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Attitude strength and situational strength as moderators of the job satisfaction – job performance relationship

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ATTITUDE STRENGTH AND SITUATIONAL STRENGTH AS MODERATORS OF THE JOB SATISFACTION – JOB PERFORMANCE RELATIONSHIP

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I HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER MY SUPERVISION BY Joseph William Dagosta ENTITLED Attitude Strength and Situational Strength as Moderators of the Job Satisfaction – Job Performance Relationship BE ACCEPTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF Doctor of Philosophy.

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ABSTRACT

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Workers who are satisfied with their jobs are better performers, but prior research has found a plethora of moderating variables between job satisfaction and job performance (Ostroff, 1992, Schleicher, Watt, & Greguras, 2004; Spector, 1997). Prior research has suggested that job attitude strength can strengthen the relationship between job satisfaction and job performance and that the relationships between personality variables and extra-role job performance are stronger in weak rather than strong workplace situations (Meyer et al., 2014; Shleicher et al., 2015). In the current study, I investigated the interaction between job satisfaction, job attitude strength, and situational strength on job performance. Using attitude strength and situational strength theories, I argued that the relationship between job satisfaction and job performance is stronger when attitudes are strong and situations are weak. Using a sample of workers from Amazon's Mechanical Turk (MTurk, $N = 539$), I found that job attitude strengthens the relationship between job satisfaction and job performance. However, strong evidence was found to suggest that strong situations strengthened rather than weakened the relationship between job satisfaction and job performance. I found little evidence of a three-way interaction between job satisfaction, job attitude strength, and situational

strength on job performance in the direction expected. My findings have important implications for the attitude strength and situational strength literatures.

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I. INTRODUCTION

Workers who are satisfied with their jobs show higher levels of positive affect, are more committed to their organization, and are better performers (Mathieu & Zajac, 1990; Spector, 1997). The relationship between job satisfaction and job performance has been one of the most investigated but controversial in the industrial/organizational psychology literature. Previous research has found a wide range of weighted correlations (Judge, Thoresen, Bono, & Patton, 2001; Ostroff, 1992; Podsakoff & Williams, 1986), opposing directions of causality (Judge et al., 2001; Kraus, 1995; Riketta, 2008), and a plethora of moderating variables (Ostroff, 1992; Podsakoff & Williams, 1986; Schleicher, Watt, & Greguras, 2004).

Job satisfaction is theorized to have multiple components (e.g., cognitive, affective), the consistency of which indicates a strong job satisfaction attitude (Schleicher et al., 2004). People with similar levels of job satisfaction might have different levels of strength regarding this job attitude, which acts as a moderating variable on the job satisfaction–job performance relationship (Kraus, 1995). Schleicher et al. (2015), for example, found that job attitude strength moderated the relationship between job satisfaction and job performance, organizational citizenship behavior (OCB), and turnover intentions.

Although prior research supports the moderating effect of job attitude strength, to the current author's knowledge, there has been only a single study that has examined the moderating effect of situational strength rather than attitude strength (Bowling, Khazon,

Meyer, & Burrus, 2013). Situational strength refers to the idea that different situations exert different levels of restriction on behavior (Meyer, Dalal, & Hermida, 2010). More specifically, strong situations guide behavior through the clarity and consistency of expected behaviors, as well as the consequences and constraints associated with behaviors. Prior research has indicated that the effects of conscientiousness on OCB and counterproductive work behavior (CWB) were moderated by situational strength, such that the relationships were stronger when the situation was weak rather than strong (Meyer, Dalal, José, Hermida, Chen, Vega, Brooks, & Khare, 2014). Given that workers' attitudes are determined both by personal emotions, beliefs, and the workplaces to which these attitudes are directed, I find it necessary to understand the moderating effect of situational strength on the relationship between job satisfaction and job performance. Prior research on the job satisfaction–job performance relationship has found inconsistent results regarding the satisfaction–performance relationship. For example, meta-analyses on the satisfaction–performance relationship have revealed a wide range of true correlations between satisfaction and performance, which indicates the presence of moderators (Judge et al., 2001; Podsakoff & Williams, 1986). As I discuss in a later section of the current proposal, a few moderators have received much empirical attention. However, relatively little research exists on the moderating effects of job attitude strength and situational strength. Thus, in the current study, I will investigate the interaction between job satisfaction, job attitude strength, and situational strength on in-role and extra-role job performance.

In the following sections, I will define and discuss prior research on job satisfaction and job performance before discussing the relationship between job

satisfaction and job performance. Then, I will discuss job attitude strength, situational strength, and the proposed interaction between job satisfaction, job attitude strength, and situational strength. Finally, I will discuss the purpose of the current study and propose my hypotheses.

Job satisfaction

At the broadest level, job satisfaction refers to an overall evaluation an individual holds regarding his or her job (Spector, 1997). Job satisfaction, similar to many other job attitudes, includes an affective component, a cognitive component, and a target to which the attitude is directed (Fisher, 2000). The affective component refers to the emotions or feelings an individual holds regarding the target of the attitude whereas the cognitive component refers to the beliefs or judgments about the target of the attitude. For example, the Faces Scale of Job Satisfaction includes a single item that measures the affective component of job satisfaction. The item asks respondents to "put a check under the face that expresses how you feel about your job in general, including the work, the pay, the supervision, the opportunities for promotion, and the people you work with," (Kunin, 1955). Another example is the Job Descriptive Index (JDI), which includes items that measure the cognitive component of job satisfaction, such as asking respondents whether they can "barely live on income," or if they think "opportunities [for promotion] are somewhat limited," (Balzer, Smith, & Kravitz, 1990). Thus, job satisfaction can be conceptualized as the positive or negative feelings and the positive or negative beliefs and judgments an individual holds regarding his or her job. Although both components account for unique variance in job satisfaction, measures of job

satisfaction are criticized as exclusively measuring the cognitive component (Weiss, Dawis, England, & Lofquist, 1967).

In addition to the affective and cognitive components of job satisfaction, job satisfaction measures have differentiated between overall job satisfaction and facets of job satisfaction. For example, one of the first measures of job satisfaction was the Faces Scale developed by Kunin (1955). This single item scale asks participants to indicate how they feel about their job overall, including "the work, the pay, the supervision, the opportunities for promotion, and the people you work with" (Kunin, 1955). Although the Faces Scale implies that job satisfaction can be divided into separate facets, responses to these individual facets were not possible on this scale. However, Smith, Kendall, and Hulin (1969) addressed this issue with the Job Descriptive Index (JDI). The JDI asks respondents about their satisfaction with different facets of their job, specifically their work, pay, and promotions. Finally, Weiss et al. (1967) developed the Minnesota Satisfaction Questionnaire (MSQ), which in its long form is purported to measure 22 facets of job satisfaction. Included in these 22 facets are social status, security, compensation, achievement, and independence. According to Weiss et al. (1967), facets of job satisfaction are particularly useful to organizations because information about specific facets can reveal areas in which organizations can improve. Thus, although overall job satisfaction is useful for more general research purposes, facets of job satisfaction can provide valuable information to practitioners.

Job performance

Much of the job performance literature has focused on understanding the structure of job performance. Campbell, McHenry, and Wise (1990) posited that job performance

is best conceptualized as a domain of covarying, job-relevant behaviors. More specifically, only the behavioral manifestations of job performance can be observed and measured. Indicators of job performance are best categorized into eight categories, including job-specific task proficiency, non-job-specific task proficiency, written and oral communication, demonstrating effort, maintaining personal discipline, facilitating peer and team performance, supervision, and management. According to Campbell et al. (1990), each of these eight categories or factors are independent of each other. However, Viswesvaran (1993) argued that job performance was best conceptualized as a single construct that contains ten different dimensions. Viswesvaran (1993) proposed that each of these ten dimensions loaded onto one general factor of job performance.

Viswesvaran and Ones (2000) offered three categories of the many proposed models of job performance. First, task performance models conceptualize job performance as employee behaviors that aim to contribute to the accomplishment of organizational goals, usually by meeting task demands specific to one's position. In contrast to task performance models are two contextual performance models. Contextual performance refers to employee behaviors that set the context within which task performance occurs (Cascio & Aguinis, 2011). Examples of contextual performance are OCB and CWB, both of which are considered two separate models in Viswesvaran and Ones' (2000) categorization. Whereas OCBs refer to voluntary, extra-role employee behaviors that aim to benefit the organization or individuals within the organization, CWBs refer to voluntary, extra-role employee behaviors that result in intentional harm to the organization or organizational members. Whereas contextual performance is a type of voluntary or extra-role behavior, task performance generally refers to behavior that

follows a set of specified behaviors assigned to a role. Rotundo and Sackett (2002) provided empirical support for these three broad components of job performance by investigating the relative importance of each component on ratings of overall job performance. The results indicated that task and counterproductive performance were rated as equally important in determining overall job performance ratings, and citizenship behavior was rated as important but not to the same extent as task or counterproductive performance.

Historically, job performance has been and remains one of the most researched topics in the industrial/organizational psychology literature. Perhaps this focus is due in part to the significant organizational consequences associated with job performance. According to DeNisi (2000), job-related behaviors that are relevant to achieving broader organizational goals are associated with high job performance. If workers do not perform these job-related behaviors, then the attainment of organizational goals is threatened. Therefore, organizations are concerned with measuring job performance in an attempt to monitor, maintain, and improve levels of job performance among workers. Also, organizations are concerned with ensuring that their workers understand job-related, behavioral expectations and how these expectations are associated with performance and subsequent rewards (Heneman & Gresham, 1998). The practical implications of job performance have caused researchers to investigate the relationships between job attitudes and job performance.

Job satisfaction–job performance relationship

The relationship between job satisfaction and job performance is one of the most investigated in the I/O psychology literature. For example, in a meta-analysis, Judge et

al. (2001), identified over 300 studies that investigated the satisfaction–performance relationship. The popularity of this topic should not be surprising given the fact that organizations strive to maintain high levels of job performance and consider satisfaction an important predictor of performance (DeNisi, 2000; Heneman & Gresham, 1998; Judge et al., 2001). However, prior research is not consistent on the direction of the satisfaction–performance relationship. Furthermore, in their meta-analysis, Judge et al. (2001) found large credibility intervals and little variance explained by statistical artifacts, which suggests the possibility of moderator variables on the satisfaction–performance relationship. Similarly, evidence for the possibility of moderator variables was found in meta-analyses of the satisfaction–CWB and satisfaction–OCB relationships (Dalal, 2005; LePine, Erez, & Johnson, 2002).

In-role performance

Much of the early research on the satisfaction–performance relationship adopted the framework of Vroom's (1964) expectancy theory (see Iaffaldano & Muchinsky, 1985; Podsakoff & Williams, 1986). According to expectancy theory, workers will put forth effort on the job (a) if their effort is associated with performance expectations, and (b) their performance is associated with valuable outcomes. Although job satisfaction does not appear in these relationships, obtaining valued outcomes for performance might be associated with feelings of satisfaction about one's job. Thus, job performance might cause job satisfaction. However, meta-analytic regression analyses on studies of the satisfaction–performance relationship did not provide support for job performance causing job satisfaction (Riketta, 2008). More specifically, the effect of job satisfaction and organizational commitment on subsequent job performance was small but

statistically significant (ß = .06) whereas the effect of performance on subsequent job satisfaction and organizational commitment was practically non-existent (ß = .00).

In a meta-analysis of the job satisfaction–job performance relationship, Judge et al. (2001) described the prior research as suffering from methodological issues (e.g., sampling error) and a lack of consideration for moderators of the satisfaction–performance relationship. According to Judge et al. (2001), prior research on the direction of causality between job satisfaction and job performance can be separated into seven different models: (a) job satisfaction causes job performance, (b) job performance causes job satisfaction, (c) the relationship between satisfaction and performance is reciprocal, (d) the relationship between satisfaction and performance is spurious, (e) the relationship between satisfaction and performance is moderated by a third variable, (f) job satisfaction and job performance are unrelated, and (g) job satisfaction causes positive affect, which causes higher levels of job performance. Judge et al. (2001) noted that prior research attempting to test causal models (a) and (b) have found inconsistent results. Furthermore, prior research providing tests of the reciprocal model (c) have resulted in inconsistent results also, which might be due to a poor theoretical foundation for such dynamic models. Although prior research has investigated a wide range of moderating variables, including reward contingency, self-esteem, and situational constraints, Judge et al. (2001) noted that only single studies exist on a number of moderators of the satisfaction¬–performance relationship. Thus, generalizing findings across studies is problematic. Overall, Judge et al. (2001) found a corrected correlation between job satisfaction and job performance of .30.

However, research by Ajzen and Fishbein (1977) suggested that attitudes will predict behavioral criteria when there is a high level of consistency between attitudes and behavior. Ajzen and Fishbein (1977) argued that attitudes are associated with objects, behaviors, or policies. Prior research attempting to predict behavior from attitudes assume attitude–behavior consistency, such that people with a given attitude will behave in a manner consistent with that attitude and not in a way inconsistent with that attitude. For example, workers with high levels of job satisfaction will behave in a manner that reflects their satisfaction (e.g., high levels of in-role job performance, high levels of OCB) and will not behave in a manner that does not reflect their satisfaction (e.g., low levels of CWB). Furthermore, attitudes and behaviors consist of four elements: action, target of the action, context of the action, and the time in which the action is performed. Attitudes will predict behavior to the extent that the attitude is identical across all four elements with the behavioral criterion. For example, an attitude towards one's job relates to a behavioral criterion which might contain behaviors such as successfully performing the duties associated with one's role, contributing additional and beneficial effort to help the organization, and avoiding behaviors that are detrimental to the organization and organizational members. Therefore, according to Ajzen and Fishbein's (1977) attitude–behavior consistency framework, job satisfaction should cause job performance to the extent that job satisfaction is consistent with the job performance domain.

Contextual job performance: OCB

Whereas many of the aforementioned studies have focused on the job satisfaction–in-role job performance relationship, prior research has focused also on the job satisfaction–contextual job performance relationship. Bateman and Organ (1983)

proposed the term "citizenship behavior" to refer to helpful and constructive behaviors workers engage in to benefit the organization or its members. Later, Viswesvaran and Ones (2000) conceptualized citizenship behavior as OCB and categorized it as a type of contextual performance as opposed to task performance (i.e., in-role performance). Borman and Motowidlo (1997) argued that the contextual performance domain is conceptually important and empirically distinct from the task performance domain. Furthermore, in a qualitative review of the literature, Borman and Motowidlo (1997) found that supervisors consider contextual performance in addition to task performance when making performance ratings. Organ (1977) argued that satisfaction has a much stronger relationship with OCB than with behaviors related to task performance. Later, Organ (1988) reviewed evidence supporting his original argument. For example, Bateman and Organ (1983) found that overall satisfaction and OCB were strongly correlated (r = .41). Similarly, Smith, Organ, and Near (1983) found that job satisfaction was moderately correlated with altruism, which was considered a facet of OCB (r = .21). Organ (1988) argued that fairness perceptions was the major factor linking job satisfaction to OCB. Job satisfaction might be a product of workers perceiving that their contributions to the organization are met with fair compensation, benefits, and respect. In turn, these satisfied workers will engage in helpful, extra-role behaviors (e.g., OCB).

Contextual performance: CWB

Along with OCB, contextual performance includes CWB. Although the relationship between job satisfaction and CWB has not received as much empirical attention, Dalal (2005) found a corrected correlation a significantly negative correlation between job satisfaction and CWB (ρ = –.37). Of the individual studies that exist on this

relationship, Mangione and Quinn (1975) found that job satisfaction was negatively correlated with CWB but only among older men rather than women. Additionally, job satisfaction was negatively correlated with drug use at work. Mount, Ilies, and Johnson (2006) used path analysis to examine the mediating effect of job satisfaction on the relationship between personality and CWB. The results indicated that job satisfaction had a direct relationship with CWBs targeted at the individual and the organization. Furthermore, job satisfaction partially mediated the relationship between agreeableness and CWB. Finally, prior research has found mixed evidence regarding the relationship between job satisfaction and absenteeism, a specific type of CWB. For example, Hackett and Guion (1985) conducted a meta-analysis on the job satisfaction–absenteeism relationship and found a corrected correlation of –.09. Hackett and Guion (1985) suggested that this relationship is weak because absenteeism is a complex variable that is difficult to measure, job satisfaction is too general of an attitude and absenteeism too specific of a behavior, and absenteeism is a low base rate CWB. However, recent longitudinal research by Ybema, Smulders, and Bongers (2010) provided support for the job satisfaction–absenteeism relationship. More specifically, workers with low levels of initial job satisfaction had more absences from the workplace a year later. Interestingly, workers with high levels of initial absenteeism had higher levels of job satisfaction a year later.

Moderators of the job satisfaction–job performance relationship

According to Judge et al. (2001), one of the most common approaches to investigating the satisfaction–performance relationship is examining the moderators of this relationship. Although the job satisfaction and job performance literatures have

made significant developments following their meta-analysis, Judge, Weiss, Kammeyer-Mueller, and Hulin (2017) noted that certain moderators continue to receive attention in the literature. First, some researchers have hypothesized that pay for performance is necessary for satisfaction to influence job performance. Locke (1970) argued that the satisfaction–performance relationship is stronger for individuals who value pay and perceive that performance is linked with pay. In their meta-analysis of the satisfaction–performance relationship, Podsakoff and Williams (1986) found that satisfaction–performance relationship was stronger when rewards were linked to performance rather than not linked to performance.

A second common moderator of the satisfaction–performance relationship is that of fairness perceptions of the effort–reward relationship. Organ (1988) argued that fairness perceptions were the major factor linking job satisfaction to OCB, such that individuals who perceive that their contributions to the organization are met with fair compensation, benefits, and respect will engage in OCB. In a similar study, Janssen (2001) hypothesized that perceptions of the effort–reward relationship would moderate the relationship between job demands and employee responses to these demands (i.e., performance). Using a sample of managers, the results indicated that managers who perceive that the association between effort and rewards is fair are both better performers and report being more satisfied with their work. A third and perhaps the most common moderator is self-esteem. According to Korman (1970), individuals who believe that their performance is closely associated with their self-image should be more satisfied with their work and perform better. However, empirical studies that adopted this proposition have found mixed support. For example, Inkson (1978) found that self-

esteem moderated the relationship between supervisory ratings of job performance and intrinsic satisfaction but not between job performance and extrinsic satisfaction. However, Kaldenberg and Becker (1991) found that the relationship between satisfaction and objective measures of job performance were not significantly moderated by self-esteem. Thus, although self-esteem is popular as a moderator, research on its effects is mixed. However, research on the strength of job satisfaction, however, has found more consistent results.

Attitude strength as a moderator. For decades, social psychology researchers have examined the moderating effects of attitude strength. According to Krosnick, Boninger, Chuang, Berent, and Carnot (1993), a strong attitude is an attitude that is consistent and persistent over time, plays a significant role in one's cognition, and influences one's behavior. One of the indicators of attitude strength is affective–cognitive consistency, which refers to the extent to which the cognitive and affective components of an attitude are consistent for a given individual (Kraus, 1995). Correlations between attitudes and behavior should be lower for individuals with low rather than high affective–cognitive consistency (Kraus, 1995). Schleicher et al. (2004) investigated the moderating effect of affective–cognitive consistency on the relationship between job satisfaction and in-role job performance. Schleicher et al. (2004) proposed that when workers experience a lack of consistency between how they feel and what they think about their job, satisfaction will be unrelated to performance. The results supported this proposition, such that the satisfaction–performance relationship was stronger for people with high rather than low affective–cognitive consistency. However, attitude strength is not limited to a single indicator (Krosnick et al., 1993). In a study with four

indicators of job attitude strength, Schleicher et al. (2015) found that job attitude strength significantly moderated the relationships of job satisfaction with in-role job performance, OCB, and organizational commitment, such that these relationships were stronger rather than weaker when job attitude strength was high rather than low. Similarly, Ziegler, Schlett, Casel, and Diehl (2012) found that job ambivalence (i.e., having both negative and positive evaluations about one's job) weakened the relationship between job satisfaction and OCB. Therefore, the strength of an individual's attitude about his or her job appears to be a significant moderator of the satisfaction¬–performance relationship. However, research has examined the effects of the workplace situation on the satisfaction–performance relationship also.

Situational strength as a moderator. Further, research also begun to investigate the moderating effect of situational strength. Situational strength refers to the idea that different situations exert a level of restriction or strength on individual differences in behavior (Meyer et al., 2010). Thus, as opposed to the focus on attitudes with attitude strength, situational strength focuses on the effects that situations have on behavior. Similar to attitude strength, situational strength includes different facets: clarity, consequences, consistency, and constraints, each of which are defined below (Meyer et al., 2010). Bowling, Khazon, Meyer, and Burrus (2015) hypothesized that situational strength would moderate the satisfaction–performance relationship, such that this relationship would be stronger when situational strength was low rather than high. More specifically, weak situations should allow workers the freedom to determine how they perform their jobs whereas strong situations should restrict individuals in how they do their jobs and thus weaken the relationship between satisfaction and performance. Using

meta-analytic data, the results indicated that the constraints facet of situational strength significantly moderated the satisfaction–performance relationship, such that the relationship was stronger when the situation was weak rather than strong. However, to the extent of the current author's knowledge, this is the only study that has investigated the moderating effect of situational strength on the satisfaction¬–performance relationship. Given the practical and theoretical implications for organizational researchers, future research is needed in this area. In the following section, I will discuss attitude strength before discussing situational strength further.

Attitude strength

The topic of attitudes has been one of the most frequently investigated topics across many fields of psychology. According to Allport (1935), an attitude is a "mental state of readiness, organized through experience, exerting a directive and dynamic experience upon the individual's response to all objects and situations with which it is related" (p. 803). Thus, attitudes help organize experiences with objects and situations into evaluative judgments that can guide future behavior. The idea of attitudes guiding behavior is one that permeates the attitude literature. For example, prior research on job attitudes has demonstrated that job attitudes such as job satisfaction and organizational commitment are positively associated with job performance (Judge et al., 2001; Mathieu & Zajac, 1990; Podsakoff & Williams, 1986) and negatively associated with absenteeism and turnover (Kammeyer-Mueller, Wanberg, Glomb, & Ahlburg, 2005; Mathieu & Zajac, 1990; Tett & Meyer, 1993; Ybema et al., 2010).

Conceptually, attitudes are important guides to behavior. However, the effects of attitudes on behavior might vary as a function of the strength of attitudes (Kraus, 1995).

More specifically, some people have attitudes that are harder to change than others or are more consistent over time. Stated differently, "strong" attitudes are both impactful and durable (Krosnick & Petty, 1995). For example, two workers may have similar, negative attitudes about their employer. However, one worker frequently thinks negatively about his or her organization at work and home and eventually leaves the organization. The other worker rarely thinks about his/her job after leaving the office and remains with the organization. However, both workers have similar levels of a negative attitude regarding the same organization. Thus, the first worker has a strong attitude which led to his or her voluntary turnover whereas the second has a weak attitude about the organization and remained with the organization. Therefore, the strength of one's attitude might moderate the relationship between one's attitude and behavior.

According to Krosnick and Petty (1995), the strength of an attitude refers to the extent to which an attitude has impact and is durable. The impact and durability of strong attitudes can each be further divided into two manifestations which when combined make up the four features of attitude strength. That is, the strength of an attitude is determined by the extent to which it (a) influences information processing and judgment, (b) guides behavior, (c) is persistent, and (d) is resistant to threats or attacks. First, the two manifestations of impact are (a) the attitudinal influence on information processing and judgments and (b) attitudes as guides to behavior. According to Judd and Brauer (1995), attitudes are conceptualized as representations in memory between the object of an attitude and the evaluation one has of the attitude object. The strength of the association between the object and the evaluation is referred to as attitude strength. Thus, stronger attitudes are more likely to have a greater influence on information processing and

judgments, such that a stronger evaluation is more likely to be remembered when encountering a specific object. Furthermore, strong attitudes can guide behavior whereas weak attitudes are less likely to guide behavior. Second, two manifestations of durability are (a) persistence of the attitude and (b) resistance of the attitude to change. The persistence of an attitude is also referred to as the stability of an attitude, or the extent to which an attitude remains unchanged during one's daily life. The resistance of an attitude refers to the extent to which an attitude is resistant to a challenge or threat. Strong attitudes are characterized as being persistent and resistant.

Also, according to Krosnick and Petty (1995), a formal definition of attitude strength requires that the relationship between these manifestations and attitude strength are specified. More specifically, Krosnick and Petty (1995) argue that there are two perceptions of this relationship. First, attitude strength might be defined as a latent psychological construct, which is related to various attitude attributes in memory. According to this perspective, an attitude's durability and impact are viewed as effect indicators, in which changes to the durability and impact of an attitude are indicative of changes in the underlying latent trait of attitude strength. Also, when the durability and impact of an attitude are viewed as effect indicators, attitude strength would only exist if both durability and impact exist in a given attitude (Krosnick & Petty, 1995). Second, attitude strength might be defined as a "phantom variable," in which the durability and impact of an attitude are causal indicators of attitude strength. From this perspective, attitude strength is a heuristic label that is applied to attitudes that possess only durability, only impact, or both. Krosnick and Petty (1995) argue that this view of durability and impact as causal indicators permeates much of the prior research in attitude strength.

Therefore, attitude strength is more often defined as "the extent to which attitudes manifest the qualities of durability and impactfulness" (Krosnick & Petty, 1995, p. 3). In order to align my current work with that of previous work, I will define attitude strength in this way and will view attitude strength indicators as causal indicators of an attitude's strength.

Prior research in the attitudes literature has investigated a wide range of attitude dimensions, each of which possess some of Krosnick and Petty's (1995) manifestations. For example, Scott (1968) documented ten different properties of an attitude's strength (e.g., extremity, cognitive complexity, flexibility), which Raden (1985) extended to include properties such as evaluative-cognitive consistency, accessibility, and certainty. Based on empirical evidence, Krosnick and Petty (1995) posited that all attitude dimensions might be determined by similar causes, which would lead to high correlations between dimensions. More specifically, a high level in one dimension might cause a "reverberation" throughout all attitude strength dimensions, which would ultimately produce high levels in all dimensions. For example, thinking about an attitude object can increase attitude accessibility in memory and attitude extremity (Rennier, 1988; Tesser, 1978). However, given the relatively distinct nature of each dimension, it is unlikely that all dimensions have enough overlap to support the existence of a single attitude strength construct.

Krosnick, Jarvis, Strathman, and Petty (1994) demonstrated that different attitude strength dimensions were not as strongly correlated as expected. More specifically, Krosnick et al. (1994) re-analyzed attitude strength dimension data collected by prior researchers and found that some correlations between dimensions were high whereas

others were low or practically zero. For example, correlations between attitude importance, certainty, and thought were high, but correlations between amount of thinking, perceived knowledge, and affective-cognitive consistency were small. Similarly, Krosnick et al. (1993) used a confirmatory factor analysis approach to examine the fit of a series of models that specified certain pairs of dimensions as reflections of higher-order attitude strength concepts. The results indicated that none of the proposed models fit the data acceptably. Thus, different attitude dimensions should be treated as distinct indicators of attitude strength. In the following sections, I will discuss four attitude strength dimensions including prior research on each dimension and the methods by which each dimension is measured. These four dimensions were selected with the goal of replicating the findings of Schleicher et al. (2015).

Attitude extremity

Attitude extremity refers to the extent to which one deviates from a neutral position regarding an attitude (Abelson, 1995). Judd and Brauer (1995) argued that attitude extremity should be related to the other dimensions of attitude strength, given that extreme attitudes are more accessible in memory and viewed as important. Prior research has indicated that different social processes can lead to extreme attitudes, both negative and positive, including group polarization, thought polarization, and salience of group conflict (see Abelson, 1995 for a review). However, Judd and Brauer (1995) proposed that attitude extremity is determined by (a) repeated exposure to the attitude object, (b) repeated communication about the object, (c) repeated thought about the object, and (d) repeated behavioral expressions of the attitude.

