Adheres to informal rules devised to maintain order

Please circle the appropriate number on the scale given after each question.

1. How ORIGINAL and PRACTICAL is this person's work? Original and practical work refers to developing ideas, methods, or products that are both totally unique and especially useful to the organization.

1----------2----------3----------4----------5----------6----------7
Very little Moderately Very much

2. How ADAPTIVE and PRACTICAL is this person's work? Adaptive and practical work refers to using existing information or materials to develop ideas, methods, or products that are useful to the organization.

1----------2----------3----------4----------5----------6----------7
Very little Moderately Very much

3. How CREATIVE is this person's work? Creativity refers to the extent to which the employee develops ideas, methods, or products that are both original and useful to the organization.

1----------2----------3----------4----------5----------6----------7
Very little Moderately Very much

SECTION IV

Please respond by filling in the blanks.

1. How long have you known him/her? _____
2. During the past six (6) months, how many days has he/she been absent from scheduled work for any reason, including illness and personal reasons? _____
3. Currently about how many days in six months does the average employee in his/her work group miss due to absenteeism? _____
4. All things considered, how many days do you think would be "normal" or "typical" for someone doing his/her kind of work to be absent during six months? _____

PERSONAL DATA

Please provide the following information about **YOURSELF**. Circle the appropriate response or fill in the blanks.

1. Gender: Male Female
2. Age: _____
3. Education (highest degree or certificate attained): _____
4. Area of specialization: _____
5. How long have you been working with your present company? Years _____ Months _____
6. Total working experience? Years _____ Months _____
7. What is your current designation / grade / rank? _____
8. What department are you currently working in? _____
9. Nature of employment? Contract Permanent / Regular