In their general model of attitude formation, representation, and output, Judd and Brauer (1995) posited that attitudes are represented in memory, are computed based on previous experiences or beliefs, and ultimately result in some form of behavioral output. Attitudes are represented in memory as a system of interconnected nodes that lead back to an attitude object. The individual nodes might include other related objects, judgments, events, or perceptions associated with the attitude object. In the computation stage, "cognitive algebra" takes place in which one generates a judgment of an attitude object (Judd & Brauer, 1995, p. 53). Different features of an attitude object receive different weights of importance when generating a final judgment on an attitude object, such that more readily available features will be weighted more heavily. Finally, that judgment is used to express behavior, such as responding to an item on an attitude questionnaire. Judd and Brauer (1995) argued that certain features of an attitude object or repeated retrieval of certain features will increase the strength of the association between the attitude object and that feature. The stronger association results in a greater weight during the computation stage, which is more likely to influence behavior. Attitude extremity is more likely to occur to the extent that there is (a) repeated exposure to the attitude object which results in feature selectivity, (b) repeated pairings of an object with certain features, (c) repeated pairings of the attitude object with features that have similar implications, and (d) repeated computations of a certain judgment, which causes the judgment to more readily come to mind when exposed to the attitude object.

Generally, measures of attitude extremity generally assess how far participants deviate from a neutral rating on a given scale. For example, Downing, Judd, and Brauer (1992) calculated a deviance score from a neutral rating based on a 29-point attitude scale

in which response options ranged from oppose to support for 15 attitude objects. Similarly, Schleicher et al. (2015) measured attitude extremity by calculating the absolute value deviation of responses from the midpoint of each item on different attitude scales.

Prior research on attitude extremity has supported Judd and Brauer's (1995) general model and provided evidence for the moderating effect of attitude extremity on attitude–behavior relationships. For example, Kraus (1995) conducted a meta-analysis on the moderating effects of different attitude strength dimensions on various attitude–behavior relationships. The results indicated that relationships between attitudes and behaviors were attenuated when attitude extremity was low ($r = .31$) rather than high ($r = .54$). Cooke and Sheeran (2004) attempted to expand Kraus' (1995) meta-analysis and found similar results. Fazio, Zanna, and Cooper (1978) conducted an experiment to test the moderating effect of attitude extremity on initial attitudes and subsequent behavior. Participants were either asked to empathize with a person on video completing a puzzle or to think about the puzzle without viewing another person completing the puzzle. The results indicated that extensive thought about and direct experience with the puzzle led to more extreme attitudes, which led to greater attitude–behavior consistency. In a similar experiment by Millar and Tesser (1986), participants were either told that a puzzle was relevant for a subsequent analytical task or that the puzzle was irrelevant to a later task. Then, participants were instructed to think about how they felt while completing the puzzle task. The results indicated that extensive thought led to greater attitude extremity. Furthermore, attitude extremity moderated the relationship between cognitive attitudes and behavior on the puzzle task, such that this relationship was stronger when attitude extremity was high rather than low. Finally, Schleicher et al. (2015) found that workers

high rather than low in affective extremity regarding job satisfaction were more likely to have high rather than low levels of OCB. Thus, extreme attitudes are more likely to result in the expression of certain behaviors.

Attitude certainty

Attitude certainty refers to the extent to which one is confident about his or her attitude (Gross, Holtz, & Miller, 1995). More specifically, the more confident one is about his or her standing along an attitude dimension, the stronger the attitude. Prior investigations of attitude certainty have raised the issue of possible overlap between attitude certainty and attitude extremity. Measures of attitude extremity involve calculating deviations from a neutral midpoint on an attitude scale. However, this can be construed also as a measure of attitude certainty, such that someone holding an extreme attitude should be certain of the attitude (Gross et al., 1995). However, Sherif and Hovland (1961) found that some people can hold attitudes that are certain but neutral, and neutral responses might carry different meanings to different people. Thus, the correlation between extremity and certainty might not be as strong as theorized.

Also, prior attitude researchers have noted that there is an important distinction to be made between attitude certainty and attitude ambivalence (see Gross et al., 1995 for a review). Generally, ambiguous stimuli should cause less certainty compared to clear and unambiguous stimuli. For example, Lemon (1968) found that people experience greater ambivalence about an attitude object when there are similar numbers of good and bad attributes of the object. In a study by Liberman and Chaiken (1991), responses were collected to an issue with conflicting values. Participants who found the values conflicting and those who found little conflict between values were compared. The

results indicated that thinking about the issue led to greater certainty for participants who found little conflict between values but did not lead to greater certainty for participants who viewed the values as conflicting. Therefore, it appears that attitude certainty is negatively associated with ambiguity.

Attitude certainty is generally assessed via self-report measures. For example, Fazio and Zanna (1978) used a single item with nine response options to ask participants how certain they were about their attitudes toward volunteering. The response options ranged from certain to not certain. Alternatively, Sample and Warland (1973) asked participants about their certainty to each item on a 15-item attitude scale on a 5-point scale ranging from not certain to very certain. After averaging certainty scores across all items, participants were considered to have high attitude certainty if the average score was above four whereas participants were considered to have low attitude certainty if the average score was below four.

According to Gross et al. (1995), attitude certainty has implications for the stability and range of an attitude, which might moderate attitude–behavior relationships. For example, Babad, Ariav, Rosen, and Salomon (1987) found that attitudes held with great certainty were difficult to change. In a meta-analysis by Kraus (1995), attitude certainty strengthened the relationships between attitudes and behaviors when attitude certainty was high (r = .47) rather than low (r = .08). In an experiment by Fazio and Zanna (1978), participants who gave extensive thought to or had higher levels of experience with an attitude object were more certain about their attitudes. Furthermore, attitude certainty was significantly associated with attitude–behavior consistency. Fazio and Zanna (1978) argued that this finding demonstrates direct experience with an attitude

object has indirect effects on consistency through attitude certainty. Further, Davidson, Yantis, Norwood, and Montano (1985) found that voting for a specific candidate (i.e., attitude certainty) predicted future voting behavior only when attitude certainty was consistent with what voters already knew about the candidate and how frequently they voted in the past.

Sample and Warland (1973) conducted a study in which the certainty of participants' responses to attitude items were examined as moderators of the relationship between attitudes towards student government and voting behavior. The results indicated that attitude certainty was a significant moderator of the student government attitude–voting behavior relationship, such that this relationship was positive and stronger when attitude certainty was high rather than low. Thus, according to Sample and Warland (1973), when people are certain of their attitudes, attitudes are strong predictors of behavior, and other personal and social variables fail to predict behavior as successfully. In a follow-up study, Warland and Sample (1973) found that attitude certainty significantly moderated the relationships between student government attitudes and several criterion variables. More specifically, the correlations between student government attitudes and civil government-related behaviors were attenuated when attitude certainty was weak rather than strong. Thus, attitude certainty is a significant moderator of attitude–behavior relationships.

Structural consistency

Attitudes develop based on affective and cognitive evaluations of an attitude object (Eagly & Chaiken, 1993). More specifically, attitudes represent an overall evaluation based on some mixture of affective and cognitive evaluations that cause

certain behavioral reactions to an attitude object. For example, an affective job satisfaction item might ask workers about the emotions they associate with their jobs whereas a cognitive job satisfaction item might ask workers about the beliefs they hold about their jobs. Structural consistency refers to the extent to which a worker's overall evaluation of an attitude object is consistent with (a) the affect he or she associates with his or her job, and (b) the meanings of his or her beliefs about the attitude object (Chaiken, Pomerantz, & Giner-Sorolla, 1995). Stated differently, structural consistency refers to the affective–cognitive consistency of attitudes. People with structurally consistent attitudes have more attitude–behavior consistency. For example, Norman (1975) found a positive correlation between affective–cognitive consistency and attitude–behavior consistency. More specifically, people with consistent levels of affect and beliefs regarding volunteering were more consistent in their volunteering behavior.

According to Chaiken et al. (1995), there is a clear distinction between an overall evaluation of an attitude object and affect (e.g., feelings, emotions) towards an attitude object. Chaiken et al. (1995) note that this distinction is clearly made in prior research on attitude strength. For example, Millar and Tesser (1986; 1989) found that general or overall evaluations of an attitude object can be based on affect and cognition. More specifically, attitudes carry a number of attributes, of which people have affective or cognitive evaluations. The overall evaluation of an attitude object can be influenced by mostly affective, mostly cognitive, or a mix of both affective and cognitive attributes of an attitude object. Similarly, Millar and Tessar (1986; 1989) found that behaviors might be driven by cognitive or affective attributes of an attitude rather than an overall evaluation. Further, the extent to which a given attitude and behavior exhibit similar

attributes (e.g., mostly affective, mostly cognitive) is positively associated with stronger attitude¬–behavior consistency. Alternatively, a mismatch between the attributes of a given attitude and behavior is less likely to lead to attitude–behavior consistency. Thus, an overall evaluation of an attitude object refers to an abstract evaluation of an attitude object which can be rooted in mostly affective, mostly cognitive, or a mix of both affective and cognitive attributes of an attitude object (Millar & Tesser, 1986). The extent to which the attributes of an attitude object are aligned with the attributes of a given behavior directly influences the strength of the attitude–behavior relationship (Millar & Tesser, 1989).

One can divide structural consistency further into evaluative–cognitive consistency and evaluative–affective consistency. Evaluative–cognitive consistency refers to the consistency between beliefs about an attitude object and the overall evaluation of an object (Chaiken et al., 1995). People with higher evaluative–cognitive consistency have stronger attitudes that are resistant to change and represent a set of highly organized, supportive cognitions (Chaiken et al., 1995, p. 401). People with lower evaluative–cognitive consistency have weaker attitudes that fail to consistently influence subsequent behavior. Tesser (1978) argued that this polarization of attitudes develops as a function of a highly organized set of supportive cognitions or schemas about an attitude object. Without a schema, thinking about an attitude object produces inconsistent beliefs and cognitions about an attitude object. Evaluative–affective consistency refers to the consistency of affect or feelings about an attitude object and an overall evaluation of an object (Chaiken et al., 1995). People with low levels of evaluative–cognitive consistency are likely to have high levels of evaluative–affective consistency, which suggests that

their attitudes are rooted in feelings rather than beliefs about an attitude object. Although both evaluative–cognitive consistency and evaluative–affective consistency are components of structural consistency, the correlations between these two components tends to be quite low (Chaiken et al., 1995). However, measuring both components of structural consistency can reveal the structural bases of people's attitudes, whether they are rooted in cognition or affect.

Generally speaking, structural consistency is measured using an evaluative, overall measure of an attitude and measures of the components of the underlying structure (i.e., evaluative–cognitive consistency, evaluative–affective consistency; Wegener et al., 1995). For example, researchers have used measures of an overall favorability of an attitude object to assess an overall or general evaluation of the attitude object (e.g., Norman, 1975; Schleicher et al., 2004). Researchers have measured evaluative–cognitive consistency by asking participants about traits or features an attitude object holds as either favorable or unfavorable (e.g., Crites, Fabrigar, & Petty, 1994). Overall evaluative and evaluative–cognitive consistency scores are calculated and put onto the same scale. Then, an absolute difference score is calculated between the overall evaluative and cognitive scores to evaluate consistency. Finally, researchers typically have measured evaluative–affective consistency by asking participants how certain attitude objects make them feel (e.g., Crites et al., 1994). Similarly, overall evaluative and evaluative–affective consistency scores are calculated and put onto the same scale. Then, an absolute difference score is calculated between the overall evaluative and affective scores to evaluate consistency. To measure affective–cognitive consistency, an

absolute difference score is calculated between the re-scaled evaluative–cognitive and evaluative–affective measures.

Prior research has found that structural consistency moderates attitude–behavior relationships. For example, Norman (1975) conducted a study in which college students were asked about their attitudes towards volunteering as a participant in psychological research studies and were later presented with an opportunity to participate in research. The results indicated that participants with high rather than low levels of affective–cognitive consistency had stronger attitude–behavior relationships (i.e., were more likely to participate in research studies). Norman (1975) argued that this result demonstrates the importance of examining both affective and cognitive components of attitudes when predicting behavior. Millar and Tesser (1989) tested the moderating effect of affective–cognitive consistency on the relationship between attitudes toward a puzzle and puzzle playing behavior. Millar and Tesser (1989) hypothesized that thought emphasizing either cognitive or affective components of attitudes toward puzzle playing should lead to similar puzzle playing behavior among participants high rather than low in affective–cognitive consistency. The results indicated that participants with low affective–cognitive consistency had more variability in puzzle playing behavior compared to participants with high affective–cognitive consistency.

Schleicher et al. (2004; 2015) found that structural consistency interacted with overall, cognitive, and affective measures of job satisfaction to predict job performance and OCB. More specifically, the job satisfaction–OCB relationship was stronger among workers with high structural consistency rather than low structural consistency. Finally, in a meta-analysis by Kraus (1995), affective–cognitive consistency was a significant

moderator of attitude–behavior relationships. More specifically, various attitude–behavior relationships were significantly stronger when consistency was high (r = .49) rather than low (r = .10). A meta-analysis by Cooke and Sheeran (2004) found similar results. More specifically attitude–behavior relationships were significantly stronger when consistency was high (r = .54) rather than low (r = .13). However, structural consistency did not significantly moderate attitude–behavior relationships (r = .46). Thus, the consistency between cognitive and affective components of an attitude appears to strengthen an attitude and leads to greater attitude–behavior consistency.

Vested interest

Vested interest refers to the extent to which an attitude object is "hedonically relevant for the attitude holder" (Crano, 1995). Stated differently, attitude objects that are perceived as carrying important consequences and are salient in memory are held with higher levels of vested interest. According to Crano (1995), there are five components of vested interest. First, a perceived stake, or perception of significant consequences, in the attitude object is a necessary component for overall vested interest in an attitude object. People who perceive a great magnitude, high number, and long duration of consequences associated with an attitude object are more likely to hold an attitude with vested interest (Crano, 1995). More specifically, when one perceives he or she has much to gain or lose from an attitude, the stronger the attitude, and behaviors consistent with the attitude are more likely to occur. For example, workers who perceive job satisfaction is related to job performance are more likely to have high levels of vested interest in job satisfaction, given that their job satisfaction levels might have significant consequences on their job performance ratings (Schleicher et al., 2015). Second, the extent to which an attitude

object is salient should increase the level of vested interest (Crano, 1995). If an attitude object is salient, then the attitude will be stronger, and the object should guide attitude-consistent behavior. For example, a worker might hold a negative attitude towards his or her organization wherein vested interest is stronger to the extent that an abusive supervisor is salient in a workplace with low levels of CWBs.

Third, the extent to which one holds a high level of certainty regarding the consequences associated with an attitude object is directly related to vested interest (Crano, 1995). More specifically, if a given attitude object has uncertain consequences, then the attitude is less likely to be held with a high level of vested interest. For example, a worker might hold a negative attitude towards CWBs, but vested interest is attenuated to the extent that the worker does not see the relationship between engaging in CWBs and getting terminated. Fourth, the immediacy of the consequences associated with an attitude-consistent behavior is directly related to the level of vested interest in an attitude (Crano, 1995). For example, a negative attitude toward CWBs is more likely to be held with a high level of vested interest if the organization successfully associates immediate consequences with CWBs. Finally, the last component of vested interest is self-efficacy. More specifically, the extent to which people feel they can confidently behave in a manner consistent with the positive and negative consequences of an attitude object should lead to higher levels of vested interest (Crano, 1995). It is possible that certain actions are beyond the capabilities of a given person. Thus, low self-efficacy will attenuate vested interest. For example, a worker with a positive attitude toward OCBs might not be able to bring themselves to engage in OCBs. As a result, vested interest in

attenuated, and a behavior consistent with a positive attitude toward OCBs is less likely to occur.

Due to the five components of vested interest, there are many methods with which vested interest can be measured. Due to the self-report nature of the current study, I will limit my discussion to self-report measures of vested interest. Sherif et al. (1973) developed a 36-item self-report measure of vested interest on attitudes about the country of India. The items consisted of statements about India and were classified as either moderately favorable, intermediate, or moderately unfavorable towards India. Then, participants rated the extent to which they found the statements objectionable. Similarly, Schleicher et al. (2015) asked participants whether they found seven statements regarding job satisfaction as either objectionable or acceptable.

Prior research, primarily in the social psychology literature, has provided support for most of the vested interest components. Regan and Fazio (1977) found that college students overwhelmingly held strong, negative attitudes toward an on-campus housing problem. However, only students who were directly affected by the housing problem (i.e., high level of personal stake in the issue) were more likely to work towards finding a solution. Fazio, Chen, McDonel, and Sherman (1982) found that direct experience with an attitude object increased attitude–behavior consistency. Fazio et al. (1982) posited that this finding is due to direct experience making certain attitude objects more salient than those with which participants had less direct experience. Tyler and McGraw (1983) found that antinuclear activists were more likely to believe that a nuclear attack was imminent compared to non-activists. Furthermore, activists were far more likely to protest against nuclear activity compared to non-activists. Crano (1995) argued that these

results suggest that antinuclear activists held their attitudes with a higher level of certainty compared to those who simply held a negative attitude towards nuclear warfare. Finally, Ajzen (1985) proposed a model of planned behavior in which self-efficacy has an indirect effect on attitude-consistent behavior through intentions. A study by Ajzen and Madden (1986) provided support for this model. Therefore, vested interest in an attitude strengthens the relationship between the attitude and behavior.

Moderating effect of job attitude strength

Prior research has demonstrated that job satisfaction has a significant, positive relationship with in-role performance and OCB (Bateman & Organ, 1983; Riketta, 2008). Furthermore, job satisfaction has a significant, negative relationship with CWB (Mount et al., 2006). The literature on the job satisfaction–job performance relationship has revealed a wide range of moderators, including the moderating effect of job attitude strength. For example, Schleicher et al. (2004) found that the affective–cognitive consistency (i.e., structural consistency) of job satisfaction moderated the job satisfaction–job performance relationship, such that workers high rather than low in affective–cognitive consistency were more likely to have high rather than low levels of job performance. Similarly, Schleicher et al. (2015) found that workers with high levels of four indicators of job attitude strength (i.e., structural consistency, attitude certainty, latitude of rejection, and attitude extremity) were more likely to have high rather than low levels of in-role job performance and OCB.

Allport (1935) argued that attitudes are important guides to behavior, and research in the job satisfaction literature has supported this argument. However, prior research has indicated that the effects of attitudes on behavior are moderated by the strength of

attitudes, such that strong attitudes are more likely to have effects on behavior (Kraus, 1995; Schleicher et al., 2004; Schleicher et al., 2015). According to Krosnick and Petty (1995), strong attitudes are those that (a) influence information processing and judgment, (b) guide behavior, (c) are persistent, and (d) are resistant to threats or attacks. Each feature is theorized to have different dimensions or indicators. In the current study, I will investigate the dimensions of attitude extremity, structural consistency, attitude certainty, and vested interest.

Thus, according to the attitude strength literature, workers with strong job satisfaction attitudes should hold attitudes toward their jobs that are (a) more extreme, (b) consistent across affective and cognitive components, (c) more certain, and (d) salient and carry important consequences (Chaiken et al., 1995; Crano, 1995; Holtz & Miller, 1995; Judd & Brauer, 1995). Furthermore, strong job satisfaction attitudes should be activated automatically when on the job (Fazio, 1995). High levels across these indicators of job attitude strength should be associated with attitude-consistent behavior (Crano, 1995). Thus, in the current study, I argue that job attitudes are more likely to have a relationship with work-related behavior when those attitudes are strong rather than weak. More specifically, workers with strong job satisfaction attitudes should be more likely to have high levels of in-role job performance and OCB and low levels of CWB. Furthermore, I build on the previous job attitude strength literature by addressing OCB and CWB as outcomes, whereas prior research has primarily focused on in-role job performance as the outcome (Schleicher et al., 2004; 2015).

Hypothesis 1: Attitude strength will moderate the relationship between job satisfaction and job performance. Specifically, the satisfaction–performance relationship will be stronger when attitude strength is high than when it is low.

Situational strength

Although the definition has varied over time, situational strength refers to the idea that "strong" situations restrict certain behaviors, whereas "weak" situations allow for the expression of individual differences in behavior (Meyer et al., 2010). One of the earliest propositions regarding situational strength came from Carl Rogers' (1954) theory of creativity. According to Rogers (1954), everyone has the capacity to be creative, and there are certain situational influences or variables that bring forth creative thinking and behavior. Rogers (1954) argued that humans harbor a unique capacity of awareness of the inner self and of the inner self's relationship with the external environment. When humans are open to the influences of the environment, they can access every element of their experience and produce novel (i.e., creative) products that are a result of the interaction between person and environment.

In 1963, social psychologist Stanley Milgram provided perhaps the earliest and most powerful demonstration of the influence of situations on behavior by conducting an experimental study on obedience to authority. Following this study, Milgram (1965) reflected on the implications of his results. Milgram (1965) posited that certain situations will produce greater compliance than others. More specifically, situations with severe consequences for certain behaviors represent "strong" situations in which certain behavioral contingencies are stronger than others whereas in diluted situations, certain behaviors are muted and more variable between participants. In 1968, social

psychologist Walter Mischel argued that individual differences or personality cannot be studied in a vacuum. Rather, researchers must study the interaction between personality and situational characteristics. Some situations are powerful determinants of behavior whereas other situations may be trivial.

Unfortunately, many social psychology researchers misinterpreted Mischel's (1968) work as claiming that personality was irrelevant in predicting behavior. Rather, only the situation matters in predicting behavior. Mischel (1973) later elaborated on his earlier work and argued that the importance of personality on behavior depends on four things: the situation selected, the type of behavior of interest, the particular individual differences sampled, and the purpose of the assessment. Although an exact model was not proposed by Mischel (1973), his later work provided the first model of situational strength.

Early research on situational strength provided has the foundation for researchers to develop models of situational strength. The first model of situational strength was proposed by Mischel (1977). According to Mischel (1977), there are four features of a "strong situation" and four features of a "weak situation." Mischel defined a strong situation as a situation in which (a) everyone construes events in the same way, (b) there are uniform expectancies regarding desired behavior, (c) there are adequate incentives for performance, and (d) everyone has the skills required to perform. Conversely, a weak situation is a situation in which (a) events are not uniformly encoded, (b) there are no uniform expectancies concerning the desired behavior, (c) there are insufficient incentives for performance, and (d) people are not provided the opportunity to learn the conditions appropriate to behave in a certain way. However, this model is not without significant limitations. First, Mischel did not provide an explanation as to whether strong

and weak situations are two ends of a continuum or two distinct situations. Second, directions for and implications of applying these methods in an experimental setting are not offered.

Mischel's (1977) proposed conceptualization of a strong versus a weak situation was a pivotal moment in situational strength research, but implications for personality research were not provided. Traditionally, social psychologists had measured the effects of personality on behavior through experimental studies. According to Snyder and Ickes (1985), the influence of personality traits is attenuated in strong situations because the behavior is determined by the situation. Furthermore, personality researchers use strong situations that do not allow for the expression of individual differences (i.e., personality) to influence behavior. Thus, social psychologists were left with the question of which type of situation was optimal for personality research. Snyder and Ickes (1985) proposed that social psychologists use "precipitating situations." A precipitating situation refers to a strong experimental setting in which (a) the situation is relevant to the trait or disposition of interest, (b) makes the disposition salient as a guide to behavior, and (c) allows individuals to select alternative modes of responding which reflect their standing on the trait dimension (Snyder & Ickes, 1985, p. 907). For example, a researcher interested in studying conscientiousness could conduct an experiment in which (a) the experimental setting is highly structured and organized, (b) provides a task that involves an organized and disciplined approach, and (c) allows for a wide range of responses to the task, which indicate participants' level of conscientiousness.

Following Snyder and Ickes (1985) proposition of a precipitating situation, no new models of situational strength were proposed until I/O psychologists reviewed the

extant situational strength literature and proposed a four facet model of situational strength (Meyer, Dalal, & Hermida, 2010). In their review, Meyer et al. (2010) argued that situational strength had a poorly defined construct space. More specifically, Meyer et al. (2010) questioned whether situational strength would be better represented by a number of facets rather than one comprehensive construct. After reviewing prior conceptualizations of situational strength, Meyer et al. (2010) identified four consistent features or facets of a situation's strength: clarity, consistency, constraints, and consequences. Given that this model of situational strength is arguably the most recent and comprehensive model, I will discuss each of these facets and present examples of each in the following paragraphs.

Clarity

Clarity refers to the extent to which cues regarding responsibilities are available and easily understood (Meyer et al., 2010). In situations with a high level of clarity, individual differences (e.g., personality, job attitudes) are restricted by clear, unambiguous information regarding desired or appropriate behaviors. Many organizational variables can influence clarity, including clearly communicated procedures or policies, clear supervisor support, and an ethical organizational culture. Alaybek et al. (2017) examined situational strength cues from proximal (e.g., coworkers) and distal (e.g., top management) sources as antecedents to perceptions of overall situational strength in the workplace. The results indicated that overall clarity was significantly, positively associated with overall situational strength. Furthermore, workers weighted clarity cues from distal sources greater than clarity cues from proximal sources. Alaybek et al. (2017) posited that whereas proximal sources such as supervisors

might communicate to workers what they should be doing, distal sources such as top management might communicate the broader rationale as to what workers should be doing through frequent communications about broader organizational values and objectives. Thus, clearly communicated policies from top management restrict individual differences and encourage certain types of behaviors.

Consistency

Consistency refers to the extent to which cues regarding responsibilities are compatible with each other (Meyer et al., 2010). It is important to note that this facet includes consistency between sources of information as well as consistency in information over time. For example, different sources might provide different information about the same behavior, and information about one behavior may change over time. In situations with a high level of consistency, individual differences are restricted by cues that uniformly indicate which behaviors are more desired. For example, prior research on climate strength has suggested that stronger organizational climates regarding ethical behavior attenuates the relationships between individual differences and ethical behavior (Knoll, Lord, Petersen, & Weigelt, 2016; Shin, 2012). Climate strength refers to the extent to which workers from the same organization share similar perceptions of the organizational climate (Shin, 2012). Consistent perceptions of ethical climate across workers indicates that the organization and its constituencies communicate consistent policies regarding certain types of behavior. Therefore, climate strength more closely reflects the consistency facet of situational strength compared to the other facets.

Much of the prior research on climate strength has investigated the effects of climate strength at different levels in the organization. For example, Shin (2012) found that ethical climate strength moderated the relationship between ethical climate and OCB at the business-unit level, such that a strong ethical climate strengthened this relationship. Shin (2012) argued that in stronger ethical climates, consistent cues regarding ethical behavior reinforce organizational policies and lead to higher levels of positive organizational outcomes, such as OCBs directed at individuals and the organization. González-Romá, Fortes-Ferreira, and Peiró (2009) found that the relationship between team climate, operationalized as norms and expectations of team behavior, and team performance was moderated by team climate strength. More specifically, in strong team climates, the relationships between different facets of team climate and team performance were significantly stronger. González-Romá et al. (2009) argued that these findings suggest that consistent cues regarding the expected behaviors of team members reflects stronger climates in which team behavior is more likely to lead to higher levels of team performance.

Also at the team level, Colquitt, Noe, and Jackson (2002) found that the positive association between procedural justice climate and team performance was significantly stronger in strong rather than weak climates. Finally, at the individual level of analysis, Lee and Dalal (2016) found that strong safety climates attenuated the relationship between conscientiousness and employee safety behavior. Lee and Dalal (2016) argued that organizations with strong safety climates restrict the range of behavior, which thereby restricts the extent to which individual differences in levels of conscientiousness influence employee safety behavior.

Constraints

Constraints refers to the extent to which freedom or action is limited by forces outside an individual's control (Meyer et al., 2010). In situations with a high level of constraints, individual differences are restricted by preventing individuals from exercising his or her own discretion. For example, Smithikrai (2008) found that behavioral monitoring systems and close supervision among workers across different industries can increase constraints on CWBs in strong rather than weak situations. More specifically, the results indicated that the relationship between conscientiousness and CWB was stronger and more negative when the workplace situation (i.e., electronic monitoring and supervision) was weak rather than strong. Thus, the relationship between conscientiousness and CWBs was attenuated in workplaces with constraints on behavior. Similarly, Alaybek et al. (2017) found that workers placed greater weight on cues regarding constraints from supervisors (i.e., a proximal source) compared to top management (i.e., a distal source).

Consequences

Consequences refers to the extent to which decisions or actions have important positive or negative implications (Meyer et al., 2010). In situations with many perceived consequences, individual differences are restricted by encouraging behaviors that increase the probability of positive outcomes and by discouraging behaviors that increase the probability of negative outcomes. Few studies in the situational strength literature has specifically investigated the consequences facet of situational strength. However, Meyer et al. (2014) found that situations with high levels of consequences attenuated the relationships between (a) conscientiousness and OCB, (b) agreeableness and OCB, (c)

conscientiousness and CWB, and (d) agreeableness and CWB. Thus, in workplace situations wherein the consequences for engaging in OCB and CWB are high, the range of OCB and CWB is restricted and the effects of conscientiousness and agreeableness on OCB and CWB are attenuated.

Measuring situational strength

Although researchers have conducted much theoretical and empirical research on situational strength, the measurement of situational strength has received less attention. However, researchers have provided both experimental and self-report methods of measuring situational strength. For example, Snyder and Ickes (1985) suggested the use of precipitating situations to measure the effects of situational strength on behavior. Traditionally, social psychologists had measured the effects of personality on behavior through experimental studies. According to Snyder and Ickes (1985), the influence of personality traits is attenuated in strong situations because the behavior is determined by the situation. Furthermore, personality researchers have used strong situations that do not allow for the expression of individual differences (i.e., personality) to influence behavior. Snyder and Ickes (1985) proposed that social psychologists use "precipitating situations." A precipitating situation refers to a strong experimental setting in which the situation (a) is relevant to the trait or disposition of interest, (b) makes the disposition salient as a guide to behavior, and (c) allows individuals to select alternative modes of responding which reflect their standing on the trait dimension (Snyder & Ickes, 1985, p. 907). For example, a researcher interested in studying conscientiousness could conduct an experiment in which (a) the experimental setting is highly structured and organized, (b) provides a task that involves an organized and disciplined approach, and (c) allows for a

wide range of responses to the task, which might indicate participants' level of conscientiousness.

Whereas experimental approaches to measuring situational strength have remained relatively consistent, self-report measures of situational strength have varied. For example, Smithikrai (2008) measured situational strength indirectly through perceptions of group norms and behavioral monitoring. Climate strength researchers have used the variance of employee perceptions of organizational climate within a single organization or business unit as indicators of climate strength (González-Romá et al., 2009; Shin, 2012). Meyer et al. (2014) addressed the inconsistency of self-report measures of situational strength by creating items that purported to measure each facet of situational strength (i.e., clarity, consistency, constraints, and consequences). Meyer et al. (2014) wrote items in which workers were asked to think about their jobs and about the level of clarity, consistency, constraints, and consequences they perceived on their jobs. The final scale contained seven items for each facet with a total of 28 items, which is described in the Method section below. Subsequent research using Meyer et al.'s (2014) scales or adaptations of each scale have found acceptable validity for each scale (Dalal et al., 2015, Meyer et al., 2014).

Moderating effect of situational strength

Prior research has demonstrated that situational strength moderates the relationships between individual difference variables (e.g., personality, job attitudes) and behavior (Lee & Dalal, 2016; Meyer et al., 2014; Smithikrai, 2008). Whereas strong situations restrict individual differences, weak situations allow individual differences to influence behavior (Alaybek et al., 2017; González-Romá et al., 2009; Shin, 2012). Prior

research has indicated that situational strength is a possible moderator of the job satisfaction–job performance relationship. For example, Bowling et al. (2015) found that the constraints facet of situational strength attenuated the relationship between job satisfaction and job performance. More specifically, the relationship between job satisfaction and job performance was stronger when there were fewer rather than many perceived constraints on behavior. Thus, workers are more likely to be better performers when they have some discretion on how to perform their jobs.

In the current study, I propose that situational strength moderates the relationship between job satisfaction and job performance. Based on the findings of prior research and the theoretical assumptions of situational strength, I expect that the relationship between satisfaction and performance will be attenuated in strong rather than weak situations. For example, in organizations with performance-based pay plans, certain behaviors are rewarded and are more likely to lead to desired outcomes, regardless of the levels of job satisfaction among workers (e.g., pay increases, promotions; Heneman & Gresham, 1998). Thus, performance-based pay plans might create strong situations in which certain behaviors are more likely to occur than others. However, a lack of performance-based pay plans might create weak situations in which levels of job satisfaction might have a greater effect on employee behavior. Furthermore, prior research has indicated that clearly communicated performance expectations and other organizational policies are associated with strong situations in which there is less variability in employee behavior (Alaybek et al., 2017). Finally, prior research has found that strong situations attenuate the relationships between (a) organizational climate and OCB, (b) personality and OCB, and (c) personality and CWB (Meyer et al., 2014; Shin,

2012). Thus, strong situations will attenuate the relationships between job satisfaction and in-role job performance, OCB, and CWB, whereas weak situations will strengthen these relationships.

Hypothesis 2: Situational strength will moderate the relationship between job satisfaction and job performance. Specifically, the satisfaction–performance relationship will be stronger when situational strength is low than when it is high.

Three-way interaction between job satisfaction, attitude strength, and situational strength

According to Meyer et al. (2010), weak situations are those in which cues regarding desired behaviors are unclear whereas strong situations are those in which these cues are clear and guide behavior. For example, when situational strength is low, job performance levels will vary across workers. However, when situational strength is high, job performance levels will be more consistent across workers. This restriction in range attenuates the effects of predictor variables on job performance. In a meta-analysis by Bowling et al. (2015), the constraints dimension of situational strength attenuated the relationship between job satisfaction and job performance. Thus, in the current study, the relationships between job satisfaction and (a) in-role job performance, (b) OCB, and (c) CWB should be stronger when situational strength is low. However, in strong situations, these relationships should be attenuated and result in more consistent in-role job performance, OCB, and CWB across workers.

According to Krosnick and Petty (1995), strong attitudes are those that (a) influence information processing and judgment, (b) guide behavior, (c) are persistent, and (d) are resistant to threats or attacks. Prior research in the social psychology literature has

found that attitude strength significantly moderates various attitude–behavior relationships, such that these relationships are stronger when attitudes are strong, but not when they are weak (Cooke & Sheeran, 2004; Kraus, 1995). In the current study, I propose that attitude strength will significantly moderate the satisfaction–performance relationship when situational strength is low, but not when it is high. Strong situations attenuate the relationships between predictor variables (e.g., job satisfaction) and criterion variables (e.g., job performance) (Bowling et al., 2015; Meyer et al., 2010). Therefore, the moderating effect of attitude strength on the satisfaction–performance relationship should be attenuated in strong situations. For example, in a workplace with pay-for-performance plans (i.e., high situational strength), the relationship between job satisfaction and job performance should be weak, regardless of attitude strength. However, in a workplace in which pay is not distributed as a function of performance (i.e., low situational strength), the relationship between job satisfaction and job performance should be strong, such that attitude strength is high rather than low. Hypothesis 3 is visually depicted in Figures 1, 2, and 3.

Hypothesis 3: The moderating effects of attitude strength on the job satisfaction–job performance relationship will vary across different levels of situational strength. Specifically, the high levels of attitude strength will produce strong satisfaction–performance relationships within weak situations, but not within strong situations.

II. METHOD

Participants

I conducted a two-tailed power analysis using G*Power to determine the required sample size to detect the interaction effects in my study (Faul, Erdfelder, Lang, & Buchner, 2007; Faul, Erdfelder, Buchner, & Lang, 2009). I conducted the analysis by setting the desired power at $\beta = 0.80$, $\alpha = 0.10$, and I assumed a small effect size of $f^2 = 0.02$. The required sample size was 500 participants. However, I expected some data to be missing or incomplete, so I recruited 600 participants in the event that a large number of participant data needed to be removed prior to data analyses. Due to the large number of participants who were found to be carelessly responding to the questionnaire, the measure of which is detailed later in this section, I recruited 934 participants and removed 390 participants who were identified as responding carelessly,

In the current study, I used employed adults recruited through Amazon's Mechanical Turk (MTurk; Casler, Bickel, & Hackett, 2013). MTurk is a crowdsourcing service that allows researchers to recruit survey respondents for research projects (Landers & Behrend, 2015). MTurk participants, colloquially referred to as "MTurkers," are individuals who participate in Human Intelligence Tasks (HITs). HITs might include surveys, small experiments, transcription assignments, and other related tasks that employers post on MTurk along with some form of compensation for successfully completing the HITs (Landers & Behrend, 2015). However, if a HIT is deemed as low quality or incomplete, researchers can return the HIT and withhold compensation

(Cheung, Burns, Sinclair, & Sliter, 2017). I used MTurk data in the present study in order to examine job performance, OCB, and CWB in actual works settings. Previous research has demonstrated that Amazon's MTurk provides quality samples to organizational researchers and is particularly useful for the study of sensitive topics, such as CWB, because of the anonymity it provides (Landers & Behrend, 2015; Woo, Keith, & Thornton, 2015).

Demographically, MTurk participants differ from participants recruited from convenience samples, face-to-face probability samples, and other web-based recruitment efforts (Berinsky, Huber, & Lenz, 2012; Paolacci & Chandler, 2014). For example, Berinsky et al. (2012) investigated the demographic characteristics of samples from the MTurk platform. Compared to convenience samples (e.g., college students, adult convenience samples), MTurk participants are older than college student samples but younger than the other adult convenience samples Berinsky et al. (2012) reviewed. MTurk participants had similar education levels, but were far less white than college student samples. Berinsky et al. (2012) also compared MTurk samples to other web-based samples (i.e., ANESP 2008–09) and face-to-face samples (i.e., ANES 2008). The ANESP refers to the American National Election 2008–09 Panel Study, in which participants were offered compensation for completing 30 minutes of surveys every month, and the ANES 2008 refers to the American National Elections Study 2008, in which face-to-face probability samples are recruited for surveys and other studies. Compared to these samples, MTurk samples are similar in educational attainment and median income, but MTurk samples are much younger (Berinsky et al., 2012). Also, MTurk samples were more politically liberal, overrepresented Asians, and

underrepresented Blacks and Hispanics compared to the ANES and ANESP samples. Overall, Berinsky et al. (2012) found that MTurk workers are more representative than college student samples but less representative compared to national, web-based and face-to-face recruitment efforts.

In a review of studies using MTurk samples, Paolacci and Chandler (2014) found that over 75% of MTurk participants reside in either the United States or India. MTurk participants also tend to be younger, more educated, more underemployed, and more liberal than the general population in the United States (Paolacci, Chandler, & Ipeirotis, 2010). In terms of personality differences, Paolacci and Chandler (2014) note that MTurk samples are less extraverted compared to college samples and more socially anxious compared to the general United States population. Also, there is evidence that MTurk samples have slightly more difficulty with more complex tasks than college students, which might be due to age and education differences (Paolacci & Chandler, 2014). Overall, Paolacci and Chandler (2014) note that despite being less representative of the general population in the United States, MTurk samples are useful for survey research, especially for researchers seeking participants with specific characteristics.

Prior research has raised concerns regarding the validity and reliability of data collected from MTurk samples (see Chandler & Shapiro, 2016). However, research by Behrend, Sharek, Meade, and Wiebe (2011) found that participants from MTurk and college student samples responded equivalently to items on the Big Five personality scale. Furthermore, responses to social desirability items were equivalent across the two groups. Horton, Rand, and Zeckhauser (2011) attempted to replicate the results of well-known psychological experiments using MTurk data. Their results showed acceptable

similarity to those found in the laboratory and field. Similarly, Berinsky et al. (2012) replicated the results of experimental studies using MTurk samples. Berinsky et al. (2012) found that the external validity and internal validity of experiments conducted using MTurk samples were acceptable also. Finally, in a study examining gambling and addiction behaviors, Kim and Hodgkins (2017) found that the reliability and validity of their scales' data were relatively high. Therefore, the use of MTurk samples for the purposes of survey and field research is supported by the extant literature.

Although prior research supports the adequacy of MTurk data for social scientific research purposes, prior research has cautioned researchers regarding the potential issues of attention and faking in MTurk samples (Chandler & Paolacci, 2017; Chandler & Shapiro, 2016). For example, Chandler and Paolacci (2017) found that MTurk participants were more likely to deceive researchers regarding eligibility criteria for MTurk studies. Participants were even more likely to deceive researchers when the monetary reward for the study was high and when eligibility criteria were designed to exclude a majority of MTurk participants. However, Chandler and Paolacci (2017) note that researchers can circumvent MTurk "impostors" by prescreening data and routing those who are not eligible to other MTurk surveys or minimize duplicate participants by using survey platform features that can prevent the same participant from taking the survey more than once.

Given the large body of psychological research that has started using MTurk for data collection, researchers have provided recommendations to researchers planning to use the MTurk platform. For example, Cheung et al. (2017) provided a large set of recommendations to organizational psychology researchers on issues of subject

inattentiveness, selection biases, demand characteristics, repeated participation, and range restriction in MTurk samples. Of particular relevance to my current study are the issues of inattentiveness and faking to the items on my survey. To attenuate these issues, Cheung et al. (2017) recommend the use of attention check questions or repetitive items. Cheung et al. (2017) also recommend that researchers provide inattentive participants a second chance if they are found to be inattentive. If participants continue to be inattentive or are found to be faking their responses, then the HIT should be rejected and data removed. In a similar review aimed specifically at industrial/organizational psychologists, Woo, Keith, and Thornton (2015) highlighted four concerns regarding the use of MTurk data: repeated participation, compensation and resulting motivation, selection bias, and the relevance of the sample to the working population. Woo et al. (2015) recommend that researchers be as transparent as possible when describing their study to MTurk participants in order to help facilitate high quality data. During an MTurk study, Woo et al. (2015) recommend the use of attention check items and an opportunity for participants to give feedback on the study. Finally, Woo et al. (2015) recommend providing bonus compensation to participants who provided high quality work relative to their peers.

In the current study, I followed the recommendations of prior studies and reviews to attenuate the issue of inattentiveness and careless responding among my participants (Chandler & Paolacci, 2017; Hauser & Schwartz, 2016). To attenuate inattentiveness, I used MTurk's built-in eligibility requirements, instead of attention check questions. For example, Peer, Vosgerau, and Acquisti (2014) found that MTurk participants who had a high reputation (i.e., above 95% approval ratings) for their completed HITs were

significantly less likely to fail attention check questions. Conversely, MTurk participants without a high reputation were more likely to fail attention check questions. The results of this experiment were replicated in a second experiment by Peer et al. (2014). Therefore, in the current study, I used MTurk's built-in eligibility requirement for MTurk participants with a high reputation to attenuate issues associated with inattentiveness.

To attenuate careless responding among my participants, I used the page time index, an insufficient effort responding (IER) index (Huang, Curran, Keeney, Poposki, & DeShon, 2012). The page time index is calculated by computing the time each participant spends on each item on each page of a multi-page questionnaire. If participants complete a page within a questionnaire at a rate faster than 2 seconds per item, then they are assumed to be carelessly responding to the items, in which case they receive a score of one on that page. However, if participants complete a page within a questionnaire at a rate slower than 2 seconds per item, then they are assumed to be responding with effort and receive a score of zero for that page. The scores for each page are summed to give a final page time index for each participant. Given that demographics information can be reasonably responded to at a rate faster than 2 seconds per item, a score of one on that page was deemed acceptable. Thus, participants with a page time index of one, specifically on the demographics page, or less were not flagged as careless responders, and their HIT was accepted. However, participants with a page time index of more than one were flagged as careless responders, and their HIT was returned. Finally, I used the survey platform Qualtrics to collect my survey data. To attenuate the potential issue of repeat participants, I used a Qualtrics feature that only allows a unique ISP address to access the survey once.

Survey respondents were compensated $1.00 for completing the survey. According to research by Hara et al. (2018), the proposed compensation falls within the range of average compensation received by participants for completing an assignment on MTurk. Due to the large number of participants who were found to be carelessly responding to the questionnaire, I recruited 934 participants and removed 390 participants who were identified as responding carelessly. The participants (N = 539) were presented with a cover letter describing the purpose of the study (see Appendix A). The mean age for the current study's participants was slighter older than prior research, but there was more variance in age compared to prior research (M = 36.27, SD = 10.48; Paolacci et al., 2010). 42% of participants were female. The current sample was predominately White (57%) and a majority had earned at least a bachelor's degree (51%). A majority of participants were employed in the United States (73%), held full-time positions (88%), and held non-managerial positions (56%). Overall, the mean hours worked per week for participants was just below 40 hours per week (M = 39.87, SD = 10.35).

Measures

Job satisfaction

I included three measures of job satisfaction in order to assess the affective, cognitive, and evaluative components of job satisfaction. Schleicher et al. (2015) provided evidence that each of the following measures correspond to one of the three components of job satisfaction. To assess the cognitive component of job satisfaction, I used Weiss et al.'s (1967) 20-item Minnesota Satisfaction Questionnaire (MSQ; α = .89). Items on the MSQ ask participants how satisfied they are with different parts of their job, such as pay and working conditions. Sample items included "being able to keep busy all

the time," and "the chance to do things for other people." Responses to each item on this scale are made on a 7-point graphic rating scale from 1 ("very unsatisfied") to 7 ("very satisfied"). To assess the affective component of job satisfaction, I used Brayfield and Rothe's (1951) 18-item Overall Job Satisfaction (OJS) scale (α = .87). Sample items were "my job is like a hobby to me," "I enjoy my work more than my leisure time," and "most days, I am enthusiastic about my work." Finally, per Schleicher et al. (2015), I measured the overall evaluative component of job satisfaction using two items from the OJS scale (α = .71): "I feel fairly well satisfied at my current job," and "I am satisfied with my job for the time being." Responses to each item on the OJS and Evaluative scales were made on a 7-point graphic rating scale from 1 ("strongly disagree") to 7 ("strongly agree"). For each scale, I created an average score across all items for each participant. Higher scores indicated higher rather than lower levels of job satisfaction. Items are show in Appendices B, C, and D.

Attitude strength

In the current study, I measured attitude strength using four indicators: attitude extremity, attitude certainty, structural consistency, and vested interest.

Attitude extremity. Attitude extremity refers to the extent to which one deviates from a neutral position regarding an attitude (Abelson, 1995). Measures of attitude extremity generally assess how far participants deviate from a neutral rating on a given scale (Downing et al., 1992; Schleicher et al., 2015). Per Schleicher et al. (2015), I measured attitude extremity by calculating deviation scores from the neutral rating on each job satisfaction scale for each item. These item-level deviation scores were

averaged for each scale to give cognitive extremity, affective extremity, and evaluative extremity scores.

Attitude certainty. Attitude certainty refers to the extent to which one is confident about his or her attitude, such that the more confident one is about his or her standing along an attitude dimension, the stronger the attitude (Gross, Holtz, & Miller, 1995). Attitude certainty is generally assessed via self-report measures by asking participants how certain they are about their attitudes towards attitude objects (Fazio & Zanna, 1978; Sample & Warland, 1973; Schleicher et al., 2015). Following Schleicher et al. (2015), I measured attitude certainty by computing certainty scores for cognitive and affective components of job satisfaction. More specifically, I asked participants "how certain do you feel about your attitude toward your present job, as expressed in the 18 (20) items listed above?" following the OJS (affective component) and MSQ (cognitive component) scales, respectively. Responses to each question were made on a 7-point graphic rating scale from 1 ("very uncertain") to 7 ("very certain"). Higher scores indicate greater attitude certainty.

Structural consistency. Structural consistency refers to the extent to which a person's overall evaluation of an attitude object is consistent with the affect associated with the object, and the meanings or beliefs about the object (Chaiken et al., 1995). People with structurally consistent attitudes had more attitude–behavior consistency. Structural consistency is typically measured using an evaluative, overall measure of an attitude and measures of the components of the underlying structure (i.e., evaluative–cognitive consistency, evaluative–affective consistency; Wegener et al., 1995). In the current study, I measured three types of structural consistency: affective-cognitive

consistency, evaluative–cognitive consistency, and evaluative–affective consistency. Per Schleicher et al. (2004), I averaged the three consistency scores to compute an overall average of structural consistency. Also, I reverse scored the items on each job satisfaction measure, such that higher values indicated more consistent rather than less consistent attitudes toward job satisfaction.

Affective-cognitive consistency. Affective-cognitive consistency refers to the extent to which the affect about an attitude object is consistent with the beliefs associated with the object (Chaiken et al., 1995). To measure affective–cognitive consistency, the absolute value of a difference score is calculated between standardized evaluative–cognitive and evaluative–affective measures (Crites et al., 1994). In the current study, I first reverse scored the job satisfaction items, such that higher scores indicated more consistent rather than less consistent job satisfaction attitudes. Second, I standardized each job satisfaction measure (i.e., MSQ, OJS, Evaluative scale). Finally, to measure affective–cognitive consistency, I computed the absolute value of the difference between the standardized scores on the measure of the affective job satisfaction component (i.e., OJS) and the measure of the cognitive job satisfaction component (i.e., MSQ) for each participant.

Evaluative-cognitive consistency. Evaluative–cognitive consistency refers to the consistency between beliefs about an attitude object and the overall evaluation of an object (Chaiken et al., 1995). To measure evaluative-cognitive consistency, the absolute value of a difference score is calculated between standardized scores on an evaluative and a cognitive measure of an attitude. In the current study, I first reverse scored the job satisfaction items, such that higher scores indicated more consistent rather than less

consistent job satisfaction attitudes. Second, I standardized the scores on the measure of the overall, evaluative measure of job satisfaction (i.e., E) and the measure of the cognitive job satisfaction component (i.e., MSQ). Finally, I computed an absolute difference between the standardized scores on the evaluative measure and the MSQ for each participant.

Evaluative-affective consistency. Evaluative–affective consistency refers to the consistency of affect or feelings about an attitude object and an overall evaluation of an object (Chaiken et al., 1995). To measure evaluative-cognitive consistency, the absolute value of a difference score is calculated between standardized scores on an evaluative and an affective measure of an attitude. In the current study, I first reverse scored the job satisfaction items, such that higher scores indicated more consistent rather than less consistent job satisfaction attitudes. Second, I standardized the scores on the measure of the overall, evaluative measure of job satisfaction (i.e., E) and the measure of the affective job satisfaction component (i.e., OJS). Finally, I computed the absolute value of the difference between the standardized scores on the overall evaluative scale and the OJS for each participant.

Vested interest. Vested interest refers to the extent to which an attitude object is perceived as carrying important consequences and is salient in memory (Crano, 1995). Vested interest is measured in many ways, but in the current study, I used self-report measures of vested interest. Self-report measures of vested interest usually ask participants to rate the extent to which they find a set of items objectionable (see Schleicher et al., 2015; Sherif et al., 1973). I used seven statements from Schleicher et al. (2015) in which participants were asked whether they found statements regarding job

satisfaction as objectionable or acceptable. Participants were asked whether the following statements about their present job are objectionable or acceptable: "extremely satisfying," "moderately satisfying," "slightly satisfying," "a neutral experience," "slightly unsatisfying," "moderately unsatisfying," and "extremely unsatisfying." The more statements found to be objectionable indicates how well-defined attitudinal boundaries are and therefore how much vested interest one has in their attitude (Sherif & Hovland, 1961). Thus, to measure vested interest, I summed all objectionable statements. The greater the number of objectionable statements, the stronger the attitude.

Situational strength

In the current study, I measured situational strength using four facets of situational strength: clarity, consequences, consistency, and constraints (Meyer et al., 2010).

Clarity. Clarity refers to the extent to which cues regarding responsibilities are available and easily understood (Meyer et al., 2010). I measured the clarity facet of situational strength using Meyer et al.'s (2014) clarity scale ($\alpha = .95$). The scale consists of seven items. Sample items include "on this job, specific information about work-related responsibilities is provided," and "on this job, an employee is told exactly what to expect." Responses to each item were made on a 7-point graphic rating scale from 1 ("strongly disagree") to 7 ("strongly agree"). I calculated average scores across items for each participant. Higher average scores indicated work situations with high levels of clarity, whereas lower average scores indicated low levels of clarity. Items are shown in Appendix E.

Consequences. Consequences refers to the extent to which decisions or actions have important positive or negative implications (Meyer et al., 2010). I measured the

consequences facet of situational strength using Meyer et al.'s (2014) consequences scale (α = .86). The scale consists of seven items. Sample items included "on this job, very serious consequences occur when an employee makes an error," and "on this job, important outcomes are influenced by an employee's actions." Responses to each item were made on a 7-point graphic rating scale from 1 ("strongly disagree") to 7 ("strongly agree"). I calculated average scores across items for each participant. Higher average scores indicated work situations with high levels of consequences, whereas lower average scores indicated low levels of consequences. Items are shown in Appendix F.

Consistency. Consistency refers to the extent to which cues regarding responsibilities are compatible with each other (Meyer et al., 2010). I measured the consistency facet of situational strength using Meyer et al.'s (2014) consistency scale (α = .90). The scale consists of seven items. Sample items included "on this job, responsibilities are compatible with each other," and "on this job, procedures remain consistent over time." Responses to each item were made on a 7-point graphic rating scale from 1 ("strongly disagree") to 7 ("strongly agree"). I calculated average scores across items for each participant. Higher average scores indicated work situations with high levels of consistency, whereas lower average scores indicated low levels of consistency. Items are shown in Appendix G.

Constraints. Constraints refers to the extent to which freedom or action is limited by forces outside an individual's control (Meyer et al., 2010). I measured the consistency facet of situational strength using Meyer et al.'s (2014) constraints scale (α = .89). The scale consists of seven items. Sample items included "on this job, an employee is prevented from making his/her own decisions," and "on this job, other people limit

what an employee can do." Responses to each item were made on a 7-point graphic rating scale from 1 ("strongly disagree") to 7 ("strongly agree"). I calculated average scores across items for each participant. Higher average scores indicated work situations with high levels of constraints, whereas lower average scores indicated low levels of constraints. Items are shown in Appendix H.

Job performance

I measured three types of job performance: in-role job performance, organizational citizenship behavior (OCB), and counterproductive work behavior (CWB).

In-role job performance. I measured in-role job performance using Williams and Anderson's (1991) in-role job performance scale ($\alpha = .91$). The scale consists of seven items, two of which are reverse coded. Participants were asked the frequency with which they performed each in-role behavior over the last year. Sample items included "I adequately complete assigned duties," and "I perform tasks that are expected of me." Responses to each item were made on a 7-point graphic rating scale from 1 ("never") to 7 ("always"). I calculated average scores across items for each participant. Higher average scores indicated high levels of in-role job performance, whereas lower average scores indicated low levels of in-role job performance. Items are shown in Appendix I.

Although prior research has found that workers rate themselves higher than others (Conway & Huffcutt, 1997; Harris & Schaubroeck, 1988; Thornton, 1980), I used a self-report measure of job performance because of funding and time limitations. The financial cost and time it would take to collect supervisor ratings of job performance were too great for the current study. Generally, ratings across different sources do not converge (Thornton, 1980). For example, in a meta-analysis of 36 independent studies

on self and supervisor ratings of job performance, Harris and Schaubroek (1988) found a corrected correlation between self and supervisor ratings of .35. Furthermore, self-ratings of job performance were .7 SD higher than supervisor ratings and .23 SD higher than peer ratings. However, these standard deviation differences were not statistically significant, and the lower end of the 90% confidence interval (CI) of the corrected correlation between self and supervisor ratings did not include zero. A meta-analysis by Conway and Huffcutt (1997) found similar results, but the corrected correlation between self and supervisor ratings of job performance was lower (.22). Also, the 80% CI for this corrected correlation did not include zero.

According to researchers, ratings between different sources might vary for a variety of reasons. For example, in a review of the self-appraisal literature, Campbell and Lee (1988) argued that one of the major uses of self-appraisal is to gather information that is not accessible to other sources (e.g., supervisors, peers). Workers might be more familiar with and exposed to the full range of job-related behaviors they perform. Thus, self-appraisals improve criterion deficiency by including information that other sources overlook. Similarly, Lance, Teachout, and Donnelly (1992) found that different rating sources might reflect different perspectives on overall performance. More specifically, raters might have relied on different sets of behavior to evaluate workers' overall performance. Therefore, correspondence in ratings across different sources should not be expected because raters rely on different sets of job-related behavior that do not overlap. Similarly, Murphy and Cleveland (1995) found that raters have different opportunities to observe job-related behavior, so ratings will differ across sources.

Although prior research had suggested a wide range of reasons as to why ratings might differ across raters, Facteau and Craig (2001) found that prior research had not examined possible inequivalence of a rating instrument across raters. Using a multiple groups confirmatory factor analysis and IRT methods on a multi-source rating instrument, Facteau and Craig (2001) found that although there was minimal invariance on a few items, the rating instrument did not vary across peer, supervisor, and subordinate rating sources. Finally, Murphy, Cleveland, Skattebo, and Kinney (2004) investigated the effects of different raters' goals on job performance ratings of the same ratee. Rater goals reflect the end states a rater aims toward when completing a performance appraisal. Raters intend to provide ratings that are consistent with the goals they hold regarding the performance appraisal system. In the study by Murphy et al. (2004), college students rated the performance of a single professor throughout a single semester. Results indicated that rating goals obtained at the beginning of the semester predicted performance at the end of the semester, which suggests that raters with different goals provide different performance ratings.

Although self-ratings differ from supervisor ratings of job performance for many reasons, none of these reasons demonstrate that self-ratings are insufficient or inaccurate measures of job performance. Rather, self-ratings might capture different behaviors in the performance domain, different conceptualizations of what constitutes job performance, and different rater goals (Campbell & Lee, 1988; Lance et al. 1992; Murphy et al., 2004). Given that workers have greater knowledge and direct experience of their job-related behaviors, they might have a wider range of behaviors upon which to rate themselves (Murphy & Cleveland, 1985). Although meta-analyses by Conway and

Huffcutt (1997) and Harris and Schaubroek (1988) found low to moderate corrected correlations between self-ratings and other rating sources, the lower end of the confidence intervals for these correlations did not include zero. Thus, although self-ratings differ from other sources, prior research suggests that self-ratings are still valid measures of job performance. Therefore, I do not find the use of self-ratings of job performance to be a significant limitation in my current study.

Organizational citizenship behavior (OCB). A meta-analysis conducted by Carpenter, Berry, and Houston (2014) demonstrates that the mean difference between OCB ratings on self-report and other-report scales of OCB is small. Furthermore, both self-ratings and supervisor-ratings of OCB significantly converge. I measured OCB using Lee and Allen's (2002) self-report scales of OCBs targeted at the individual (OCB-I; $\alpha = .83$) and the organization (OCB-O; $\alpha = .88$). Each scale consists of eight items. Participants were asked the frequency with which they performed each OCB over the last year. Sample items from the OCB-I scale included "I help others who have been absent," and "I assist others with their duties." Sample items from the OCB-O scale include "I express loyalty toward the organization," and "I keep up with developments in the organization." Responses to each item were made on a 7-point graphic rating scale from 1 ("never") to 7 ("always"). I calculated average scores across items for each participant. Higher average scores indicated high levels of OCB, whereas lower average scores indicated low levels of OCB. Items are shown in Appendix J.

Counterproductive work behavior (CWB). Results from a prior meta-analysis indicate that self-report and other-report measures of CWB are highly correlated with each other (Berry, Carpenter, & Barratt, 2012). Furthermore, self-ratings and other-

ratings of CWB showed similar magnitudes with common correlates. I measured CWB using Bennett and Robinson's (2000) self-report scales of CWBs targeted at the individual (CWB-I; $\alpha = .78$) and the organization (CWB-O; $\alpha = .81$). The CWB-I scale consists of seven items, and the CWB-O scale consists of 12 items. Participants were asked the frequency with which they performed each CWB over the past year. Sample items from the CWB-I scale included "made fun of someone at work," and "said something hurtful to someone at work." Sample items from the CWB-O scale included "taken property from work without permission," and "come in late to work without permission." Responses to each item were made on a 7-point graphic rating scale from 1 ("never") to 7 ("always"). I calculated average scores across items for each participant. Higher average scores indicated high levels of CWB, whereas lower average scores indicated low levels of CWB. Items are shown in Appendix K.

Counterbalancing scales

In the current study, I counterbalanced the order of my scales as a method of reducing potential bias from common method variance (Lindell & Brandt, 2000). Common method variance (CMV) refers to "variance that is attributable to the measurement method rather than to the constructs the measures represent" (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003, p. 879). Given that all of the measures in my study are self-report measures, there is a concern of bias from CMV. One method of controlling for CMV is counterbalancing the order of the scales or items in a given questionnaire (Lindell & Brandt, 2000).

A more popular approach to detecting and partialling out the effects of CMV is the marker variable approach. According to Lindell and Brandt (2000), if a variable is

not theoretically related to at least one other study variable, then researchers can use that variable as a marker variable wherein any observed correlations between the marker variable and other study variables can be assumed to be due to CMV. Researchers can partial out the average correlation between the marker variable and other variables as a method of controlling for the potential CMV biases.

Despite the popularity of the marker variable approach to addressing CMV, Podsakoff et al. (2003) criticize this method because it (a) fails to control for powerful causes of CMV (e.g., social desirability), (b) is a surrogate for CMV, and (c) assumes that CMV has the same effect on all variables. Instead, Podsakoff et al. (2003) argue that using an a priori approach to attenuating the effects of CMV is a more powerful method of reducing the effects of CMV. For example, a more sophisticated, multiple method factors approach is far more powerful in reducing CMV. However, this procedure is overly complex and impractical for the purposes of the current study. Another a priori approach recommended by Podsakoff et al. (2003) is counterbalancing the measurement of variables in a questionnaire. Podsakoff et al. (2003) argue that through controlling retrieval cues brought out by a question's context, counterbalancing the scales in a questionnaire might reduce the biases that affect the retrieval stage in short term memory. However, Peterson (2000) warns that using this counterbalancing procedure might interrupt the logical flow of a survey, which might affect the validity of the responses given. Furthermore, counterbalancing might only attenuate a few issues related to CMV. For example, counterbalancing does not attenuate issues of biases in the retrieval stage of memory when responding to items and the motivation to use previous answers to fill in memory gaps in recalling information used to respond to items. However, in contrast to

many of the other a priori methods of reducing CMV, the counterbalancing method is far more practical for the current study.

In the current study, I counterbalanced the scales used to measure each of my variables using the Randomizer function in Qualtrics. Using this function, I randomized the order of the scales for each participant. To ensure that each order was presented an equal number of times across all participants, I used the "Evenly Present Elements" option to mimic a counterbalancing design.

Procedure

All scales to measure the variables in the current study were included in one survey. Participants completed the survey online using Qualtrics-generated surveys. First, they were asked to read a cover letter discussing the purpose of the study and the nature of the surveys they were administered (see Appendix A). Then, the participants indicated that they had read the cover letter and the administration of survey began. Following the review of the cover letter, the measures of each variable were administered and counterbalanced appropriately, following the procedure in the previous section. Finally, a demographics questionnaire was administered before participants completed the survey. Participants were thanked for their participation in the present study, and $1.00 was deposited into their MTurk user accounts after they entered a unique, randomly generated code into the survey's entry on the MTurk platform.

III. RESULTS

Data Cleaning

Missing data

To identify missing data, I performed Little's Missing Completely at Random (MCAR) test (Tabachnick & Fiddell, 2012). Little's MCAR test determines whether the missing data are missing completely at random, which is indicated by a significant test result (i.e., $p < .05$). I ran this test on my data and found four participant cases with missing data. Further, missing data appeared to be randomly distributed and no visible pattern of missing data was recognized, χ^2 (160, $N = 539$) = 160.28, $p = 0.35$. However, given the small number of missing cases, I removed these cases from the final data set used for analyses.

Outliers

Following the recommendations from Tabachnick and Fidell (2012), I computed standardized values to identify outliers ($n = 40$). Using this procedure, cases with standardized scores above 3.29 and below -3.29 were identified as potential outliers (Tabachnick & Fiddell, 2012). After I identified the potential outliers, I re-ran all analyses with the outliers removed and compared the results to the analyses with the outliers included. The results did not differ significantly between the separate analyses. Therefore, I kept the outliers as a part of the data set for all analyses.

Descriptive Statistics

Table 1 shows a correlation matrix of all variables in the current study. Internal consistency reliabilities are displayed on the diagonal. The descriptive statistics, including mean and standard deviation, for each variable are also displayed. Most correlations were in the magnitude and direction expected, thus providing evidence of the quality of the current dataset. However, a few correlations were neither in the direction expected nor the magnitude expected. For example, overall evaluative job satisfaction was positively correlated with CWB-I ($r = .11$, $p < .01$) and CWB-O ($r = .09$, $p < .05$). This was unexpected because previous research has consistently found that job satisfaction is *negatively* related to CWB (Dalal, 2005). Further, OCB-I was positively correlated with CWB-I ($r = .09$, $p < .05$), and OCB-O was positively correlated with both CWB-I ($r = .16$, $p < .01$) and CWB-O ($r = .12$, $p < .01$). These latter correlations are contrary to the results of prior research (e.g., Sackett, Berry, Wiemann, & Laczo, 2006).

Hypothesis 1: Attitude Strength as a Moderator

Hypothesis 1 posited that attitude strength will moderate the relationship between job satisfaction and job performance such that this relationship will be stronger when levels of attitude strength are high rather than low. Hypothesis 1 was tested using a moderated regression analysis. Using this approach, I constructed a set of hierarchical models in which the main effects (i.e., job satisfaction, attitude strength) were entered on the first step. In the second step, I entered an interaction term between the main effects (i.e., job satisfaction X attitude strength). The outcome variable (i.e., job performance) was regressed on the predictor variables in each step. Significant incremental variance accounted for in job performance by the interaction between job satisfaction and attitude strength was considered evidence in support of the first hypothesis. For clearer

interpretation, I mean-centered each of my predictor variables and mean-centered them when calculating my interaction terms (Hofmann & Gavin, 1998).

I tested Hypothesis 1 by constructing four sets of hierarchical regression models, one set for each attitude strength indicator (i.e., attitude extremity, attitude certainty, structural consistency, and vested interest). These models are depicted in Table 2 with the results from the final step of the hierarchical moderated regression analyses. In each set, I first regressed each job performance variable (i.e., in-role job performance, OCB, and CWB) onto each job satisfaction variable (i.e., MSQ, OJS, and E). Also, in the first step, I regressed each job performance variable onto one of the attitude strength indicators, which was dependent on the specific set of regression analyses. In the second step, I regressed (a) in-role job performance, (b) OCB, and (c) CWB onto each interaction term between an attitude strength indicator and job satisfaction as measured by (a) MSQ, (b) OJS, and (c) Overall Evaluative job satisfaction scales. I examined the beta coefficients and any significant incremental variance accounting for (a) in-role job performance, (b) OCB, or (c) CWB in the last step.

Overall, I constructed 85 hierarchical regression models. Of these 85 models, 28 had significant beta coefficients and significant incremental variance accounting for one of the job performance variables in the last step. Patterns of significant ΔR^2 values in the final step of the hierarchical moderated regression models varied across each of the job satisfaction predictors, attitude strength moderators, and job performance outcomes. For example, 12 out of the 25 models (48%) including OJS as a predictor had significant ΔR^2 values compared to only five out of the 25 models (20%) including MSQ as a predictor. Of the models with significant ΔR^2 values, 12 out of the 20 models (60%) including

attitude certainty as a moderator were significant. In contrast, fewer models (23%) including attitude extremity as a moderator had significant ΔR^2 values. Finally, of the 17 models including CWB-I as the outcome variable, nine had significant ΔR^2 values (53%). In contrast, only one out of the 17 models (6%) including OCB-I as the outcome variable had significant ΔR^2 values. Plots of the interaction effects between job satisfaction and attitude strength variables were examined and a select few figures are shown in Figures 1 through 3 below (Cohen, Cohen, West, & Aiken, 2002; Preacher, Curran, & Bauer, 2006). More specifically, I plotted the regression lines at one standard deviation above and one standard deviation below the mean for each variable.

Of the 28 moderated hierarchical regression models with significant ΔR^2 values, 14 had moderation effects that were in the direction expected. In other words, about 16% of the analyses found that attitude strength moderated the satisfaction-performance relationship in the manner predicted in Hypothesis 1. On average, the interaction terms for the 14 analyses that supported Hypothesis 1 predicted 2% of the variance in the outcome variable after the main effects of the predictors and moderators were controlled. As I discussed earlier, 60% of the models including attitude certainty had statistically significant ΔR^2 values. Furthermore, across all job performance variables with attitude certainty used as the moderator, the lower end of the 95% credibility intervals for ΔR^2 values did not include zero, 95% CI [.01, .01]. For example, affective certainty (β = -.19, $p < .01$) and the interaction between OJS and affective certainty (β = -.12, p = .04) were significant predictors of CWB-O. The final step of the hierarchical moderated regression model accounted for significant incremental variance in CWB-O, ΔR^2 = .02, $F(3, 536)$ = 7.08, p = .04. Figure 1 illustrates the interaction between OJS and affective certainty on

CWB-O. As shown in the figure, the relationship between the OJS and CWB-O is stronger among workers who experienced high affective certainty (b = -.24) than among workers who experienced low affective certainty (b = .06).

Similarly, 48% of analyses including OJS as the predictor variable had statistically significant ΔR^2 values, and the interaction terms were in the direction expected. For example, OJS (β = -.22, p < .01), structural consistency (β = .21, p < .01), and the interaction between OJS and structural consistency (β = -.20, p < .01) were significant predictors of CWB-I. The final step of the hierarchical moderated regression model accounted for significant incremental variance in CWB-I, ΔR^2 = .04, F(3, 536) = 20.64, p < .01. Figure 2 illustrates the interaction between OJS and structural consistency on CWB-I. As shown in the figure, the relationship between OJS and CWB-I is stronger among workers who experienced high structural consistency (b = -.55) than among workers who experienced low structural consistency (b = .03).

Finally, over a quarter (29%) of analyses including in-role job performance as the outcome variable had statistically significant ΔR^2 values, and the interaction terms were in the direction expected. Furthermore, the average ΔR^2 across all moderators was .01, and the lower end of the 95% credibility intervals of ΔR^2 values for in-role job performance models across all moderators did not include zero, 95% CI [.01, .01]. For example, evaluative extremity (β = .12, p = .02) and the interaction between OJS and evaluative extremity (β = .16, p < .01) were significant predictors of in-role job performance. The final step of the hierarchical moderated regression model accounted for significant incremental variance in in-role job performance, ΔR^2 = .02, F(3, 536) = 11.94, p < .01. Figure 3 illustrates the interaction between OJS and evaluative extremity

on in-role job performance. As predicted for the high evaluative extremity group, participants with higher rather than lower OJS scores had higher rather than lower in-role job performance scores. As shown in Figure 3, the relationship between OJS and in-role job performance is stronger among workers who experienced high evaluative extremity (b = .19) than among workers who experienced low evaluative extremity (b = -.07).

I considered Hypothesis 1 supported when (a) the moderation effects for at least two attitude strength indicators and two job satisfaction measures were significant (for a similar decision rule, see Schleicher et al., 2015) and (b) the 95% credibility intervals for ΔR^2 values across models using similar variables did not include zero. Using these criteria, I received mixed support for Hypothesis 1. More specifically, although the moderation effects for at least two attitude strength indicators and two job satisfaction measures were significant, only 16% of the total models I ran were significant (Schleicher et al., 2015). As displayed in Table 2, there was significant moderation for all attitude strength indicators and at least two job satisfaction measures. Table 3 displays the pattern of significant results across job satisfaction predictors and attitude strength moderators. Also, Table 4 displays the pattern of significant results across attitude strength moderators and job performance outcome variables. As demonstrated in these tables, Hypothesis 1 was generally supported when affective job satisfaction (i.e., OJS) was used as the predictor, attitude certainty was used as the moderator, and in-role job performance was used as the outcome variable. Table 7 shows a summary of ΔR^2 values across hierarchical regression models. On average, the ΔR^2 values were .01 for all hierarchical moderated regression models, except for those including attitude extremity as the moderator variable (ΔR^2 = .00). Across all moderators and job performance

variables, the lower end of the 95% credibility interval for the ΔR^2 values included zero, 95% CI [.00, .01]. However, the lower end of the 95% credibility intervals for models across all moderators with in-role job performance and CWB variables as the outcome did not include zero, 95% CI [.01, .01] and [.01, .01], respectively. Thus, I determined there is mixed evidence in support of Hypothesis 1.

Hypothesis 2: Situational Strength as a Moderator

Hypothesis 2 posited that situational strength will moderate the relationship between job satisfaction and job performance such that this relationship will be stronger when levels of situational strength are low rather than high. Hypothesis 2 was tested using a moderated regression analysis. Similar to the Hypothesis 1 analyses, I constructed a set of hierarchical models in which the main effects (i.e., job satisfaction, situational strength) were entered on the first step. In the second step, I entered an interaction term between the main effects (i.e., job satisfaction X situational strength). The outcome variable (i.e., job performance) was regressed on the predictor variables in each step. Significant incremental variance accounted for in job performance by the interaction between job satisfaction and situational strength was considered evidence in support of the second hypothesis. For clearer interpretation, I mean-centered each of my predictor variables and mean-centered them when calculating my interaction terms (Hofmann & Gavin, 1998).

I tested Hypothesis 2 by constructing four sets of hierarchical regression models, one set for each situational strength indicator (i.e., clarity, consequences, consistency, and constraints). These models are depicted in Table 5 with the results from the final step of the hierarchical moderated regression analyses. In each set, I first regressed each job

performance variable (i.e., in-role job performance, OCB, and CWB) onto each job satisfaction variable (i.e., MSQ, OJS, and E). Also, in the first step, I regressed each job performance variable onto one of the situational strength facets, which was dependent on the specific set of regression analyses. In the second step, I regressed (a) in-role job performance, (b) OCB, and (c) CWB onto each interaction term between a situational strength facet and job satisfaction as measured by (a) MSQ, (b) OJS, and (c) Overall Evaluative job satisfaction scales. I examined the beta coefficients and any significant incremental variance accounting for (a) in-role job performance, (b) OCB, or (c) CWB in the last step.

Overall, I constructed 60 hierarchical regression models. Of these 60 models, 29 had significant beta coefficients and significant incremental variance accounting for one of the job performance variables in the last step. Patterns of models with significant ΔR^2 values in the final step varied across each of the job satisfaction predictors, situational strength facets, and job performance outcomes. For example, 12 out of the 20 models (60%) including OJS as a predictor had significant ΔR^2 values in the final step compared to 8 out of the 20 models (40%) including overall evaluative job satisfaction as a predictor. Of the models with significant ΔR^2 values in the final step, 10 out of the 15 models (67%) including constraints as a moderator were significant, and the lower end of the 95% credibility intervals for ΔR^2 values did not include zero, 95% CI [.01, .03]. In contrast, fewer models (20%) including clarity as a moderator had significant ΔR^2 values in the final step, and the lower end of the 95% credibility intervals for ΔR^2 values included zero, 95% CI [.00, .01]. Finally, of the 24 models including CWB-I or CWB-O as the outcome variable, 14 had significant ΔR^2 values in the final step (58%), and the

lower end of the 95% credibility intervals for ΔR^2 values did not include zero, 95% CI [.01, .02]. In contrast, three out of the 12 models (25%) including in-role job performance as the outcome variable had significant ΔR^2 values in the final step, and the lower end of the 95% credibility intervals for ΔR^2 values included zero, 95% CI [.00, .02]. Plots of the interaction effects between job satisfaction and situational strength variables were examined for significant interaction effects (Cohen et al., 2002; Preacher et al., 2006). More specifically, I plotted the regression lines at one standard deviation above and one standard deviation below the mean for each variable.

Although 29 out of the 60 hierarchical moderated regression models constructed to test Hypothesis 2 had significant beta coefficients and significant incremental variance accounting for one of the job performance variables in the last step, 21 models had effects in the opposite direction expected. More specifically, the situational strength slopes were *greater* for those scoring higher rather than lower on the situational strength scales, which is contrary to the hypothesized moderation effect. For example, as show in Figure 4, the relationship between evaluative job satisfaction and OCB-O was stronger among workers who experienced high clarity (b = .56) than workers who experienced low clarity (b = .42).

Eight of the hierarchical moderated regression models had effects in the direction expected. Of these eight significant models, two included consequences as a moderator and six included constraints as a moderator. Furthermore, whereas the lower end of the 95% credibility intervals for ΔR^2 values included zero for models with consequences used as the moderator variable, the lower end of these intervals did not include zero for models with constraints used as the moderator variable, 95% CI [.00, .01] and [.01, .03],

respectively. For example, MSQ (β = .15, $p < .01$), constraints (β = -.33, $p < .01$), and the interaction between MSQ and constraints (β = -.16, $p < .01$) were significant predictors of in-role job performance. The final step of the hierarchical moderated regression model accounted for significant incremental variance in in-role job performance, $\Delta R^2 = .02$, $F(3, 536) = 14.59$, $p < .01$. Figure 5 illustrates the interaction between MSQ and constraints on in-role job performance. As shown in the figure, the relationship between MSQ and in-role job performance was stronger among workers who experienced low constraints ($b = .29$) than workers who experienced high constraints ($b = .01$).

I considered Hypothesis 2 supported when (a) the moderation effects for at least two situational strength facets and two job satisfaction measures were significant (for a similar decision rule, see Schleicher et al., 2015) and (b) the 95% credibility intervals for ΔR^2 values across models using similar variables did not include zero. Using these criteria, I determined that there was not support for Hypothesis 2. As displayed in Table 3, there was significant moderation for all situational strength facets and at least two job satisfaction measures. However, only eight of these models had effects in the direction expected, whereas 21 of these models had effects in the opposite direction expected. Table 7 shows a summary of ΔR^2 values across hierarchical regression models. Overall, the average ΔR^2 values were .01 for all hierarchical moderated regression models. Only the models that used clarity as the moderator variable had an average ΔR^2 equal to zero. However, although the average ΔR^2 for models that used the other moderator variables were greater than zero, many of these had moderator effects in the opposite direction expected. As demonstrated in this table and discussed in a prior paragraph of this

section, Hypothesis 2 appeared to be supported when constraints was used as the moderator. More specifically, 6 out of the 15 models that used constraints as the moderator variable had significant ΔR^2 values in the final step and moderator effects in the expected direction. The lower end of the 95% credibility intervals for the ΔR^2 values across all predictor and outcome variables did not include zero, 95% CI [.01, .03]. Given this evidence, I determined that Hypothesis 2 was not supported.

Hypothesis 3: Three-Way Interactions

Hypothesis 3 posited that the moderating effects of attitude strength on the job satisfaction–job performance relationship will vary as a function of situational strength. Specifically, the high levels of attitude strength will produce strong satisfaction–performance relationships within weak situations, but not within strong situations. Hypothesis 3 was tested using a moderated regression analysis. Using this approach, I constructed a set of hierarchical models in which the main effects (i.e., job satisfaction, attitude strength, and situational strength) were entered on the first step. In the second step, I entered the interaction terms between all variables from the first step (i.e., job satisfaction X attitude strength, job satisfaction X situational strength, and attitude strength X situational strength). Finally, in the third step, I entered the three-way interaction term between job satisfaction, attitude strength, and situational strength. The outcome variable (i.e., job performance) was regressed on the predictor variables in each step. Significant incremental variance accounted for in job performance by the three-way interaction term was considered evidence in support of the third hypothesis. For clearer interpretation, I mean-centered each of my predictor variables and mean-centered them when calculating my interaction terms (Hofmann & Gavin, 1998).

I tested Hypothesis 3 by constructing hierarchical regression models, which were grouped by the three job performance variables: in-role job performance, OCB, and CWB. Then, these models were crossed with the three job satisfaction measures (i.e., MSQ, OJS, and E), four attitude strength indicators (i.e., attitude extremity, attitude certainty, structural consistency, and vested interest), and four situational strength facets (i.e., clarity, consequences, consistency, and constraints). After crossing each of these variables with each other, I created a total of 340 hierarchical regression models. Due to the large number of models run, I will only mention a few examples in this section. Results from all hierarchical moderated regression models are displayed in Table 6.

In the first step of each model, I first regressed the respective job performance variable (i.e., in-role job performance, OCB, and CWB) onto the respective job satisfaction variable (i.e., MSQ, OJS, and E). Second, I regressed the job performance variable onto one of the situational strength facets, which was dependent on the specific set of regression analyses. Third, I regressed the job performance variable onto one of the attitude strength indicators, which also depended on the specific set of regression analyses. In the second step, I regressed the job performance variable onto three interaction terms: (a) the interaction between the job satisfaction variable and attitude strength indicator, (b) the interaction between the job satisfaction variable and situational strength facet, and (c) the interaction between the attitude strength indicator and situational strength facet. Finally, in the last step of the model, I regressed the job performance variable onto the three-way interaction term between the job satisfaction variable, attitude strength indicator, and situational strength facet. I examined the beta coefficients and any significant incremental variance accounting for the respective job

performance variable in the last step. Also, I reported the ΔR^2 in the last step. Plots of the interaction effects between job satisfaction, attitude strength, and situational strength variables were examined (Cohen et al., 2002; Preacher et al., 2006). I distinguished between high situational strength and low situational strength participants by plotting the regression lines at one standard deviation above and one standard deviation below the mean for the situational strength variable (Aiken & West, 1991; Dawson, 2014). Then, I graphed each job satisfaction and attitude strength interaction effect for high situational strength and low situational strength participants on the same plot (Dawson, 2014).

Of the 340 hierarchical regression models constructed, only 68 had significant beta coefficients and significant incremental variance accounting for one of the job performance variables in the last step, only two of which had effects in the direction expected. Each of these two models included cognitive certainty and clarity as moderators. For example, in a model that included a three-way interaction between MSQ, cognitive certainty, and clarity, cognitive certainty ($\beta = .44$, $p < .01$) and the three-way interaction ($\beta = -.13$, $p = .03$) were significant predictors of in-role job performance. The final step of the hierarchical moderated regression model accounted for significant incremental variance in in-role job performance, $\Delta R^2 = .01$, $F(7, 532) = 4.16$, $p = .02$. However, as shown in Figure 6, the relationship between MSQ and in-role job performance was strongest when workers experienced high cognitive certainty and low clarity ($b = .16$) compared to other workers.

Similarly, in a model that included a three-way interaction between evaluative job satisfaction, cognitive certainty, and clarity, cognitive certainty ($\beta = .41$, $p < .01$) and the three way interaction ($\beta = -.14$, $p = .03$) were significant predictors of in-role job

performance. The final step of the hierarchical moderated regression model accounted for significant incremental variance in in-role job performance, $\Delta R^2 = .01$, $F(7, 532) = 4.92$, $p = .02$. As shown in Figure 7, the relationship between evaluative job satisfaction and in-role job performance was strongest when workers experienced high cognitive certainty and low clarity ($b = .13$) compared to other workers.

Finally, I considered Hypothesis 3 supported when (a) a simple majority of the models within each job performance group were statistically significant and (b) the 95% credibility intervals for ΔR^2 values across models using similar variables did not include zero. Using these criteria, I determined that there was not support for Hypothesis 3. Although 68 out of the 340 hierarchical moderated regression models were statistically significant, only two of the three-way interaction effects were in the direction expected. Table 7 shows a summary of ΔR^2 values from the final step of the hierarchical regression models used to test Hypothesis 3. Overall, the average ΔR^2 values was zero for all hierarchical moderated regression models. Furthermore, the lower end of the 95% credibility intervals of ΔR^2 values in the last step of hierarchical regression models across all three-way interactions and job performance outcome variables included zero. Therefore, Hypothesis 3 is not supported.

IV. DISCUSSION

Workers with high levels of job satisfaction are more likely to have higher levels of positive affect, organizational commitment, and job performance (Mathieu & Zajac, 1990; Spector, 1997). However, people with similar job satisfaction levels might have different levels of strength regarding this job attitude, which acts as a moderating variable on the job satisfaction–job performance relationship (Kraus, 1995). Furthermore, strong workplace situations might guide behavior through clear and consistent communication of expected behaviors, as well as the consequences and constraints associated with certain behaviors at work. The purpose of the current study was to investigate the moderating effect of attitude strength and situational strength on the job satisfaction – job performance relationship. I argued that the job satisfaction – job performance relationship would be stronger when attitude strength was high rather than low, situational strength was low rather than high, and attitude strength was high when situational strength was low rather than high.

I found mixed support for attitude strength as a moderator of the job satisfaction – job performance relationship, such that this relationship was stronger and more positive when attitude strength was high rather than low. However, I did not find support for the moderating effect of situational strength on the job satisfaction – job performance relationship. In fact, I found strong evidence *against* the hypothesized moderator effect, such that the relationships between job satisfaction and job performance were generally stronger in *strong* situations rather than weak situations. Similarly, I did not find support

for the moderating effect of the three-way interaction between job satisfaction, attitude strength, and situational strength on the job satisfaction – job performance relationship.

Theoretical Implications

Although I found mixed rather than full support for the moderating effect of attitude strength on the job satisfaction – job performance relationship, the current study provides further evidence to the job attitude strength literature. Furthermore, the current study provided partial replication of the results from Schleicher et al. (2015), on which much of the current study was based. For example, Schleicher et al. (2015) found that a similar combination of attitude strength indicators significantly moderated the relationships of job satisfaction with in-role job performance and OCB. However, it is important to note that Schleicher et al. (2015) used supervisor ratings of in-role job performance as opposed to self-report ratings of in-role job performance, which I used in the current study. Also, whereas I found that only 9% of the analyses that used either OCB-I or -O as the outcome variable were statistically significant in the direction expected, Schleicher et al. (2015) found that 29% of the analyses that used either OCB-I or -O as the outcome variable were statistically significant in the direction expected.

In contrast to the mixed support for the moderating effect of attitude strength, I found support neither for the moderating effect of situational strength nor the moderating effect of attitude strength at different levels of situational strength. Rather, I found evidence that opposed the hypothesized moderating effect of situational strength. More specifically, out of the 29 models that had significant moderator effects when testing Hypothesis 2, only eight were in the direction expected. In the other 21 models, the relationships between job satisfaction and job performance were stronger among

participants experiencing stronger rather than weaker situations. Also, out of the 68 models that had significant three-way interaction effects when testing Hypothesis 3, only two were in the direction expected. Thus, in most of the significant results when testing these two hypotheses, the satisfaction – performance relationship was stronger in strong situations than in weak situations.

These results contradict situational strength theory as conceptualized by Mischel (1973) and Meyer et al. (2010) who posited that stronger situations restrict variation in certain workplace behaviors, whereas weaker situations facilitate greater variation in certain workplace behaviors. In the context of the current study, workers should have had less variation in job performance scores in stronger situations compared to weaker situations. However, I found evidence to suggest the opposite. According to a meta-analysis by Keeler, Kong, Dalal, and Cortina (2019), perhaps this finding is not uncommon. In their meta-analysis, Keeler et al. (2019) analyzed articles that implied restricted variance interactions and invoked theories like Mischel's (1973) cognitive social learning theory. Mischel's (1973) theory was subsequently used to inform the most recent conceptualization of situational strength by Meyer et al. (2010). The purpose of Keeler et al.'s (2019) meta-analysis was to provide a quantitative review of articles that either reference situational strength directly or imply restricted variance interactions in a manner consistent with articles that specifically reference situational strength. Variance differences between constrained (i.e., strong) and unconstrained (i.e., weak) situations were calculated using (a) standard deviation differences and (b) Bartlett's test, which can be used to test for a significant difference in variances between groups.

Despite referencing restricted variance interactions in their individual studies, Keeler et al. (2019) found that only 39% of the articles used Mischel's (1973) cognitive social learning theory or a similar theory as a theoretical framework. Furthermore, using Bartlett's test Keeler et al. (2019) found that across 100 articles that allowed for group-level variance comparisons, 11% of studies had larger variance in unconstrained situations, whereas 18% had larger variance in constrained situations. When constrained situations were measured rather than manipulated, 38% of pairwise standard deviation comparisons had significantly larger variance in constrained situations, whereas 5% of pairwise comparisons had significantly larger variance in unconstrained situations. Furthermore, in studies which contained a significant interaction involving the constraint variable, Bartlett's test for equal variances indicated that nearly 18% of these comparisons had larger variance in constrained situations compared to 11% of comparisons that had larger variance in unconstrained situations. Similar results were found for studies in which the constrained variable was used in the interaction term but no significant interaction was found.

Taken together, these findings suggest that perhaps situational strength has not been tested enough to be used as a theoretical framework for the arguments I made in the current study. In addition to my own findings, the findings from Keeler et al.'s (2019) meta-analysis raise the question of how "strong" a situation must be to significantly restrict the variance in certain workplace behaviors. According to Keeler et al. (2019), very few studies have used Meyer et al.'s (2014) four situational strength facets to measure situational strength, despite being one of the few extant situational strength scales. Prior research has not investigated which facets or aspects of situational strength

are more important than others in influencing the strength of a given situation. For example, perhaps many strong workplace situations are merely constrained, rather than high in clarity and consequences. When all facets are high, it might be apparent that the situation is strong, whereas when all facets are low, it might be apparent the situation is weak.

I conducted post-hoc analyses on the data in the current study to determine the standard deviation differences in job performance variables between participants who scored high and low in each situational strength facet and then across all situational strength facets. First, using a median split on the situational strength facet scales, I calculated the standard deviations in each job performance variable for those scoring high (i.e., above the median) and low (i.e., below the median) on each of the situational strength facets. I followed the same procedure for those scoring high and low across all situational strength facets. Second, similar to analyses conducted in Keeler et al.'s (2019) meta-analysis, I calculated standard deviation ratios for each job performance variable by dividing the standard deviation of those participants scoring low in each situational strength facet over those participants scoring high in each situational strength facet. Third, I performed a Bartlett's test of equal variances to determine whether there were significant differences in variances between the low and high situational strength groups for each job performance variable.

The results of this post-hoc analysis are displayed in Table 7. As shown in the table, standard deviation differences in the job performance variables between those who scored high or low in individual facets varied considerably. However, across all job performance variables except the CWB variables, the standard deviations were larger

among participants scoring lower rather than higher across all situational strength facets. This pattern was the opposite for the CWB variables, such that the standard deviations were larger among participants scoring higher rather than lower across all situational strength facets. For in-role job performance, only the differences in variances between participants scoring low and high in clarity were statistically significant and in the direction expected. However, for the OCB variables, there were statistically significant differences in variances in the direction expected between participants scoring low and high on all situational strength facets. Conversely, for the CWB variables, there were statistically significant differences in variances between participants scoring low and high on all situational strength facets, but in the opposite direction expected. However, across all job performance variables, the pattern of statistically significant variance differences varied considerably across each situational strength facet.

Thus, generally perhaps situations are "strong" when scores on all situational strength facets are high rather than when scores on individual situational strength facets are high. These findings are generally consistent with Meyer et al.'s (2010) theorizing that the strength of a situation is a function of each of the unique situational strength facets, and when all facets are either high or low, then it is apparent that the situation is respectively strong or weak. However, more research on this topic is needed to provide empirical evidence to support this statement.

Finally, it might be possible that Meyer et al.'s (2014) conceptualization of constraints might be interpreted as a stressor by workers. Although there is no single definition of an organizational stressor, prior researchers generally define an organizational stressor as workplace conditions and events that evoke strain (e.g.,

elevated heart rate, elevated cortisol levels, poor job performance, narrowed attention; Sonnentag & Frese, 2003). Organizational constraints are considered a type of workplace stressor and refer to aspects of the work environment that inhibit one's ability to perform their jobs (Pindek & Spector, 2016). Although prior research has not examined the relationship between traditional measurements of organizational constraints and Meyer et al.'s (2014) constraints scale, workers might perceive constraints on certain workplace behaviors as a stressor. According to the organizational stress literature, experiencing organizational constraints can lead to anger and frustration in workers because they cannot perform their jobs (Pindek & Spector, 2016; Spector & Jex, 1998). Also, organizational constraints are negatively associated with job satisfaction and in-role job performance (Spector & Jex, 1998). According to a meta-analysis by Pindek and Spector (2016), organizational constraints are positively associated with long-term strains, such as CWB. Also, Karasek (1979) found that organizational constraints is negatively associated with decision latitude, or a worker's ability to determine what they do at work and how they perform their work. Further, the lack of decision latitude is positively associated with job dissatisfaction. Thus, perhaps the relationships between constraints and CWB variables were positive rather than negative because Meyer et al.'s (2014) scale might be closely related to traditional organizational constraints scales. However, future research is needed to clarity this finding.

Practical Implications

The results from the current study should also be useful for practice for a couple reasons. First, the moderating effect of attitude strength on attitude – behavior relationships should be useful for designing surveys that are used as a part of

organizational change initiatives. Based on attitude strength theory, organizational interventions or initiatives should have stronger effects on those with weak rather than strong attitudes (Krosnick & Petty, 1995). Therefore, measuring workers' job attitude strength might indicate how certain organizational initiatives will influence certain workers (Schleicher et al., 2015). For example, workers with weak job attitudes, such as job satisfaction or organizational commitment, might respond positively to organizational initiatives aimed at increasing satisfaction or commitment. As a result of their increased job satisfaction or commitment levels, these workers might work harder and show improved job performance. Therefore, measuring job attitude strength might reveal more information about workers' job attitudes and the efficacy of planned organizational initiatives.

Second, my results suggest that perhaps efforts focused on improving employee performance should be directed away from situational strength. More specifically, prior research has argued that stronger situations can constrain workers' job performance to higher levels (Keeler et al., 2019; Meyer et al., 2010; Mischel, 1973). However, my results and results from many prior studies in the situational strength literature suggest that perhaps this effect is not as robust as once theorized (see Keeler et al., 2019 for a review). Therefore, other organizational efforts at increasing job performance might be more robust and effective in increasing workers' job performance. For example, from a situational strength perspective, organizational policies or structured performance guidelines should constrain variability in job performance by constraining workers' behaviors to only those that will result in higher job performance levels. However, it could be that these policies and guidelines are perceived as organizational constraints that

might decrease in-role job performance and increase undesirable workplace behavior, such as CWB (Pindek & Spector, 2016). Rather, organizations could focus on creating a workplace environment in which feedback provides clarity around which behaviors are desired and reinforcing these through dynamic performance guidelines. Future research should investigate similar alternatives to situational strength as it relates to increasing job performance.

Future Research

Future research should focus on a couple of different topics. First, more research is needed in general on situational strength. As discussed in the current study and a recent meta-analysis by Keeler et al. (2019), there are relatively few studies that have used Mischel's (1973) or Meyer et al.'s (2010) conceptualizations of situational strength. Consequently, there is still much work to be done in the situational strength literature. For example, many questions around situational strength still exist, such as which facets are the best indicators of situational strength? Is a strong situation characterized by high scores across all situational strength facets? Future research should focus on what makes a situation "strong," and why certain situational strength facets might produce the opposite moderation effects expected, such as those found in the current study. For example, future research might focus on why some situations might encourage good performance, whereas others might encourage poor performance. Situations that might encourage good performance include clear organizational policies that reward workers for good performance, whereas situations that might encourage poor performance include organizational constraints (e.g., too little training, insufficient work equipment) that prevent workers from performing their jobs. Although both situations are "strong" in that

they would decrease the variability in job performance between workers, the average job performance levels would be very different between these situations.

Second, future research should continue to research the effects of three-way interactions between job satisfaction, attitude strength, and situational strength on behavioral outcomes, such as job performance. In the current study, of the 340 hierarchical regression models that included a three-way interaction effect, 68 included a significant effect. However, of these 68 models, 48 had a significant three-way interaction effect in the opposite direction expected. More specifically, the relationship between job satisfaction and job performance was stronger when attitude strength was low and situational strength was high. Despite the unexpected results from the current study, future research should further investigate this three-way interaction. More specifically, investigating this interaction in certain occupations with strict honor codes (e.g., medical industry) or in certain countries with relatively strict labor laws might reveal more details about what makes a situation "strong." Furthermore, future research should manipulate rather than measure situational strength.

Limitations

The current study has a few limitations that are worth nothing. First, I used self-report measures, so current results might have been affected by common method variance (CMV). As shown by the many significant correlations in Table 1, it is possible that CMV significantly inflated the correlations I observed. However, the effects of CMV might have attenuated rather than inflated my observed moderator effects (Evans, 1985). Thus, the significant moderator effects observed for each of my hypotheses were found in spite of CMV rather than as a result of CMV. Second, due to the large number of

analyses performed to test each hypothesis, family-wise error might have increased the Type I error rate in the current study. Prior research in the attitude strength literature has taken measures to reduce potential issues of family-wise error (e.g., Schleicher et al., 2015). However, to the extent of my knowledge, there is little consensus on controlling for family-wise error in similar moderator studies.

Finally, I measured rather than manipulated situational strength in the current study. Meyer et al. (2010) posited that manipulating rather than measuring situational strength might have stronger effects on participant behavior. Furthermore, in a meta-analysis of the situational strength literature by Keeler et al. (2019), studies that manipulated situational strength found greater variance in unconstrained situations rather than constrained situations, on average, which is consistent with situational strength theory. However, studies that measured situational strength found greater variance in constrained situations rather than unconstrained situations, on average. In the current study, the significant moderator effects that included situational strength is consistent with these findings, such that greater variance was found in constrained rather than unconstrained situations. Thus, manipulating situational strength might create "stronger" situations in which the job satisfaction – job performance is more likely to be attenuated rather than strengthened.

Conclusion

In the current study, I sought to determine the effects the interaction between job satisfaction, job attitude strength, and situational strength on in-role and extra-role job performance. My study is among the first in the attitude strength literature to examine the effect of the interaction between attitude strength and situational strength on job

performance, which is significant because organizations can use my findings to create robust organizational initiatives aimed at increasing the job performance of its workers. Although I observed significant moderator effects of attitude strength on the job satisfaction – job performance relationship, I observed no significant interaction effects between job satisfaction, attitude strength, and situational strength on job performance. Given the importance of understanding the structure of job attitudes (e.g., job satisfaction) and how it relates to job performance, I encourage future research to continue investigating the organizational variables that might facilitate higher job performance levels.

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Table 1

Correlation matrix of all study variables

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	36.27	10.48	-											
2. Hours worked	39.87	10.35	.01	-										
3. MSQ	5.18	0.92	.03	.08	*(.92)*									
4. OJS	4.72	1.00	.00	.06	.71**	*(.88)*								
5. E	5.24	1.31	-.02	.01	.72**	.77**	*(.82)*							
6. Affective extremity	1.69	0.53	.01	.01	.36**	.37**	.33**	*(.81)*						
7. Cognitive extremity	1.67	0.49	.08	.03	.53**	.35**	.37**	.66**	*(.85)*					
8. Evaluative extremity	1.66	0.78	.00	-.01	.34**	.37**	.48**	.73**	.56**	*(.70)*				
9. HG attitude extremity	5.45	1.33	-.05	.08	.77**	.78**	.77**	.26**	.32**	.32**	*(.93)*			
10. Affective certainty	5.86	0.91	.13**	.10*	.34**	.3**	.22**	.43**	.38**	.37**	.28**	-		
11. Cognitive certainty	5.90	0.86	.09*	.06	.38**	.28**	.24**	.39**	.43**	.36**	.29**	.63**	-	
12. HG attitude certainty	5.59	1.04	.21*	.05	.19**	.30**	.14**	.46**	.29**	.36**	.17**	.47**	.43**	*(.72)*
13. SC	-.56	0.35	.11*	.06	.20**	.16**	.13**	-.09*	-.05	.00	.14**	.10*	.11**	.16**
14. HG SC	5.34	1.00	.12**	.04	.49**	.52**	.48**	.48**	.40**	.44**	.49**	.37**	.31**	.59**
15. Latitude of rejection	3.95	1.16	.04	.08	.03	.07	-.04	.09*	.08	.03	.03	.11**	.09*	.17**
16. Clarity	5.27	1.23	-.02	.01	.53**	.31**	.41**	.26**	.32**	.28**	.44**	.16**	.24**	.11**
17. Consequences	4.61	1.23	-.13**	.08	.43**	.32**	.36**	.13**	.17**	.19**	.39**	.11**	.13**	-.10*
18. Consistency	5.00	1.23	-.04	-.01	.64**	.47**	.56**	.28**	.31**	.32**	.59**	.20**	.24**	.12**
19. Constraints	3.89	1.57	-.14**	.02	-.10*	-.24**	-.09*	-.06	-.09*	-.01	-.08	-.15**	-.07	-.33**
20. IRJP	5.94	0.90	.36**	-.02	.13**	.16**	.10*	.24**	.30**	.14**	.04	.32**	.33**	.53**
21. OCB-I	5.01	1.19	.07	.03	.35**	.21**	.25**	.25**	.35**	.22**	.25**	.19**	.29**	.06
22. OCB-O	4.81	1.32	-.01	.05	.6**	.56**	.51**	.28**	.36**	.29**	.61**	.26**	.28**	.07
23. CWB-I	2.09	1.53	-.30**	.04	.09*	-.09	.11**	.00	-.03	.05	.13**	-.17**	-.14**	-.41**
24. CWB-O	2.09	1.41	-.30**	.00	.05	-.15**	.09*	-.02	-.04	.02	.08	-.18**	-.15**	-.43**

Variable	*M*	*SD*	13	14	15	16	17	18	19	20	21	22	23	24
1. Age	36.27	10.48												
2. Hours worked	39.87	10.35												
3. MSQ	5.18	0.92												
4. OJS	4.72	1.00												
5. E	5.24	1.31												
6. Affective extremity	1.69	0.53												
7. Cognitive extremity	1.67	0.49												
8. Evaluative extremity	1.66	0.78												
9. HG attitude extremity	5.45	1.33												
10. Affective certainty	5.86	0.91												
11. Cognitive certainty	5.90	0.86												
12. HG attitude certainty	5.59	1.04												
13. SC	-.56	0.35	-											
14. HG SC	5.34	1.00	.17**	(.59)										
15. Latitude of rejection	3.95	1.16	.05	.14**	-									
16. Clarity	5.27	1.23	.04	.30**	-.01	(.94)								
17. Consequences	4.61	1.23	.09*	.09*	-.09*	.25**	(.87)							
18. Consistency	5.00	1.23	.11*	.41**	-.03	.72**	.34**	(.92)						
19. Constraints	3.89	1.57	-.07	-.25**	-.20**	.05	.28**	.05	(.96)					
20. IRJP	5.94	0.90	.11*	.39**	.18**	.07	-.16**	.05	-.38**	(.78)				
21. OCB-I	5.01	1.19	.00	.13**	-.01	.20**	.28**	.24**	.04	.15**	(.90)			
22. OCB-O	4.81	1.32	.10*	.27**	-.01	.28**	.43**	.40**	.03	.05	.56**	(.92)		
23. CWB-I	2.09	1.53	-.13**	-.24**	-.24**	.09*	.29**	.15**	.49**	-.61**	.09*	.16**	(.96)	
24. CWB-O	2.09	1.41	-.14**	-.26**	-.27**	.07	.24**	.13**	.47**	-.60**	.06	.12**	.90**	(.97)

Note. $N = 359$. HG = Homegrown. SC = Structural consistency. IRBP = In-role job performance. Cohen's alpha reliability estimates are reported along the diagonal. * $p < .05$. ** $p < .01$.

Table 2

Regression tables for Hypothesis 1

Model set	Predictor variables	Outcome variables: In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
1	MSQ	.01 (.05)	.25** (.07)	.56** (.06)	.16** (.09)	.12* (.08)
	Cognitive extremity	.31** (.09)	.22** (.11)	.06 (.11)	-.11* (.16)	-.10* (.15)
	MSQ x Cognitive extremity	-.10* (.08)	-.03 (.10)	.01 (.10)	-.02 (.14)	-.04 (.13)
		R^2 = .10	R^2 = .16	R^2 = .36	R^2 = .02	R^2 = .01
		Adjusted R^2 = .09	Adjusted R^2 = .16	Adjusted R^2 = .35	Adjusted R^2 = .01	Adjusted R^2 = .01
		F* = 5.16	F = .33	F = .03	F = .25	F = .69
		ΔR^2 = .01*	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	MSQ	.07 (.05)	.32** (.06)	.53** (.06)	.09 (.08)	.05 (.07)
	Evaluative extremity	.12* (.05)	.11* (.07)	.11** (.06)	.02 (.09)	.00 (.08)
	MSQ x Evaluative extremity	.08 (.05)	.00 (.06)	.09* (.06)	-.01 (.09)	-.01 (.08)
		R^2 = .03	R^2 = .14	R^2 = .37	R^2 = .01	R^2 = .00
		Adjusted R^2 = .03	Adjusted R^2 = .13	Adjusted R^2 = .37	Adjusted R^2 = .00	Adjusted R^2 = .00
		F = 2.81	F = .01	***F* = 5.56***	F = .05	F = .10
		ΔR^2 = .01	ΔR^2 = .00	**ΔR^2 = .01***	ΔR^2 = .00	ΔR^2 = .00
	OJS	.03 (.05)	.12* (.06)	.54** (.06)	-.03 (.08)	-.10 (.08)
	Affective extremity	.21** (.08)	.20** (.10)	.09* (.10)	.03 (.13)	.03 (.12)
	OJS x Affective extremity	.09 (.07)	.04 (.09)	-.02 (.09)	-.12* (.12)	-.11* (.11)
		R^2 = .07	R^2 = .08	R^2 = .32	R^2 = .02	R^2 = .03
		Adjusted R^2 = .06	Adjusted R^2 = .07	Adjusted R^2 = .31	Adjusted R^2 = .01	Adjusted R^2 = .03
		F = 3.48	F = .54	F = .27	***F* = 5.59***	***F* = 4.37***
		ΔR^2 = .01	ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01***	**ΔR^2 = .01***
	OJS	.06 (.04)	.13** (.06)	.52** (.06)	-.09 (.08)	-.15** (.07)
	Evaluative extremity	.12* (.05)	.17** (.07)	.10* (.06)	.08 (.09)	.08 (.08)
	OJS x Evaluative extremity	.16** (.05)	.04 (.06)	.01 (.06)	-.09* (.09)	-.07 (.07)

Model set	Predictor variables	Outcome variables				
		In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
		R^2 = .06	R^2 = .07	R^2 = .32	R^2 = .02	R^2 = .03
		Adjusted R^2 = .05	Adjusted R^2 = .06	Adjusted R^2 = .32	Adjusted R^2 = .02	Adjusted R^2 = .03
		F* = 11.94*	*F* = .85	*F* = .07	***F* = 3.91***	*F* = 2.63
		ΔR^2 = .02**	ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01***	ΔR^2 = .00
	E	-.03 (.04)	.16** (.05)	.44** (.05)	.17** (.07)	.17** (.07)
	Evaluative extremity	.16** (.06)	.14** (.08)	.08 (.07)	-.04 (.10)	-.06 (.10)
	E x Evaluative extremity	.10 (.04)	.04 (.05)	.05 (.05)	-.08 (.07)	-.09 (.06)
		R^2 = .03	R^2 = .08	R^2 = .27	R^2 = .02	R^2 = .01
		Adjusted R^2 = .02	Adjusted R^2 = .07	Adjusted R^2 = .26	Adjusted R^2 = .01	Adjusted R^2 = .01
		F = 3.60	*F* = .48	*F* = 1.30	*F* = 2.18	*F* = 2.91
		ΔR^2 = .01	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .01	ΔR^2 = .01
	E	.00 (.03)	.17** (.04)	.42** (.04)	.16** (.06)	.15** (.05)
	Affective extremity	.23** (.08)	.19** (.10)	.14** (.10)	-.05 (.13)	-.07 (.12)
	E x Affective extremity	.04 (.05)	.04 (.07)	.11** (.06)	-.07 (.09)	-.08 (.08)
		R^2 = .06	R^2 = .09	R^2 = .29	R^2 = .02	R^2 = .02
		Adjusted R^2 = .05	Adjusted R^2 = .09	Adjusted R^2 = .28	Adjusted R^2 = .02	Adjusted R^2 = .01
		F = .85	*F* = .84	***F* = 7.85****	*F* = 2.28	*F* = 3.00
		ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01****	ΔR^2 = .00	ΔR^2 = .00
	E	.00 (.03)	.13** (.04)	.42** (.04)	.15** (.05)	.13** (.05)
	Cognitive extremity	.30** (.08)	.30** (.10)	.20** (.10)	-.08 (.14)	-.08 (.13)
	E x Cognitive extremity	-.02 (.06)	.04 (.07)	.08* (.07)	-.05 (.10)	-.06 (.09)
		R^2 = .09	R^2 = .14	R^2 = .30	R^2 = .02	R^2 = .02
		Adjusted R^2 = .08	Adjusted R^2 = .14	Adjusted R^2 = .30	Adjusted R^2 = .01	Adjusted R^2 = .01
		F = .38	*F* = 1.12	***F* = 5.08***	*F* = 1.35	*F* = 2.06
		ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01***	ΔR^2 = .00	ΔR^2 = .01
2	MSQ	-.01 (.04)	.30** (.06)	.58** (.05)	.19* (.08)	.14* (.07)
	Cognitive certainty	.38** (.05)	.15* (.07)	.05 (.06)	-.27** (.09)	-.25** (.08)
	MSQ x Cognitive certainty	.11** (.04)	-.07 (.05)	-.03 (.04)	-.13* (.06)	-.12* (.06)

Model set	Predictor variables	Outcome variables				
		In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
		R^2 = .12	R^2 = .16	R^2 = .36	R^2 = .06	R^2 = .05
		Adjusted R^2 = .12	Adjusted R^2 = .15	Adjusted R2 = .36	Adjusted R^2 = .06	Adjusted R^2 = .04
		F* = 6.11	*F* = 2.90	*F* = .43	***F* = 8.05****	***F* = 6.84****
		ΔR^2 = .01*	ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01****	**ΔR^2 = .01****
	OJS	.03 (.04)	.17** (.06)	.53** (.05)	-.00 (.07)	-.07 (.07)
	Affective certainty	.34** (.04)	.13* (.06)	.10 (.06)	-.20* (.08)	-.19** (.07)
	OJS x Affective certainty	.13** (.04)	-.02 (.05)	-.02 (.05)	-.14* (.07)	-.12* (.06)
		R^2 = .12	R^2 = .06	R^2 = .32	R^2 = .05	R^2 = .06
		Adjusted R^2 = .12	Adjusted R^2 = .06	Adjusted R^2 = .32	Adjusted R^2 = .04	Adjusted R^2 = .05
		F* = 9.20*	*F* = .28	*F* = .19	***F* = 8.92****	***F* = 7.08****
		ΔR^2 = .02**	ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .02****	**ΔR^2 = .02****
	E	.00 (.03)	.20** (.04)	.47** (.04)	.18** (.05)	.16** (.05)
	Cognitive certainty	.36** (.05)	.22** (.06)	.17** (.06)	-.21** (.08)	-.22** (.07)
	E x Cognitive certainty	.10** (.03)	-.07* (.03)	-.01 (.03)	-.10* (.05)	-.11** (.04)
		R^2 = .12	R^2 = .12	R^2 = .29	R^2 = .05	R^2 = .05
		Adjusted R^2 = .12	Adjusted R^2 = .12	Adjusted R2 = .28	Adjusted R^2 = .05	Adjusted R^2 = .05
		F* = 5.43	*F* = 2.57	*F* = .02	***F* = 5.10***	***F* = 6.62***
		ΔR^2 = .01*	ΔR^2 = .01	ΔR^2 = .00	**ΔR^2 = .01***	**ΔR^2 = .01***
	E	.01 (.03)	.22** (.04)	.47** (.04)	.19** (.05)	.17** (.05)
	Affective certainty	.33** (.04)	.14* (.06)	.17** (.06)	-.23** (.07)	-.24** (.07)
	E x Affective certainty	.10** (.03)	-.02 (.04)	.03 (.04)	-.13** (.05)	-.14** (.05)
		R^2 = .11	R^2 = .08	R^2 = .29	R^2 = .07	R^2 = .07
		Adjusted R^2 = .11	Adjusted R^2 = .08	Adjusted R^2 = .28	Adjusted R^2 = .06	Adjusted R^2 = .07
		F* = 5.08	*F* = .19	*F* = .82	***F* = 9.18****	***F* = 10.76****
		ΔR^2 = .01*	ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .02****	**ΔR^2 = .02****
3	MSQ	.16** (.05)	.35** (.06)	.55** (.06)	.08 (.08)	.05 (.08)
	Structural consistency	-.06 (.05)	.03 (.06)	.10* (.06)	.02 (.08)	.01 (.08)

Model set	Predictor variables	Outcome variables: In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
	MSQ x Structural consistency	-.01 (.04)	-.07 (.05)	-.03 (.05)	-.01 (.07)	-.04 (.07)
		R^2 = .02	R^2 = .13	R^2 = .36	R^2 = .01	R^2 = .00
		Adjusted R^2 = .01	Adjusted R^2 = .13	Adjusted R2 = .36	Adjusted R2 = .00	Adjusted R^2 = .00
		F = .02	F = 2.62	F = .68	F = .01	F = .74
		ΔR2 = .00	ΔR^2 = .01	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	OJS	.21** (.04)	.15** (.05)	.48** (.05)	-.17** (.07)	-.22** (.07)
	Structural consistency	-.13* (.05)	.15** (.06)	.17** (.06)	.21** (.08)	.20** (.07)
	OJS x Structural consistency	.14** (.04)	-.12** (.05)	-.09* (.05)	-.20** (.07)	-.23** (.06)
		R^2 = .05	R^2 = .07	R^2 = .33	R^2 = .06	R^2 = .08
		Adjusted R2 = .04	Adjusted R^2 = .06	Adjusted R^2 = .33	Adjusted R^2 = .05	Adjusted R^2 = .07
		F* = 9.87*	***F* = 7.50****	***F* = 5.42***	***F* = 20.64****	***F* = 26.56****
		ΔR^2 = .03**	**ΔR^2 = .02****	**ΔR^2 = .00***	**ΔR^2 = .04****	**ΔR^2 = .05****
	E	.12* (.03)	.20** (.04)	.43** (.04)	.11* (.06)	.10* (.05)
	Structural consistency	-.04 (.05)	.12* (.06)	.19** (.06)	.01 (.08)	-.01 (.07)
	E x Structural consistency	.03 (.03)	-.08 (.04)	-.02 (.04)	-.01 (.05)	-.03 (.05)
		R^2 = .01	R^2 = .07	R^2 = .29	R^2 = .01	R^2 = .01
		Adjusted R^2 = .01	Adjusted R^2 = .07	Adjusted R^2 = .29	Adjusted R2 = .01	Adjusted R^2 = .00
		F = .61	F = 3.48	F = .20	F = .03	F = .59
		ΔR2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
4	MSQ	.12** (.04)	.35** (.05)	.60** (.05)	.11* (.07)	.06 (.06)
	Vested interest	.17** (.03)	-.02 (.04)	-.03 (.04)	-.21** (.06)	-.25** (.05)
	MSQ x Vested interest	.04 (.04)	.00 (.04)	.04 (.04)	-.15** (.06)	-.14** (.05)
		R^2 = .05	R^2 = .13	R^2 = .36	R^2 = .09	R^2 = .10
		Adjusted R^2 = .05	Adjusted R^2 = .13	Adjusted R^2 = .35	Adjusted R^2 = .08	Adjusted R^2 = .09
		F = .98	F = .01	F = 1.41	***F* = 13.28****	***F* = 11.05****
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .02****	**ΔR^2 = .02****

Model set	Predictor variables	Outcome variables: In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
	OJS	.16** (.04)	.21** (.05)	.55** (.05)	-.07 (.07)	-.13** (.06)
	Vested interest	.17** (.03)	-.03 (.04)	-.05 (.04)	-.23** (.06)	-.27** (.05)
	OJS x Vested interest	-.06 (.03)	.02 (.05)	.07 (.04)	.02 (.06)	.04 (.05)
		R^2 = .06	R^2 = .04	R^2 = .32	R^2 = .06	R^2 = .09
		Adjusted R^2 = .05	Adjusted R^2 = .04	Adjusted R^2 = .31	Adjusted R^2 = .06	Adjusted R^2 = .09
		F = 2.06	F = .14	F = 3.37	F = .17	F = 1.28
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	E	.10* (.03)	.25** (.04)	.51** (.04)	.12** (.05)	.09* (.05)
	Vested interest	.18** (.03)	.00 (.04)	.01 (.04)	-.21** (.05)	-.26** (.05)
	E x Vested interest	.03 (.03)	-.02 (.03)	-.01 (.04)	-.15 ** (.04)	-.11** (.04)
		R^2 = .05	R^2 = .06	R^2 = .26	R^2 = .09	R^2 = .09
		Adjusted R^2 = .04	Adjusted R^2 = .06	Adjusted R^2 = .26	Adjusted R^2 = .08	Adjusted R^2 = .09
		F = .40	F = .27	F = .05	**F = 12.66****	**F = 7.10****
		ΔR^2 = .01	ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .02****	**ΔR^2 = .01****

Note. N = 539. All coefficients and statistics are from the second step of the hierarchical regression analyses. All regression coefficients are standardized. Standard errors are represented in parentheses following the regression coefficients. Significant F-test statistics are represented in bold. * $p < .05$. ** $p < .01$.

Table 3

Pattern of significant results in the direction expected across predictor variables and moderators for Hypothesis 1

Predictor variable	Moderator variable				
	Attitude extremity	Attitude certainty	Structural consistency	Latitude of rejection	All
MSQ					
Sig.	1	0	0	0	1
Total	10	5	5	5	25
Percent	*10%*	*0%*	*0%*	*0%*	*4%*
OJS					
Sig.	3	3	3	0	9
Total	10	5	5	5	25
Percent	*30%*	*60%*	*80%*	*0%*	*36%*
E					
Sig.	2	2	0	0	4
Total	15	10	5	5	35
Percent	*13%*	*20%*	*0%*	*0%*	*11%*
All					
Sig.	6	5	3	0	14
Total	35	20	15	15	85
Percent	*17%*	*25%*	*20%*	*0%*	*16%*

Note. Sig. = number of significant hierarchical regression models. Total = number of all hierarchical regression models run.

Table 4

Pattern of significant results in the direction expected across outcome variables and moderators for Hypothesis 1

Outcome variable	Moderator variable				
	Attitude extremity	Attitude certainty	Structural consistency	Latitude of rejection	All
IRJP					
Sig.	1	3	1	0	5
Total	7	4	3	3	17
Percent	*14%*	*75%*	*33%*	*0%*	*29%*
OCB					
Sig.	3	0	0	0	3
Total	14	8	6	6	34
Percent	*21%*	*0%*	*0%*	*0%*	*9%*
CWB					
Sig.	2	2	2	0	6
Total	14	8	6	6	34
Percent	*14%*	*25%*	*33%*	*0%*	*18%*
All					
Sig.	6	5	3	0	14
Total	35	20	15	15	85
Percent	*17%*	*25%*	*20%*	*0%*	*16%*

Note. IRJP = in-role job performance. Sig. = number of significant hierarchical regression models. Total = number of all hierarchical regression models run.

Table 5

Regression analyses for Hypothesis 2

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
1	MSQ	.13* (.05)	.34** (.06)	.62** (.06)	.06 (.08)	.02 (.08)
	Clarity	.00 (.04)	.03 (.05)	-.03 (.04)	.06 (.06)	.07 (.06)
	MSQ x Clarity	-.01 (.03)	.06 (.04)	.06 (.03)	-.01 (.05)	.03 (.04)
		R^2 = .02	R^2 = .13	R^2 = .36	R^2 = .01	R^2 = .01
		Adjusted R^2 = .01	Adjusted R^2 = .12	Adjusted R^2 = .36	Adjusted R^2 = .01	Adjusted R^2 = .00
		F = .08	F = 1.99	F = 3.36	F = .06	F = .37
		ΔR2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	OJS	.15** (.04)	.16** (.05)	.52** (.05)	-.13** (.07)	-.19** (.06)
	Clarity	.03 (.03)	.15** (.04)	.12** (.04)	.12** (.06)	.12** (.05)
	OJS x Clarity	.05 (.03)	.02 (.03)	.05 (.03)	-.14** (.05)	-.13** (.04)
		R^2 = .03	R^2 = .06	R^2 = .33	R^2 = .04	R^2 = .05
		Adjusted R^2 = .02	Adjusted R^2 = .06	Adjusted R^2 = .32	Adjusted R^2 = .04	Adjusted R^2 = .05
		F = 1.11	F = .16	F = 1.98	***F* = 10.31****	F = ***9.20****
		ΔR2 = .00	ΔR^2 = .00	ΔR^2 = .01	**ΔR^2 = .02****	**ΔR^2 = .01****
	E	.08 (.03)	.20** (.04)	.20** (.04)	.09 (.06)	.08 (.05)
	Clarity	.04 (.03)	.13** (.04)	.13** (.04)	.05 (.06)	.05 (.05)
	E x Clarity	-.04 (.02)	.06 (.03)	.06 (.03)	.00 (.03)	.03 (.03)
		R^2 = .01	R^2 = .08	R^2 = .08	R^2 = .01	R^2 = .01
		Adjusted R^2 = .01	Adjusted R^2 = .07	Adjusted R^2 = .07	Adjusted R^2 = .01	Adjusted R^2 = .01
		F = .95	*F = 1.93*	***F* = 5.27***	F = .01	F = .59
		ΔR^2 = .00	ΔR^2 = .01	**ΔR^2 = .01***	ΔR^2 = .00	ΔR^2 = .00
2	MSQ	.25** (.05)	.29** (.06)	.50** (.05)	-.03 (.08)	-.05 (.07)
	Consequences	-.27** (.03)	.16** (.04)	.21** (.04)	.31** (.06)	.27** (.05)

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
	MSQ x Consequences	.01 (.03)	.05 (.04)	.00 (.03)	.14** (.05)	.14** (.05)
		R^2 = .08	R^2 = .15	R^2 = .39	R^2 = .10	R^2 = .08
		Adjusted R^2 = .07	Adjusted R^2 = .14	Adjusted R^2 = .39	Adjusted R^2 = .10	Adjusted R^2 = .07
		F = .07	F = 1.63	F = .01	***F* = 10.84****	***F* = 10.45****
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01****	**ΔR^2 = .02****
	OJS	.26** (.04)	.14** (.05)	.46** (.05)	-.22** (.07)	-.27** (.06)
	Consequences	-.22** (.03)	.24** (.04)	.28** (.04)	.35** (.05)	.31** (.05)
	OJS x Consequences	.14** (.03)	.03 (.04)	-.02 (.03)	-.10* (.04)	-.12** (.04)
		R^2 = .10	R^2 = .10	R^2 = .38	R^2 = .13	R^2 = .13
		Adjusted R^2 = .09	Adjusted R^2 = .09	Adjusted R^2 = .38	Adjusted R^2 = .13	Adjusted R^2 = .12
		F* = 10.94*	F = .64	F = .31	***F* = 5.41***	***F* = 9.00****
		ΔR^2 = .02**	ΔR^2 = .01	ΔR^2 = .00	**ΔR^2 = .01***	**ΔR^2 = .02****
	E	.19** (.03)	.18** (.04)	.41** (.04)	.03 (.05)	.02 (.05)
	Consequences	-.23** (.03)	.22** (.04)	.28** (.04)	.29** (.05)	.24** (.05)
	E x Consequences	.04 (.02)	.05 (.03)	.01 (.03)	.13** (.03)	.11** (.03)
		R^2 = .06	R^2 = .11	R^2 = .33	R^2 = .10	R^2 = .07
		Adjusted R^2 = .05	Adjusted R^2 = .10	Adjusted R^2 = .33	Adjusted R^2 = .10	Adjusted R^2 = .06
		F = 1.11	F = 1.60	F = .04	***F* = 9.43****	***F* = 6.74****
		ΔR^2 = .01	ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01****	**ΔR^2 = .01****
3	MSQ	.18** (.06)	.38** (.07)	.60** (.07)	.00 (.09)	-.04 (.09)
	Consistency	-.05 (.04)	.04 (.05)	.06 (.05)	.15** (.07)	.17** (.06)
	MSQ x Consistency	.03 (.03)	.15** (.03)	.11** (.03)	.02 (.05)	.05 (.04)
		R^2 = .02	R^2 = .14	R^2 = .37	R^2 = .02	R^2 = .02
		Adjusted R^2 = .01	Adjusted R^2 = .14	Adjusted R^2 = .36	Adjusted R^2 = .02	Adjusted R^2 = .01
		F = .43	***F* = 11.68****	***F* = 9.01****	F = .12	F = 1.28
		ΔR^2 = .00	**ΔR^2 = .01****	**ΔR^2 = .02****	ΔR^2 = .00	ΔR^2 = .00
	OJS	-.30 ** (.07)	.15** (.06)	.49** (.05)	-.24** (.07)	-.30** (.07)

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
	Consistency	.22** (.05)	.20** (.05)	.20** (.04)	.21** (.06)	.22** (.05)
	OJS x Consistency	-.17** (.04)	.10* (.03)	.08* (.03)	-.18** (.04)	-.17** (.04)
		R^2 = .10	R^2 = .08	R^2 = .34	R^2 = .08	R^2 = .10
		Adjusted R^2 = .09	Adjusted R^2 = .07	Adjusted R^2 = .34	Adjusted R^2 = .08	Adjusted R^2 = .09
		F* = 9.21*	***F* = 5.19***	***F* = 4.14***	***F* = 15.97****	***F* = 15.73****
		ΔR^2 = .07**	**ΔR^2 = .01***	**ΔR^2 = .01***	**ΔR^2 = .03****	**ΔR^2 = .03****
	E	.13* (.04)	.24** (.05)	.47** (.05)	.04 (.06)	.04 (.06)
	Consistency	.00 (.04)	.17** (.05)	.19** (.05)	.12* (.06)	.12* (.06)
	E x Consistency	.06 (.02)	.19** (.03)	.15** (.03)	.00 (.03)	.03 (.03)
		R^2 = .01	R^2 = .10	R^2 = .30	R^2 = .02	R^2 = .02
		Adjusted R^2 = .01	Adjusted R^2 = .10	Adjusted R^2 = .29	Adjusted R^2 = .01	Adjusted R^2 = .01
		F = 1.50	***F* = 16.14****	***F* = 13.47****	*F* = .01	*F* = .46
		ΔR^2 = .00	**ΔR^2 = .02****	**ΔR^2 = .02****	ΔR^2 = .00	ΔR^2 = .00
4	MSQ	.15** (.04)	.43** (.06)	.64** (.05)	.05 (.06)	.01 (.06)
	Constraints	-.33** (.02)	.12** (.03)	.12** (.03)	.44** (.04)	.42** (.03)
	MSQ x Constraints	-.16** (.02)	-.18** (.03)	-.11** (.03)	.25** (.04)	.25** (.03)
		R^2 = .18	R^2 = .16	R^2 = .37	R^2 = .31	R^2 = .28
		Adjusted R^2 = .17	Adjusted R^2 = .15	Adjusted R^2 = .37	Adjusted R^2 = .31	Adjusted R^2 = .28
		F* = 14.59*	***F* = 16.07****	***F* = 8.06****	***F* = 40.17****	***F* = 36.75****
		ΔR^2 = .02**	**ΔR^2 = .03****	**ΔR^2 = .01****	**ΔR^2 = .05****	**ΔR^2 = .05****
	OJS	.10* (.04)	.28** (.05)	.63** (.05)	.02 (.06)	-.04 (.06)
	Constraints	-.35** (.02)	.13** (.03)	.20** (.03)	.49** (.04)	.46** (.04)
	OJS x Constraints	-.07 (.02)	-.16** (.03)	-.12** (.03)	.04 (.03)	.02 (.03)
		R^2 = .15	R^2 = .07	R^2 = .35	R^2 = .24	R^2 = .22
		Adjusted R^2 = .15	Adjusted R^2 = .07	Adjusted R^2 = .35	Adjusted R^2 = .24	Adjusted R^2 = .22
		F = 3.14	***F* = 12.97****	***F* = 10.48****	*F* = 1.01	*F* = .27
		ΔR^2 = .00	**ΔR^2 = .02****	**ΔR^2 = .01****	ΔR^2 = .00	ΔR^2 = .00

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
	E	.09* (.03)	.29** (.04)	.53** (.04)	.09* (.05)	.07 (.04)
	Constraints	-.36** (.02)	.09* (.03)	.09* (.03)	.46** (.04)	.44** (.03)
	E x Constraints	-.08 (.02)	-.11* (.02)	-.04 (.02)	.19** (.03)	.18** (.02)
		R^2 = .16	R^2 = .08	R^2 = .27	R^2 = .30	R^2 = .26
		Adjusted R^2 = .15	Adjusted R^2 = .07	Adjusted R^2 = .26	Adjusted R^2 = .29	Adjusted R^2 = .26
		F = 3.20	**F = 5.50***	F = 1.10	**F = 22.01****	**F = 18.54****
		ΔR^2 = .01	**ΔR^2 = .01***	ΔR^2 = .00	**ΔR^2 = .03****	**ΔR^2 = .02****

Note. N = 539. All coefficients and statistics are from the second step of the hierarchical regression analyses. All regression coefficients are standardized. Standard errors are represented in parentheses following the regression coefficients. Significant F-test statistics are represented in bold. * $p < .05$. ** $p < .01$.

Table 6

Regression analyses for Hypothesis 3

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
1	MSQ	-.04 (.06)	.24** (.08)	.62** (.07)	.15* (.11)	.12 (.10)
	Cognitive extremity	.36** (.10)	.22** (.13)	.04 (.13)	-.12* (.15)	-.15* (.17)
	Clarity	-.03 (.04)	.00 (.05)	-.03 (.05)	.09 (.07)	.08 (.07)
	MSQ x Cognitive extremity	-.01 (.09)	-.04 (.12)	-.05 (.11)	-.04 (.17)	-.06 (.15)
	MSQ x Clarity	-.10 (.04)	-.01 (.05)	.07 (.05)	.06 (.07)	.08 (.06)
	Cognitive extremity x Clarity	-.12* (.08)	.03 (.10)	.06 (.10)	.01 (.14)	.01 (.13)
	MSQ x Cognitive extremity x Clarity	.05 (.06)	-.01 (.07)	-.06 (.07)	-.05 (.10)	.00 (.09)
		R^2 = .12	R^2 = .16	R^2 = .37	R^2 = .02	R^2 = .02
		Adjusted R^2 = .11	Adjusted R^2 = .15	Adjusted R^2 = .36	Adjusted R^2 = .01	Adjusted R^2 = .01
		F = .70	F = .01	F = 1.56	F = .60	F = .01
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .01	ΔR^2 = .00	ΔR^2 = .00
	MSQ	.08 (.06)	.17** (.07)	.45** (.07)	.09 (.10)	.07 (.09)
	Cognitive extremity	.35** (.10)	.23** (.13)	.10* (.12)	-.19** (.17)	-.18** (.16)
	Consequences	-.24** (.04)	.17** (.05)	.24** (.04)	.30** (.06)	.26** (.06)
	MSQ x Cognitive extremity	-.11* (.09)	.00 (.11)	.02 (.11)	-.02 (.15)	-.04 (.14)
	MSQ x Consequences	-.10 (.04)	-.04 (.05)	.02 (.05)	.19** (.07)	.18** (.07)
	Cognitive extremity x Consequences	.00 (.07)	.06 (.10)	-.05 (.09)	.01 (.13)	.00 (.12)
	MSQ x Cognitive extremity x Consequences	-.03 (.06)	.04 (.07)	-.06 (.07)	.02 (.10)	.02 (.09)
		R^2 = .16	R^2 = .19	R^2 = .40	R^2 = .12	R^2 = .10
		Adjusted R^2 = .15	Adjusted R^2 = .18	Adjusted R^2 = .39	Adjusted R^2 = .11	Adjusted R^2 = .09
		F = .26	F = .52	F = 1.35	F = .07	F = .09
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	MSQ	-.06 (.07)	.26** (.09)	.61** (.09)	.13 (.13)	.11 (.12)
	Cognitive extremity	.40** (.11)	.20** (.14)	.01 (.14)	-.16* (.20)	-.17** (.18)
	Consistency	-.06 (.04)	.04 (.05)	.06 (.05)	.16** (.07)	.18** (.07)
	MSQ x Cognitive extremity	-.10 (.11)	-.07 (.13)	-.07 (.13)	-.04 (.19)	-.07 (.17)
	MSQ x Consistency	-.15* (.04)	.05 (.05)	.11* (.05)	.10 (.07)	.14* (.07)
	Cognitive extremity x Consistency	.02 (.09)	.05 (.12)	.07 (.11)	.01 (.16)	.02 (.15)
	MSQ x Cognitive extremity x Consistency	-.02 (.05)	.00 (.07)	-.03 (.06)	-.01 (.09)	-.01 (.09)
		R^2 = .11	R^2 = .17	R^2 = .37	R^2 = .03	R^2 = .04
		Adjusted R^2 = .10	Adjusted R^2 = .16	Adjusted R^2 = .36	Adjusted R^2 = .02	Adjusted R^2 = .03
		F = .06	F = .01	F = .31	F = .01	F = .01

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
		ΔR^2 = .00	ΔR^2 = 00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	MSQ	.09 (.05)	.34** (.07)	.62** (.07)	.04 (.08)	.01 (.08)
	Cognitive extremity	.24** (.09)	.22** (.12)	.08 (.12)	-.02 (.14)	-.01 (.14)
	Constraints	-.40** (.02)	.09 (.03)	.10* (.03)	.51** (.04)	.47** (.04)
	MSQ x Cognitive extremity	-.12** (.08)	-.05 (.10)	-.03 (.10)	.00 (.12)	-.02 (.11)
	MSQ x Constraints	-.27** (.03)	-.23** (.04)	-.15** (.04)	.38** (.05)	.34** (.04)
	Cognitive extremity x Constraints	.13** (.05)	.01 (.07)	-.06 (.07)	-.11* (.09)	-.10* (.08)
	MSQ x Cognitive extremity x Constraints	.12* (.05)	.13* (.07)	.12* (.07)	-.13* (.08)	-.08 (.08)
		R^2 = .26	R^2 = .19	R^2 = .38	R^2 = .33	R^2 .29
		Adjusted R^2 = .25	Adjusted R^2 = .18	Adjusted R^2 = .37	Adjusted R^2 = .32	Adjusted R^2 = .28
		F* = 4.22	***F* = 4.31***	***F* = 5.01***	***F* = 5.22***	F = 1.87
		ΔR^2 = .01*	**ΔR^2 = .00***	**ΔR^2 = .00***	**ΔR^2 = .01***	ΔR^2 = .00
	MSQ	.06 (.05)	.31** (.07)	.57** (.06)	.06 (.09)	.02 (.09)
	Evaluative extremity	.15** (.06)	.09 (.07)	.13** (.07)	.02 (.10)	-.02 (.09)
	Clarity	.01 (.04)	.01 (.05)	-.03 (.05)	.06 (.07)	.06 (.06)
	MSQ x Evaluative extremity	.08 (.06)	.04 (.07)	.05 (.07)	-.01 (.10)	-.02 (.09)
	MSQ x Clarity	-.02 (.03)	.04 (.04)	.05 (.04)	-.01 (.06)	.02 (.05)
	Evaluative extremity x Clarity	-.02 (.05)	-.06 (.06)	.03 (.06)	.01 (.08)	.01 (.07)
	MSQ x Evaluative extremity x Clarity	-.08 (.03)	.05 (.04)	-.08 (.04)	-.02 (.06)	.02 (.05)
		R^2 = .04	R^2 = .14	R^2 = .38	R^2 = .01	R^2 = .01
		Adjusted R^2 = .03	Adjusted R^2 = .13	Adjusted R^2 = .37	Adjusted R^2 = .00	Adjusted R^2 = .00
		F = 1.95	F = .78	F = 3.31	F = .11	F = .10
		ΔR^2 = .01	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	MSQ	.18** (.05)	.26** (.06)	.44** (.06)	-.01 (.08)	-.03 (.08)
	Evaluative extremity	.14** (.06)	.09 (.07)	.13** (.07)	-.04 (.10)	-.05 (.09)
	Consequences	-.28** (.03)	.15** (.04)	.22** (.04)	.32** (.06)	.27** (.05)
	MSQ x Evaluative extremity	.10* (.06)	.02 (.07)	.08* (.07)	-.06 (.09)	-.06 (.09)
	MSQ x Consequences	-.02 (.04)	.02 (.05)	.01 (.04)	.13* (.06)	.14** (.06)
	Evaluative extremity x Consequences	-.04 (.05)	-.02 (.06)	-.03 (.06)	.07 (.08)	.07 (.07)
	MSQ x Evaluative extremity x Consequences	.01 (.04)	.02 (.05)	-.05 (.04)	-.02 (.06)	-.03 (.06)
		R^2 = .10	R^2 = .15	R^2 = .41	R^2 = .11	R^2 = .09
		Adjusted R^2 = .08	Adjusted R^2 = .14	Adjusted R^2 = .40	Adjusted R^2 = .10	Adjusted R^2 = .07
		F = .04	F = .21	F = 1.56	F = .07	F = .22
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .01
	MSQ	.11 (.06)	.36** (.08)	.56** (.07)	.01 (.10)	-.02 (.10)
	Evaluative extremity	.14** (.06)	.05 (.08)	.11* (.07)	.01 (.11)	-.03 (.10)
	Consistency	-.08 (.04)	.02 (.05)	.06 (.05)	.17** (.07)	.19** (.07)

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
	MSQ x Evaluative extremity	.05 (.07)	.02 (.09)	.05 (.08)	-.04 (.12)	-.04 (.11)
	MSQ x Consistency	-.01 (.03)	.12* (.04)	.13** (.04)	.04 (.06)	.08 (.05)
	Evaluative extremity x Consistency	.02 (.05)	-.01 (.07)	-.02 (.06)	.01 (.09)	.01 (.09)
	MSQ x Evaluative extremity x Consistency	-.03 (.03)	.03 (.04)	-.11* (.04)	-.05 (.06)	-.03 (.05)
		R^2 = .04	R^2 = .15	R^2 = .38	R^2 = .02	R^2 = .02
		Adjusted R^2 = .02	Adjusted R^2 = .14	Adjusted R^2 = .37	Adjusted R^2 = .01	Adjusted R^2 = .01
		F = .15	F = .29	***F* = 4.28***	F = .52	F = .22
		ΔR^2 = .00	ΔR^2 = .00	***ΔR² = .00****	ΔR^2 = .00	ΔR^2 = .00
	MSQ	.11* (.05)	.40** (.06)	.58** (.05)	.04 (.07)	.00 (.07)
	Evaluative extremity	.10* (.05)	.08 (.07)	.10* (.07)	.02 (.08)	.01 (.08)
	Constraints	-.39** (.02)	.09* (.03)	.12** (.03)	.48** (.04)	.45** (.04)
	MSQ x Evaluative extremity	.05 (.05)	.01 (.07)	.10* (.06)	.02 (.08)	.01 (.07)
	MSQ x Constraints	-.25** (.03)	-.22** (.04)	-.10* (.03)	.31** (.04)	.29** (.04)
	Evaluative extremity x Constraints	.11* (.03)	.07 (.04)	.01 (.04)	-.03 (.05)	-.02 (.05)
	MSQ x Evaluative extremity x Constraints	.13** (.03)	.06 (.04)	.00 (.04)	-.11 * (.04)	-.10* (.04)
		R^2 = .21	R^2 = .17	R^2 = .39	R^2 = .32	R^2 = .29
		Adjusted R^2 = .20	Adjusted R^2 = .16	Adjusted R^2 = .38	Adjusted R^2 = .31	Adjusted R^2 = .28
		F* = 7.45*	F = 1.40	F = .01	***F* = 6.35****	***F* = 5.04****
		ΔR² = .10*	ΔR^2 = .00	ΔR^2 = .00	***ΔR² = .01****	***ΔR² = .01****
	OJS	.02 (.05)	.08 (.07)	.53** (.06)	-.07 (.09)	-.14* (.08)
	Affective extremity	.21** (.08)	.18** (.11)	.07 (.10)	.05 (.14)	.03 (.13)
	Clarity	.00 (.04)	.11* (.05)	.12** (.04)	.12* (.06)	.10* (.06)
	OJS x Affective extremity	.14* (.08)	.04 (.10)	-.07 (.09)	-.15** (.13)	-.14* (.12)
	OJS x Clarity	-.01 (.04)	-.04 (.05)	.07 (.05)	-12* (.06)	-.16** (.06)
	Affective extremity x Clarity	-.11* (.06)	.00 (.08)	.12** (.08)	.13** (.11)	.14** (.10)
	OJS x Affective extremity x Clarity	.06 (.05)	.03 (.07)	-.10* (.06)	-.09 (.09)	-.02 (.08)
		R^2 = .08	R^2 = .09	R^2 = .35	R^2 = .07	R^2 = .08
		Adjusted R^2 = .07	Adjusted R^2 = .08	Adjusted R^2 = .34	Adjusted R^2 = .06	Adjusted R^2 = .06
		F = 1.08	F = .32	***F* = 4.24****	F = 2.03	F = .14
		ΔR^2 = .00	ΔR^2 = .00	***ΔR² = .01****	ΔR^2 = .00	ΔR^2 = .00
	OJS	.13* (.05)	.03 (.07)	.44** (.06)	-.17** (.08)	-.23** (.08)
	Affective extremity	.20** (.08)	.21** (.11)	.11** (.10)	.06 (.14)	.07 (.12)
	Consequences	-.21** (.03)	.23** (.04)	.27** (.04)	.31** (.06)	.28** (.05)
	OJS x Affective extremity	.12* (.07)	.04 (.10)	-.06 (.09)	-.20** (.12)	-.18** (.11)
	OJS x Consequences	.12 (.04)	-.04 (.05)	.00 (.05)	-.12 (.07)	-.14* (.06)
	Affective extremity x Consequences	-.07 (.06)	.01 (.08)	.06 (.07)	.17** (.10)	.15** (.09)
	OJS x Affective extremity x Consequences	-.04 (.05)	.01 (.07)	-.09 (.06)	-.05 (.09)	-.06 (.08)

Model set	Predictor variables	Outcome variables: In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
		R^2 = .13	R^2 = .13	R^2 = .40	R^2 = .17	R^2 = .16
		Adjusted R^2 = .12	Adjusted R^2 = .12	Adjusted R^2 = .39	Adjusted R^2 = .16	Adjusted R^2 = .15
		F = .35	F = .05	F = 2.94	F = .62	F = .99
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .01	ΔR^2 = .00	ΔR^2 = .00
	OJS	.07 (.05)	.06 (.07)	.50** (.07)	-.20** (.09)	-.27** (.08)
	Affective extremity	.17** (.09)	.17** (.12)	.09* (.11)	.13* (.15)	.12* (.13)
	Consistency	-.05 (.04)	.16** (.05)	.20** (.05)	.18** (.06)	.19** (.06)
	OJS x Affective extremity	.16** (.08)	.01 (.11)	-.13** (.10)	-.24** (.14)	-.22** (.13)
	OJS x Consistency	.04 (.04)	.01 (.05)	.11* (.05)	-.22** (.07)	-.23** (.06)
	Affective extremity x Consistency	-.09 (.07)	.06 (.09)	.12** (.08)	.18** (.11)	.19** (.10)
	OJS x Affective extremity x Consistency	.05 (.05)	.02 (.07)	-.11* (.06)	-.05 (.08)	-.02 (.08)
		R^2 = .08	R^2 = .10	R^2 = .36	R^2 = .12	R^2 = .14
		Adjusted R^2 = .07	Adjusted R^2 = .09	Adjusted R^2 = .35	Adjusted R^2 = .11	Adjusted R^2 = .13
		F = .55	F = .05	***F* = 3.98***	F = .47	F = .08
		ΔR^2 = .00	ΔR^2 = 00	***ΔR² = .00****	ΔR^2 = .00	ΔR^2 = .00
	OJS	-.01 (.05)	.20** (.07)	.61** (.06)	.03 (.08)	-.03 (.07)
	Affective extremity	.18** (.08)	.15** (.12)	.06 (.11)	.00 (.14)	-.01 (.13)
	Constraints	-.40** (.02)	.09 (.04)	.20** (.03)	.51** (.04)	.47** (.04)
	OJS x Affective extremity	.09 (.07)	.06 (.10)	.00 (.10)	-.04 (.12)	-.03 (.11)
	OJS x Constraints	-.13* (.03)	-.20** (.04)	-.08 (.04)	.16** (.05)	.12* (.05)
	Affective extremity x Constraints	.13* (.05)	.09 (.07)	-.01 (.06)	.00 (.08)	.02 (.08)
	OJS x Affective extremity x Constraints	.08 (.04)	.06 (.06)	-.03 (.06)	-.18** (.07)	-.15* (.07)
		R^2 = .21	R^2 = .11	R^2 = .36	R^2 = .26	R^2 = .24
		Adjusted R^2 = .20	Adjusted R^2 = .10	Adjusted R^2 = .35	Adjusted R^2 = .25	Adjusted R^2 = .23
		F = 1.91	F = .98	F = .37	***F* = 8.98****	***F* = 6.16****
		ΔR^2 = .00	ΔR^2 = .01	ΔR^2 = .00	***ΔR² = .01****	***ΔR² = .01****
	OJS	.07 (.05)	.10* (.06)	.49** (.06)	-.14** (.08)	-.20** (.07)
	Evaluative extremity	.11* (.06)	.15** (.05)	.09* (.07)	.10* (.10)	.09 (.09)
	Clarity	-.01 (.04)	.14** (.04)	.14** (.04)	.13** (.06)	.12* (.06)
	OJS x Evaluative extremity	.16** (.05)	.05 (.06)	-.01 (.06)	-.11* (.08)	-.09* (.07)
	OJS x Clarity	.01 (.03)	.02 (.04)	.07 (.04)	-.14** (.06)	-.16** (.05)
	Evaluative extremity x Clarity	-.01 (.04)	-.05 (.05)	.05 (.05)	.09 (.07)	.10* (.06)
	OJS x Evaluative extremity x Clarity	.03 (.03)	-.04 (.04)	-.12* (.04)	-.08 (.06)	-.03 (.05)
		R^2 = .06	R^2 = .08	R^2 = .34	R^2 = .07	R^2 = .08
		Adjusted R^2 = .04	Adjusted R^2 = .07	Adjusted R^2 = .34	Adjusted R^2 = .06	Adjusted R^2 = .06
		F = .43	F = .46	***F* = 7.85****	F = 2.47	F = .41
		ΔR^2 = .00	ΔR^2 = .00	***ΔR² = .01****	ΔR^2 = .00	ΔR^2 = .01

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
	OJS	.17** (.05)	.06 (.06)	.43** (.06)	-.21** (.08)	-.27** (.07)
	Evaluative extremity	.12** (.06)	.15** (.07)	.09* (.07)	.07 (.09)	.08 (.09)
	Consequences	-.21** (.04)	.23** (.04)	.27** (.04)	.32** (.06)	.28** (.05)
	OJS x Evaluative extremity	.17** (.05)	.05 (.07)	-.01 (.06)	-.16** (.08)	-.14** (.08)
	OJS x Consequences	.15** (.03)	.00 (.05)	-.03 (.04)	-.13* (.06)	-.16** (.05)
	Evaluative extremity x Consequences	-.10* (.04)	-.01 (.06)	.04 (.05)	.17** (.07)	.17** (.07)
	OJS x Evaluative extremity x Consequences	-.04 (.04)	-.01 (.05)	-.03 (.04)	-.03 (.06)	-.03 (.05)
		R^2 = .13	R^2 = .11	R^2 = .39	R^2 = .17	R^2 = .16
		Adjusted R^2 = .11	Adjusted R^2 = .10	Adjusted R^2 = .38	Adjusted R^2 = .16	Adjusted R^2 = .15
		F = 60	F = .01	F = .52	F = .34	F = .40
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	OJS	.13* (.05)	.09 (.07)	.47** (.06)	-.27** (.08)	-.34** (.08)
	Evaluative extremity	.06 (.06)	.13* (.08)	.08 (.07)	.17** (.10)	.16** (.09)
	Consistency	-.06 (.04)	.17** (.05)	.22** (.05)	.20** (.06)	.21** (.06)
	OJS x Evaluative extremity	.19* (.05)	.00 (.07)	-.08 (.07)	-.20** (.09)	-.18** (.08)
	OJS x Consistency	.08 (.04)	.06 (.05)	.11* (.04)	-.22** (.06)	-.23** (.05)
	Evaluative extremity x Consistency	-.02 (.05)	.04 (.06)	.06 (.06)	.15** (.08)	.15* (.07)
	OJS x Evaluative extremity x Consistency	.07 (.03)	-.02 (.04)	-.12* (.04)	-.07 (.06)	-.04 (.05)
		R^2 = .07	R^2 = .09	R^2 = .36	R^2 = .13	R^2 = .14
		Adjusted R^2 = .06	Adjusted R^2 = .08	Adjusted R^2 = .35	Adjusted R^2 = .12	Adjusted R^2 = .13
		F = 1.27	F = .06	***F* = 5.41***	F = 1.43	F = .56
		ΔR^2 = .00	ΔR^2 = .00	***ΔR² = .01****	ΔR^2 = .00	ΔR^2 = .00
	OJS	.00 (.04)	.22** (.06)	.60** (.05)	.02 (.07)	-.04 (.07)
	Evaluative extremity	.13** (.05)	.12* (.07)	.04 (.07)	.01 (.09)	.00 (.08)
	Constraints	-.41** (.03)	.08 (.04)	.20** (.03)	.52** (.04)	.48** (.04)
	OJS x Evaluative extremity	.15** (.05)	.05 (.06)	.03 (.06)	-.04 (.07)	-.02 (.07)
	OJS x Constraints	-.16** (.03)	-.21** (.04)	-.09 (.04)	.12* (.05)	.08 (.04)
	Evaluative extremity x Constraints	.10* (.03)	.09 (.05)	.03 (.04)	.03 (.05)	.05 (.05)
	OJS x Evaluative extremity x Constraints	.12* (.03)	.08 (.04)	-.07 (.04)	-.15** (.05)	-.14** (.04)
		R^2 = .20	R^2 = .10	R^2 = .36	R^2 = .27	R^2 = .24
		Adjusted R^2 = .19	Adjusted R^2 = .09	Adjusted R^2 = .35	Adjusted R^2 = .26	Adjusted R^2 = .23
		F* = 4.99	F = 2.22	F = 2.29	***F* = 9.49****	***F* = 7.67****
		ΔR² = .01*	ΔR^2 = .00	ΔR^2 = .00	***ΔR² = .02****	***ΔR² = .01****
	E	-.03 (.03)	.11* (.04)	.43** (.04)	.14** (.06)	.13* (.05)
	Cognitive extremity	.34** (.09)	.29** (.12)	.20** (.12)	-.09 (.16)	-.13* (.05)
	Clarity	-.04 (.04)	.06 (.05)	.07 (.05)	.09 (.06)	.07 (.06)
	E x Cognitive extremity	.07 (.06)	.04 (.08)	.05 (.08)	-.08 (.11)	-.09 (.10)

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
	E x Clarity	-.11* (.02)	-.02 (.03)	.06 (.03)	.04 (.04)	.07 (.04)
	Cognitive extremity x Clarity	-.16** (.07)	.01 (.09)	.05 (.09)	.04 (.13)	.03 (.12)
	E x Cognitive extremity x Clarity	.08 (.04)	.00 (.05)	-.09* (.05)	-.06 (.07)	.01 (.06)
		R^2 = .13	R^2 = .14	R^2 = .31	R^2 = .03	R^2 = .03
		Adjusted R^2 = .11	Adjusted R^2 = .13	Adjusted R^2 = .30	Adjusted R^2 = .02	Adjusted R^2 = .01
		F = 2.47	F = .01	***F* = 4.58***	F = 1.17	F = .01
		ΔR^2 = .01	ΔR^2 = .00	**ΔR^2 = .00***	ΔR^2 = .00	ΔR^2 = .00
	E	.07 (.03)	.08 (.04)	.32** (.04)	.09 (.06)	.09 (.05)
	Cognitive extremity	.34** (.09)	.28** (.11)	.22** (.11)	-.15** (.15)	-.15** (.14)
	Consequences	-.22** (.04)	.20** (.04)	.29** (.04)	.29** (.06)	.23** (.05)
	E x Cognitive extremity	.02 (.06)	.06 (.08)	.05 (.08)	-.09 (.11)	-.10 (.10)
	E x Consequences	.00 (.02)	-.03 (.03)	-.01 (.03)	.13** (.04)	.12* (.04)
	Cognitive extremity x Consequences	-.09 (.07)	-.07 (.09)	-.03 (.09)	.07 (.12)	.06 (.11)
	E x Cognitive extremity x Consequences	-.05 (.04)	.06 (.05)	-.07 (.05)	.03 (.07)	.03 (.06)
		R^2 = .15	R^2 = .18	R^2 = .37	R^2 = .13	R^2 = .09
		Adjusted R^2 = .14	Adjusted R^2 = .17	Adjusted R^2 = .36	Adjusted R^2 = .12	Adjusted R^2 = .08
		F = .81	F = 1.27	F = 2.78	F = .24	F = .30
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	E	.00 (.04)	.12* (.05)	.39** (.05)	.09 (.07)	.10 (.06)
	Cognitive extremity	.34** (.10)	.27** (.12)	.19** (.12)	-.11* (.17)	-.15** (.16)
	Consistency	-.06 (.04)	.12* (.05)	.17** (.05)	.15** (.07)	.14** (.06)
	E x Cognitive extremity	.03 (.07)	.01 (.10)	-.02 (.09)	-.11 (.13)	-.11 (.12)
	E x Consistency	-.04 (.02)	.09 (.03)	.11* (.03)	.03 (.04)	.06 (.04)
	Cognitive extremity x Consistency	-.10 (.08)	.01 (.11)	.07 (.10)	.08 (.15)	.08 (.13)
	E x Cognitive extremity x Consistency	-.04 (.04)	-.03 (.05)	-.10* (.05)	.01 (.07)	.04 (.06)
		R^2 = .10	R^2 = .15	R^2 = .33	R^2 = .04	R^2 = .04
		Adjusted R^2 = .09	Adjusted R^2 = .14	Adjusted R^2 = .32	Adjusted R^2 = .03	Adjusted R^2 = .03
		F = .56	F = .34	***F* = 4.20***	F = .06	F = .41
		ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01***	ΔR^2 = .00	ΔR^2 = .00
	E	.00 (.03)	.17** (.04)	.43** (.04)	.09* (.05)	.09* (.04)
	Cognitive extremity	.25** (.08)	.31** (.11)	.24** (.11)	-.04 (.13)	-.04 (.12)
	Constraints	-.37** (.02)	.11* (.04)	.11** (.03)	.49** (.04)	.45** (.04)
	E x Cognitive extremity	-.02 (.06)	.04 (.08)	.05 (.08)	-.01 (.09)	-.05 (.09)
	E x Constraints	-.08 (.02)	-.07 (.03)	-.02 (.03)	.24** (.03)	.20** (.03)
	Cognitive extremity x Constraints	.09 (.05)	-.03 (.07)	-.10* (.07)	-.02 (.08)	-.03 (.08)
	E x Cognitive extremity x Constraints	-.01 (.04)	.00 (.05)	.06 (.05)	-.09 (.06)	-.03 (.06)
		R^2 = .23	R^2 = .15	R^2 = .32	R^2 = .30	R^2 = .27

Model set	Predictor variables	Outcome variables: In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
		Adjusted R^2 = .22	Adjusted R^2 = .14	Adjusted R^2 = .31	Adjusted R^2 = .29	Adjusted R^2 = .26
		F = .02	F = .01	F = 1.29	F = 3.57	F = .40
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	E	-.03 (.04)	.13* (.05)	.41** (.05)	.15** (.06)	.15** (.06)
	Affective extremity	.26** (.08)	.17** (.11)	.13** (.11)	-.06 (.14)	-.10* (.13)
	Clarity	-.02 (.04)	.09 (.05)	.10* (.05)	.07 (.06)	.05 (.06)
	E x Affective extremity	.09 (.06)	.05 (.07)	.07 (.07)	-.10* (.10)	-.11* (.09)
	E x Clarity	-.13* (.03)	.00 (.03)	.08 (.03)	.04 (.04)	.05 (.04)
	Affective extremity x Clarity	-.06 (.06)	-.02 (.08)	.07 (.08)	.05 (.11)	.05 (.10)
	E x Affective extremity x Clarity	.07 (.04)	.04 (.05)	-.10* (.05)	-.06 (.06)	.00 (.06)
		R^2 = .08	R^2 = .10	R^2 = .30	R^2 = .03	R^2 = .02
		Adjusted R^2 = .06	Adjusted R^2 = .09	Adjusted R^2 = .29	Adjusted R^2 = .01	Adjusted R^2 = .01
		F = 1.68	F = .56	***F* = 4.17***	F = 1.22	F = .00
		ΔR^2 = .01	ΔR^2 = .00	$\Delta \boldsymbol{R^2}$ **= .00***	ΔR^2 = .01	ΔR^2 = .00
	E	.07 (.04)	.11* (.05)	.32** (.04)	.09 (.06)	.09 (.06)
	Affective extremity	.26** (.08)	.17** (.11)	.16** (.10)	-.11* (.14)	-.12* (.13)
	Consequences	-.22** (.03)	.20** (.04)	.29** (.04)	.30** (.06)	.25** (.05)
	E x Affective extremity	.07 (.06)	.04 (.07)	.07 (.07)	-.12* (.09)	-.12* (.09)
	E x Consequences	-.01 (.03)	-.05 (.04)	.01 (.04)	.16** (.05)	.15* (.04)
	Affective extremity x Consequences	-.04 (.06)	-.02 (.08)	.01 (.08)	.07 (.11)	.06 (.10)
	E x Affective extremity x Consequences	-.02 (.04)	.09 (.05)	-.08 (.05)	-.04 (.07)	-.05 (.06)
		R^2 = .11	R^2 = .14	R^2 = .35	R^2 = .12	R^2 = .09
		Adjusted R^2 = .10	Adjusted R^2 = .13	Adjusted R^2 = .35	Adjusted R^2 = .11	Adjusted R^2 = .08
		F = .16	F = 2.29	F = 2.23	F = .38	F = .63
		ΔR^2 = .00	ΔR^2 = .01	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	E	-.01 (.04)	.17** (.06)	.41** (.05)	.10 (.07)	.12 (.07)
	Affective extremity	.25** (.09)	.13* (.12)	.12** (.11)	-.06 (.16)	-.11* (.14)
	Consistency	-.06 (.04)	.14** (.05)	.20** (.05)	.14* (.07)	.13* (.06)
	E x Affective extremity	.09 (.07)	.03 (.09)	.03 (.09)	-13* (.12)	-.13* (.11)
	E x Consistency	-.08 (.03)	.12 (.04)	.19** (.03)	.03 (.05)	.06 (.04)
	Affective extremity x Consistency	-.04 (.07)	.02 (.10)	.03 (.09)	.07 (.13)	.08 (.12)
	E x Affective extremity x Consistency	.04 (.04)	.01 (.05)	-.15* (.04)	-.02 (.06)	.01 (.06)
		R^2 = .06	R^2 = .11	R^2 = .32	R^2 = .03	R^2 = .03
		Adjusted R^2 = .05	Adjusted R^2 = .10	Adjusted R^2 = .31	Adjusted R^2 = .02	Adjusted R^2 = .02
		F = .29	F = .02	F = 6.32*	F = .09	F = .03
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .01*	ΔR^2 = .00	ΔR^2 = .00
	E	.02 (.03)	.21** (.05)	.42** (.05)	.09 (.05)	.09 (.05)

Model set	Predictor variables	Outcome variables: In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
	Affective extremity	.18** (.08)	.18** (.11)	.16** (.11)	-.02 (.12)	-.04 (.11)
	Constraints	-.39** (.02)	.08 (.03)	.12** (.03)	.49** (.04)	.46** (.04)
	E x Affective extremity	.05 (.05)	.05 (.08)	.11* (.07)	.00 (.09)	-.02 (.08)
	E x Constraints	-.10 (.02)	-.12 (.03)	.02 (.03)	.29** (.03)	.25** (.03)
	Affective extremity x Constraints	.12* (.05)	.04 (.07)	-.08 (.06)	-.03 (.07)	-.02 (.07)
	E x Affective extremity x Constraints	.02 (.03)	.03 (.04)	-.03 (.04)	-.16** (.05)	-.12* (.05)
		R^2 = .20	R^2 = .11	R^2 = .30	R^2 = .31	R^2 = .27
		Adjusted R^2 = .19	Adjusted R^2 = .10	Adjusted R^2 = .29	Adjusted R^2 = .30	Adjusted R^2 = .26
		F = .09	F = .25	F = .32	**F = 7.90****	**F = 4.60***
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01****	**ΔR^2 = .00***
	E	-.09 (.05)	.13 (.06)	.45** (.06)	.16* (.08)	.19** (.07)
	Evaluative extremity	.21** (.07)	.12* (.09)	.05 (.09)	-.04 (.12)	-.10 (.11)
	Clarity	.02 (.04)	.11* (.05)	.13** (.05)	.08 (.07)	.06 (.06)
	E x Evaluative extremity	.12* (.04)	.06 (.06)	.02 (.05)	-.09 (.07)	-.11 (.07)
	E x Clarity	-.12 (.03)	.03 (.04)	.13** (.05)	.07 (.05)	.09 (.05)
	Evaluative extremity x Clarity	.04 (.05)	-.06 (.06)	.00 (.06)	-.02 (.08)	-.01 (.08)
	E x Evaluative extremity x Clarity	-.01 (.03)	.02 (.04)	-.11 (.04)	-.08 (.05)	-.02 (.04)
		R^2 = .04	R^2 = .09	R^2 = .28	R^2 = .02	R^2 = .02
		Adjusted R^2 = .03	Adjusted R^2 = .08	Adjusted R^2 = .27	Adjusted R^2 = .01	Adjusted R^2 = .01
		F = .01	F = .11	F = 3.52	F = 1.39	F = .15
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	E	.05 (.04)	.09 (.06)	.35** (.06)	.14* (.07)	.15* (.07)
	Evaluative extremity	.16** (.07)	.13* (.09)	.10* (.08)	-.11* (.11)	-.12* (.10)
	Consequences	-.23** (.04)	.22** (.05)	.32** (.04)	.31** (.06)	.27* (.06)
	E x Evaluative extremity	.12* (.04)	.05 (.05)	.05 (.05)	-.13* (.07)	-.14* (.06)
	E x Consequences	.00 (.03)	.02 (.04)	.09 (.04)	.19** (.06)	.21** (.05)
	Evaluative extremity x Consequences	-.03 (.05)	-.03 (.06)	-.06 (06)	.04 (.08)	.03 (.08)
	E x Evaluative extremity x Consequences	.02 (.03)	.00 (.04)	-.14* (.04)	-.08 (.05)	-.11 (.05)
		R^2 = .07	R^2 = .11	R^2 = .34	R^2 = .12	R^2 = .09
		Adjusted R^2 = .06	Adjusted R^2 = .10	Adjusted R^2 = .33	Adjusted R^2 = .11	Adjusted R^2 = .08
		F = .07	F = .01	**F = 6.10***	F = 1.26	F = 2.77
		ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .00***	ΔR^2 = .01	ΔR^2 = .01
	E	-.06 (.06)	.23** (.07)	.53** (.07)	.13 (.10)	.19* (.09)
	Evaluative extremity	.19** (.08)	.03 (.10)	-.01 (.10)	-.05 (.13)	-.13 (.12)
	Consistency	-.01 (.04)	.17** (.05)	.25** (.05)	.14* (.07)	.13* (.06)
	E x Evaluative extremity	.07 (.05)	.01 (.06)	-.03 (.06)	-.11 (.08)	-.12 (.08)
	E x Consistency	-.05 (.03)	.21** (.04)	.33** (.04)	.06 (.06)	.11 (.05)

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
	Evaluative extremity x Consistency	.06 (.06)	-.03 (.07)	-.07 (.07)	.01 (.10)	.00 (.09)
	E x Evaluative extremity x Consistency	-.01 (.03)	-.04 (.04)	-.24** (.04)	-.06 (.05)	-.02 (.04)
		R^2 = .03	R^2 = .10	R^2 = .32	R^2 = .03	R^2 = .03
		Adjusted R^2 = .02	Adjusted R^2 = .09	Adjusted R^2 = .31	Adjusted R^2 = .02	Adjusted R^2 = .01
		F = .01	F = *.32*	***F* = 12.84****	F = .51	F = .09
		ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .02****	ΔR^2 = .00	ΔR^2 = .03
	E	-.02 (.04)	.23** (.06)	.45** (.06)	.11* (.07)	.12* (.06)
	Evaluative extremity	.15** (.06)	.11* (.08)	.08 (.08)	-.03 (.09)	-.06 (.09)
	Constraints	-.43** (.03)	.06 (.04)	.12** (.04)	.54** (.04)	.51** (.04)
	E x Evaluative extremity	.09 (.04)	.03 (.05)	.07 (.05)	-.05 (.06)	-.06 (.06)
	E x Constraints	-.22** (.03)	-.15* (.04)	.07 (.04)	.37** (.04)	.34** (.04)
	Evaluative extremity x Constraints	.12* (.04)	.07 (.05)	-.06 (.05)	-.10* (.05)	-.08 (.05)
	E x Evaluative extremity x Constraints	.16** (.02)	.05 (.03)	-.12* (.03)	-.22** (.04)	-.22** (.03)
		R^2 = .19	R^2 = .09	R^2 = .28	R^2 = .32	R^2 = .29
		Adjusted R^2 = .18	Adjusted R^2 = .08	Adjusted R^2 = .27	Adjusted R^2 = .31	Adjusted R^2 = .28
		F* = 6.83*	F = .50	F = 3.98*	***F* = 14.90****	***F* = 14.58****
		ΔR^2 = .01**	ΔR^2 = .00	ΔR^2 = .01	**ΔR^2 = .02****	**ΔR^2 = .02****
2	MSQ	-.02 (.05)	.29** (.06)	.61** (.06)	.15** (.09)	.11* (.08)
	Cognitive certainty	.44** (.06)	.15** (.07)	.04 (.07)	-.25** (.10)	-.25** (.09)
	Clarity	.00 (.04)	.04 (.05)	-.03 (.05)	.10 (.07)	.11* (.06)
	MSQ x Cognitive certainty	.10 (.04)	.00 (.05)	.01 (.05)	-.12* (.07)	-.11* (.07)
	MSQ x Clarity	-.05 (.03)	.09* (.04)	.08* (.04)	.06 (.05)	.09 (.05)
	Cognitive certainty x Clarity	-.03 (.05)	-.14* (.06)	-.07 (.06)	-.07 (.09)	-.06 (.08)
	MSQ x Cognitive certainty x Clarity	-.13* (.03)	.00 (.04)	.02 (.04)	-.06 (.05)	-.03 (.05)
		R^2 = .14	R^2 = .17	R^2 = .37	R^2 = .07	R^2 = .06
		Adjusted R^2 = .13	Adjusted R^2 = .16	Adjusted R^2 = .36	Adjusted R^2 = .05	Adjusted R^2 = .05
		F* = 4.16	F = .01	F = .15	F = .90	F = .25
		ΔR^2 = .01*	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	MSQ	.10* (.05)	.23** (.06)	.48** (.06)	.07 (.08)	.04 (.07)
	Cognitive certainty	.37** (.05)	.13** (.07)	.06 (.07)	-.23** (.09)	-.21** (.08)
	Consequences	-.27** (.03)	.16** (.04)	.22** (.04)	.34** (.06)	.31** (.05)
	MSQ x Cognitive certainty	.07 (.04)	-.03 (.05)	.00 (.05)	-.09 (.07)	-.08 (.06)
	MSQ x Consequences	-.04 (.03)	.04 (.04)	.00 (.04)	.21** (.05)	.22** (.05)
	Cognitive certainty x Consequences	.07 (.04)	-.05 (.05)	-.03 (.06)	-.14** (.08)	-.15** (.07)
	MSQ x Cognitive certainty x Consequences	.00 (.03)	.06 (.04)	.00 (.04)	-.08 (.06)	-.10 (.05)
		R^2 = .18	R^2 = .19	R^2 = .40	R^2 = .17	R^2 = .14
		Adjusted R^2 = .17	Adjusted R^2 = .17	Adjusted R^2 = .39	Adjusted R^2 = .16	Adjusted R^2 = .13

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
		F = .01	F = 1.22	F = .01	F = 2.40	F = 3.63
		ΔR^2 = .00	ΔR^2 = .01	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	MSQ	.00 (.06)	.33** (.07)	.60** (.07)	.13* (.10)	.09 (.09)
	Cognitive certainty	-.39** (.06)	.09 (.07)	.03 (.07)	-.27** (.10)	-.26** (.09)
	Consistency	-.09 (.04)	.05 (.05)	.08 (.05)	.20** (.07)	.23** (.07)
	MSQ x Cognitive certainty	.13* (.05)	-.03 (.06)	.00 (.06)	-.14* (.09)	-.13* (.08)
	MSQ x Consistency	-.08 (.03)	.13* (.04)	.14** (.04)	.13* (.05)	.17** (.05)
	Cognitive certainty x Consistency	.03 (.05)	-.06 (.07)	-.11 (.06)	-.09 (.09)	-.12 (.08)
	MSQ x Cognitive certainty x Consistency	.05 (.03)	.03 (.04)	-.05 (.04)	-.10 (.05)	-.12 (.05)
		R^2 = .13	R^2 = .17	R^2 = .37	R^2 = .09	R^2 = .09
		Adjusted R^2 = .12	Adjusted R^2 = .16	Adjusted R^2 = .36	Adjusted R^2 = .07	Adjusted R^2 = .07
		F = .42	F = .20	F = .65	F = 1.68	F = 2.64
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .01	ΔR^2 = .01
	MSQ	.04 (.04)	.38** (.06)	.61** (.06)	.08 (.07)	.03 (.07)
	Cognitive certainty	.29** (.05)	.11* (.07)	.07 (.07)	-.12** (.08)	-.10* (.08)
	Constraints	-.39** (.02)	.09* (.03)	.13** (.03)	.49** (.04)	.46** (.04)
	MSQ x Cognitive certainty	.02 (.03)	-.08 (.05)	-.01 (.05)	-.04 (.05)	-.03 (.05)
	MSQ x Constraints	-.17** (.02)	-17** (.03)	-.07 (.03)	.30** (.04)	.30** (.04)
	Cognitive certainty x Constraints	.11* (.03)	.04 (.04)	-.06 (.04)	-.17** (.04)	-.17** (.04)
	MSQ x Cognitive certainty x Constraints	.16** (.02)	.06 (.03)	-.01 (.03)	-.12** (.03)	-.12** (.03)
		R^2 = .28	R^2 = .18	R^2 = .38	R^2 = .36	R^2 = .33
		Adjusted R^2 = .27	Adjusted R^2 = .17	Adjusted R^2 = .37	Adjusted R^2 = .35	Adjusted R^2 = .32
		F = 14.51**	F = 1.78	F = .14	**F = 8.42****	**F = 8.63****
		ΔR^2 = .02**	ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01****	**ΔR^2 = .01****
	OJS	.02 (.04)	.11* (.06)	.50** (.05)	-.04 (.07)	-.11* (.07)
	Affective certainty	.36** (.05)	.15** (.06)	.08 (.06)	-.18** (.08)	-.18** (.08)
	Clarity	.01 (.03)	.14** (.04)	.11** (.04)	.16** (.06)	.14** (.04)
	OJS x Affective certainty	.17** (.04)	.05 (.06)	-.02 (.05)	-.13** (.07)	-.11* (.07)
	OJS x Clarity	.03 (.03)	.05 (.04)	.04 (.04)	-.09 (.05)	-.10* (.05)
	Affective certainty x Clarity	-.11* (.04)	-.18** (.05)	.00 (.05)	.02 (.07)	.02 (.06)
	OJS x Affective certainty x Clarity	.00 (.03)	.04 (.04)	.02 (.04)	-.08 (.05)	-.03 (.04)
		R^2 = .13	R^2 = .11	R^2 = .33	R^2 = .08	R^2 = .08
		Adjusted R^2 = .12	Adjusted R^2 = .10	Adjusted R^2 = .33	Adjusted R^2 = .07	Adjusted R^2 = .07
		F = .01	F = .74	F = .30	F = 2.53	F = .27
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	OJS	.15** (.04)	.10* (.06)	.43** (.05)	-.14** (.07)	-.20** (.07)
	Affective certainty	.34** (.05)	.15** (.06)	.10* (.06)	-.18** (.08)	-.17** (.07)

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
	Consequences	-.21** (.03)	.26** (.04)	.27** (.04)	.36** (.06)	.31** (.05)
	OJS x Affective certainty	.07 (.04)	.01 (.06)	.00 (.06)	-.09 (.08)	-.06 (.07)
	OJS x Consequences	.12** (.03)	.05 (.04)	-.04 (.04)	-.05 (.05)	-.10* (.05)
	Affective certainty x Consequences	-.01 (.04)	-.08 (.05)	.03 (.05)	-.05 (.07)	.04 (.06)
	OJS x Affective certainty x Consequences	-.08 (.03)	-.06 (.04)	.02 (.03)	-.02 (.05)	.01 (.04)
		R^2 = .18	R^2 = .11	R^2 = .39	R^2 = .16	R^2 = .15
		Adjusted R^2 = .17	Adjusted R^2 = .10	Adjusted R^2 = .38	Adjusted R^2 = .15	Adjusted R^2 = .14
		F = 2.30	F = 1.02	F = .24	F = .13	F = .04
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	OJS	.08 (.05)	.13* (.06)	.47** (.06)	-.15** (.08)	-.22** (.07)
	Affective certainty	.31** (.05)	.09 (.07)	.05 (.06)	-.18** (.08)	-.18** (.08)
	Consistency	-.06 (.04)	.19** (.05)	.18** (.04)	.24** (.06)	.25** (.06)
	OJS x Affective certainty	.19** (.04)	.00 (.06)	-.03 (.05)	-.14** (.07)	-.12* (.07)
	OJS x Consistency	.04 (.03)	.08 (.04)	.04 (.04)	-.11* (.05)	-.12* (.05)
	Affective certainty x Consistency	-.10 (.04)	-.08 (.06)	.01 (.05)	-.01 (.07)	.00 (.06)
	OJS x Affective certainty x Consistency	.04 (.03)	.01 (.04)	.05 (.04)	-.03 (.05)	-.01 (.05)
		R^2 = .14	R^2 = .09	R^2 = .35	R^2 = .11	R^2 = .12
		Adjusted R^2 = .13	Adjusted R^2 = .08	Adjusted R^2 = .34	Adjusted R^2 = .10	Adjusted R^2 = .11
		F = .52	F = .02	F = 1.08	F = .21	F = .02
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	OJS	-.01 (.04)	.22** (.06)	.59** (.06)	.04 (.07)	-.02 (.07)
	Affective certainty	.31** (.05)	.14** (.07)	.10* (.06)	-.11* (.08)	-.10* (.07)
	Constraints	-.34** (.02)	.15** (.03)	.22** (.03)	.51** (.04)	.47** (.04)
	OJS x Affective certainty	.06 (.04)	.00 (.06)	.02 (.05)	-.02 (.07)	-.03 (.06)
	OJS x Constraints	-.03 (.03)	-.11* (.04)	-.08 (.03)	.09 (.04)	.05 (.04)
	Affective certainty x Constraints	-.03 (.03)	-.05 (.04)	.01 (.03)	-.06 (.04)	-.07 (.04)
	OJS x Affective certainty x Constraints	.05 (.02)	-.04 (.03)	-.05 (.03)	-.12** (.04)	-.08 (.04)
		R^2 = .23	R^2 = .09	R^2 = .36	R^2 = .27	R^2 = .24
		Adjusted R^2 = .22	Adjusted R^2 = .08	Adjusted R^2 = .35	Adjusted R^2 = .26	Adjusted R^2 = .23
		F = 1.22	F = .68	F = 1.32	***F* = 6.90****	F = 2.48
		ΔR^2 = .01	ΔR^2 = .00	ΔR^2 = .00	***ΔR²* = .01****	ΔR^2 = .00
	E	.02 (.03)	.16** (.04)	.46** (.04)	.16** (.06)	.15** (.05)
	Cognitive certainty	.41** (.05)	.20** (.07)	.15** (.07)	-.20** (.09)	-.22** (.08)
	Clarity	-.01 (.03)	.10* (.04)	.08 (.04)	.10* (.06)	.09 (.06)
	E x Cognitive certainty	.04 (.04)	.01 (.05)	.01 (.05)	-.13* (.07)	-.15* (.06)
	E x Clarity	-.07 (.02)	.08 (.03)	.09* (.03)	.06 (.04)	.10* (.03)
	Cognitive certainty x Clarity	.01 (.04)	-.12* (.06)	-.07 (.06)	-.05 (.07)	-.03 (.07)

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
	E x Cognitive certainty x Clarity	-.14* (.02)	.03 (.03)	-.01 (.03)	-.09 (.04)	-.07 (.03)
		R^2 = .14	R^2 = .14	R^2 = .30	R^2 = .06	R^2 = .06
		Adjusted R^2 = .13	Adjusted R^2 = .13	Adjusted R^2 = .29	Adjusted R^2 = .05	Adjusted R^2 = .05
		F* = 4.92	F = .22	F = .03	F = 1.99	F = 1.02
		ΔR^2 = .01*	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	E	.09* (.03)	.14** (.04)	.38** (.04)	.11* (.05)	.11* (.05)
	Cognitive certainty	.38** (.05)	.22** (.06)	.17** (.06)	-.22** (.08)	-.22** (.07)
	Consequences	-.25** (.03)	.22** (.04)	.30** (.04)	.34** (.05)	.29** (.05)
	E x Cognitive certainty	.06 (.03)	-.05 (.04)	-.01 (.04)	-.10* (.05)	-.12* (.05)
	E x Consequences	.01 (.02)	.06 (.03)	.04 (.03)	.22** (.04)	-.21** (.04)
	Cognitive certainty x Consequences	.06 (.04)	-.08 (.05)	-.07 (.05)	-.13** (.07)	-.13** (.06)
	E x Cognitive certainty x Consequences	-.03 (.02)	-.04 (.03)	-.09 (.03)	-.11 (.04)	-.13* (.04)
		R^2 = .18	R^2 = .16	R^2 = .36	R^2 = .17	R^2 = .14
		Adjusted R^2 = .17	Adjusted R^2 = .15	Adjusted R^2 = .35	Adjusted R^2 = .16	Adjusted R^2 = .13
		F = .29	F = .48	F = 3.77	F = 3.84	***F* = 5.80***
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .01	**ΔR^2 = .01***
	E	.03 (.04)	.23** (.05)	.47** (.05)	.16** (.07)	.16** (.06)
	Cognitive certainty	.40** (.05)	.17** (.07)	.11* (.07)	-.25** (.09)	-.26** (.08)
	Consistency	-.08 (.04)	.16** (.05)	.18** (.05)	.20** (.06)	.20** (.06)
	E x Cognitive certainty	.06 (.04)	-.12 (.05)	-.03 (.05)	-.15* (.07)	-.18* (.07)
	E x Consistency	-.04 (.02)	.18** (.03)	.16** (.03)	.13* (.04)	.17** (.04)
	Cognitive certainty x Consistency	.01 (.04)	-.08 (.05)	-.11* (.05)	-.10 (.07)	-.10 (.07)
	E x Cognitive certainty x Consistency	-.07 (.02)	-.10 (.03)	-.09 (.03)	-.12 (.04)	-.14 (.04)
		R^2 = .13	R^2 = .15	R^2 = .32	R^2 = .09	R^2 = .09
		Adjusted R^2 = .12	Adjusted R^2 = .14	Adjusted R^2 = .31	Adjusted R^2 = .07	Adjusted R^2 = .08
		F = .97	F = 1.97	F = 2.07	F = 2.70	F = 3.42
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .01	ΔR^2 = .01
	E	.00 (.03)	.23** (.04)	.46** (.04)	.11** (.05)	.10* (.05)
	Cognitive certainty	.32** (.05)	.23** (.06)	.20** (.06)	-.13** (.07)	-.14** (.07)
	Constraints	-.35** (.02)	.09* (.03)	.11** (.03)	.48** (.04)	.46** (.03)
	E x Cognitive certainty	.07 (.03)	-.07 (.04)	.02 (.04)	-.03 (.04)	-.04 (.04)
	E x Constraints	-.04 (.02)	-.07 (.03)	.03 (.03)	.23** (.03)	.22** (.03)
	Cognitive certainty x Constraints	.03 (.03)	-.04 (.04)	-.11** (.04)	-.08* (.04)	-.08* (.04)
	E x Cognitive certainty x Constraints	-.01 (.02)	.02 (.03)	-.06 (.03)	-.10* (.03)	-.11* (.03)
		R^2 = .25	R^2 = .13	R^2 = .31	R^2 = .33	R^2 = .30
		Adjusted R^2 = .24	Adjusted R^2 = .12	Adjusted R^2 = .30	Adjusted R^2 = .32	Adjusted R^2 = .29
		F = .10	F = .25	F = 2.30	***F* = 6.08***	F = 6.33

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
		$\Delta R^2 = .00$	$\Delta R^2 = .00$	$\Delta R^2 = .01$	$\mathbf{\Delta R^2 = .01^*}$	$\Delta R^2 = .01$
	E	-.02 (.03)	.15** (.04)	.45** (.04)	.18** (.06)	.17** (.05)
	Affective certainty	.34** (.05)	.15** (.06)	.16** (.06)	-.20** (.08)	-.22** (.07)
	Clarity	.01 (.03)	.13** (.05)	.09* (.05)	.09 (.06)	.08 (.05)
	E x Affective certainty	.15** (.03)	.07 (.04)	.03 (.04)	-.15** (.06)	-.16** (.05)
	E x Clarity	-.07 (.02)	.09* (.03)	.07 (.03)	.05 (.04)	.09* (.03)
	Affective certainty x Clarity	-.07 (.04)	-.19** (.05)	-.01 (.05)	-.01 (.07)	-.02 (.06)
	E x Affective certainty x Clarity	.04 (.02)	.05 (.03)	.00 (.03)	-.11* (.03)	-.09 (.03)
		$R^2 = .12$	$R^2 = .13$	$R^2 = .30$	$R^2 = .08$	$R^2 = .08$
		Adjusted $R^2 = .11$	Adjusted $R^2 = .12$	Adjusted $R^2 = .29$	Adjusted $R^2 = .07$	Adjusted $R^2 = .07$
		$F = .57$	$F = 1.25$	$F = .01$	$\mathbf{F = 5.02^*}$	$F = 3.14$
		$\Delta R^2 = .00$	$\Delta R^2 = .01$	$\Delta R^2 = .00$	$\mathbf{\Delta R^2 = .01^*}$	$\Delta R^2 = .00$
	E	.10* (.03)	.15** (.04)	.37** (.04)	.10* (.05)	.10* (.05)
	Affective certainty	.34** (.04)	.14** (.06)	.17** (.06)	-.22** (.07)	-.22** (.07)
	Consequences	-.23** (.03)	.22** (.04)	.29** (.04)	.32** (.05)	.26** (.05)
	E x Affective certainty	.06 (.03)	.01 (.04)	.04 (.04)	-.10* (.05)	-.11* (.05)
	E x Consequences	.02 (.02)	.06 (.03)	.01 (.03)	.19** (.04)	.17** (.03)
	Affective certainty x Consequences	.05 (.04)	-.07 (.05)	-.01 (.04)	-.10* (.06)	-.09 (.06)
	E x Affective certainty x Consequences	-.03 (.02)	-.04 (.03)	-.03 (.03)	-.10 (.04)	-.09 (.03)
		$R^2 = .16$	$R^2 = .13$	$R^2 = .36$	$R^2 = .17$	$R^2 = .14$
		Adjusted $R^2 = .15$	Adjusted $R^2 = .11$	Adjusted $R^2 = .35$	Adjusted $R^2 = .16$	Adjusted $R^2 = .13$
		$F = .45$	$F = .59$	$F = .57$	$F = 3.63$	$F = 3.49$
		$\Delta R^2 = .00$	$\Delta R^2 = .00$	$\Delta R^2 = .00$	$\Delta R^2 = .00$	$\Delta R^2 = .00$
	E	.02 (.04)	.23** (.05)	.44** (.05)	.15** (.06)	.15** (.06)
	Affective certainty	.31** (.05)	.09* (.06)	.13** (.06)	-.23** (.08)	-.24** (.07)
	Consistency	-.06 (.04)	.16** (.05)	.17** (.05)	.18** (.06)	.17** (.06)
	E x Affective certainty	.18** (.04)	.00 (.05)	.02 (.05)	-.16** (.06)	-.18** (.06)
	E x Consistency	-.05 (.02)	.18** (.03)	.13** (.03)	.11* (.04)	.15** (.03)
	Affective certainty x Consistency	-.08 (.04)	-.11* (.05)	-.04 (.05)	-.06 (.07)	-.06 (.06)
	E x Affective certainty x Consistency	.09 (.02)	-.04 (.03)	-.04 (.03)	-.12* (.04)	-.13* (.03)
		$R^2 = .13$	$R^2 = .12$	$R^2 = .31$	$R^2 = .10$	$R^2 = .10$
		Adjusted $R^2 = .11$	Adjusted $R^2 = .11$	Adjusted $R^2 = .30$	Adjusted $R^2 = .08$	Adjusted $R^2 = .09$
		$F = 2.60$	$F = .65$	$F = .70$	$\mathbf{F = 4.25^*}$	$\mathbf{F = 5.12^*}$
		$\Delta R^2 = .01$	$\Delta R^2 = .00$	$\Delta R^2 = .00$	$\mathbf{\Delta R^2 = .01^*}$	$\mathbf{\Delta R^2 = .01^*}$
	E	.00 (.03)	.24** (.05)	.45** (.04)	.09 (.05)	.08 (.05)
	Affective certainty	.29** (.04)	.16** (.06)	.20** (.06)	-.10* (.07)	-.11** (.07)
	Constraints	-.32** (.02)	.11* (.03)	.12** (.03)	.47** (.04)	.44** (.03)

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
	E x Affective certainty	.05 (.03)	-.01 (.04)	.07 (.04)	.01 (.05)	-.02 (.04)
	E x Constraints	-.02 (.02)	-.07 (.03)	.02 (.03)	.24** (.03)	.22** (.03)
	Affective certainty x Constraints	-.04 (.02)	-.06 (.03)	-.04 (.03)	-.06 (.04)	-.07 (.04)
	E x Affective certainty x Constraints	-.01 (.01)	-.01 (.02)	-.06 (.02)	-.14** (.03)	-.12** (.03)
		R^2 = .22	R^2 = .10	R^2 = .30	R^2 = .32	R^2 = .29
		Adjusted R^2 = .21	Adjusted R^2 = .08	Adjusted R^2 = .29	Adjusted R^2 = .31	Adjusted R^2 = .28
		F = .08	F = .02	F = 2.01	***F* = 9.98****	***F* = 6.78****
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01****	**ΔR^2 = .00****
3	MSQ	.15** (.06)	.36** (.07)	.55** (.07)	.05 (.10)	.02 (.09)
	Structural consistency	-.06 (.06)	-.03 (.07)	.13** (.06)	.01 (.10)	.00 (.09)
	Clarity	.02 (.04)	.00 (.05)	.01 (.05)	.06 (.07)	.08 (.06)
	MSQ x Structural consistency	-.01 (.05)	-.05 (.06)	-.10* (.06)	-.03 (.09)	-.05 (.08)
	MSQ x Clarity	.00 (.03)	.08 (.04)	.02 (.04)	-.02 (.05)	.03 (.05)
	Structural consistency x Clarity	.01 (.04)	-.06 (.05)	.13** (.05)	.04 (.07)	.02 (.06)
	MSQ x Structural consistency x Clarity	-.01 (.03)	.09 (.04)	-.10* (.03)	.01 (.05)	-.01 (.04)
		R^2 = .02	R^2 = .14	R^2 = .38	R^2 = .01	R^2 = .01
		Adjusted R^2 = .01	Adjusted R^2 = .13	Adjusted R^2 = .37	Adjusted R^2 = .00	Adjusted R^2 = .00
		F = .02	F = 3.12	***F* = 5.12***	F = .03	F = .05
		ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01***	ΔR^2 = .00	ΔR^2 = .00
	MSQ	.27** (.05)	.30** (.07)	.44** (.06)	-.03 (.09)	-.04 (.08)
	Structural consistency	-.02 (.05)	.01 (.07)	.13** (.06)	-.02 (.09)	-.04 (.08)
	Consequences	-.26** (.04)	.15** (.05)	.24** (.04)	.33** (.06)	.28** (.06)
	MSQ x Structural consistency	.01 (.05)	-.04 (.06)	-.04 (.06)	-.03 (.08)	-.07 (.08)
	MSQ x Consequences	.05 (.03)	.06 (.04)	.00 (.04)	.11* (.05)	.11* (.05)
	Structural consistency x Consequences	-.08 (.04)	-.04 (.05)	.02 (.04)	.10* (.06)	.12* (.06)
	MSQ x Structural consistency x Consequences	-.04 (.03)	-.01 (.04)	-.09* (.03)	-.03 (.05)	-.01 (.04)
		R^2 = .08	R^2 = .15	R^2 = .40	R^2 = .11	R^2 = .09
		Adjusted R^2 = .07	Adjusted R^2 = .14	Adjusted R^2 = .39	Adjusted R^2 = .10	Adjusted R^2 = .08
		F = .51	F = .05	***F* = 4.59***	F = .42	F = .08
		ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .00***	ΔR^2 = .00	ΔR^2 = .00
	MSQ	.23** (.07)	.42** (.08)	.51** (.08)	-.05 (.11)	-.07 (.10)
	Structural consistency	-.08 (.06)	-.05 (.08)	.16** (.07)	.04 (.11)	.02 (.10)
	Consistency	-.05 (.04)	.04 (.06)	.11* (.05)	.19** (.08)	.21** (.07)
	MSQ x Structural consistency	.01 (.06)	-.04 (.08)	-.14** (.07)	-.10 (.11)	-.12 (.10)
	MSQ x Consistency	.06 (.03)	.17** (.04)	.09* (.04)	-.02 (.05)	.04 (.05)
	Structural consistency x Consistency	-.02 (.05)	-.03 (.06)	.11* (.05)	.13* (.08)	.12 (.07)
	MSQ x Structural consistency x Consistency	.00 (.03)	.02 (.03)	-.11* (.03)	-.02 (.05)	-.02 (.04)

Model set	Predictor variables	Outcome variables: In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
		R^2 = .02	R^2 = .15	R^2 = .38	R^2 = .03	R^2 = .03
		Adjusted R^2 = .01	Adjusted R^2 = .14	Adjusted R^2 = .37	Adjusted R^2 = .02	Adjusted R^2 = .02
		F = .01	F = .13	**F = 5.70***	F = .08	F = .14
		ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .00***	ΔR^2 = .00	ΔR^2 = .00
	MSQ	.17** (.05)	.46** (.07)	.61** (.07)	.08 (.08)	.04 (.07)
	Structural consistency	-.02 (.05)	-.04 (.06)	.07 (.06)	-.04 (.08)	-.04 (.07)
	Constraints	-.37** (.03)	.13** (.04)	.10* (.04)	.47** (.04)	.47** (.04)
	MSQ x Structural consistency	-.02 (.04)	-.03 (.06)	-.02 (.05)	.02 (.07)	-.02 (.06)
	MSQ x Constraints	-.19 (.03)	-.24** (.04)	-.12* (.04)	.23** (.04)	.24** (.04)
	Structural consistency x Constraints	.02 (.03)	.12* (.04)	.03 (.04)	.05 (.05)	.02 (.04)
	MSQ x Structural consistency x Constraints	.09 (.03)	-.03 (.04)	.02 (.03)	-.06 (.04)	-.10* (.04)
		R^2 = .19	R^2 = .17	R^2 = .38	R^2 = .31	R^2 = .29
		Adjusted R^2 = .18	Adjusted R^2 = .16	Adjusted R^2 = .37	Adjusted R^2 = .31	Adjusted R^2 = .28
		F = 2.61	F = .24	F = .28	F = 1.44	**F = 3.92***
		ΔR^2 = .01	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01***
	OJS	.21** (.04)	.12* (.06)	.45** (.05)	-.21** (.07)	-.27** (.07)
	Structural consistency	-.16** (.05)	.12* (.07)	.16** (.06)	.20** (.08)	.21** (.08)
	Clarity	.02 (.04)	.15** (.05)	.17** (.04)	.16** (.06)	.16** (.05)
	OJS x Structural consistency	.16** (.04)	-.12** (.05)	-.14** (.05)	-.24** (.07)	-.26** (.06)
	OJS x Clarity	.06 (.03)	.02 (.04)	.00 (.03)	-.18** (.05)	-.16** (.04)
	Structural consistency x Clarity	-.07 (.04)	.02 (.05)	.18** (.04)	.20** (.06)	.17** (.05)
	OJS x Structural consistency x Clarity	.08 (.03)	-.05 (.03)	-.14** (.03)	-.11* (.04)	-.13* (.04)
		R^2 = .06	R^2 = .08	R^2 = .37	R^2 = .11	R^2 = .13
		Adjusted R^2 = .05	Adjusted R^2 = .07	Adjusted R^2 = .36	Adjusted R^2 = .10	Adjusted R^2 = .12
		F = 2.74	F = .85	**F = 11.77****	**F = 5.29***	**F = 7.00****
		ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01****	**ΔR^2 = .00***	**ΔR^2 = .01****
	OJS	.30** (.04)	.10* (.06)	.41** (.05)	-.27** (.07)	-.32** (.06)
	Structural consistency	-.09 (.05)	.13* (.07)	.15** (.06)	.19** (.08)	.19** (.07)
	Consequences	-.21** (.03)	.23** (.04)	.28** (.04)	.36** (.05)	.31** (.05)
	OJS x Structural consistency	.15** (.04)	-.10* (.05)	-.08* (.05)	-.24** (.06)	-.27** (.06)
	OJS x Consequences	.17** (.03)	.04 (.04)	-.03 (.03)	-.13** (.04)	-.16** (.04)
	Structural consistency x Consequences	-.14** (.03)	-.01 (.05)	.06 (.04)	.22** (.05)	.24** (.05)
	OJS x Structural consistency x Consequences	-.01 (.03)	-.06 (.03)	-.08* (.03)	-.16** (.04)	-.14** (.04)
		R^2 = .12	R^2 = .11	R^2 = .40	R^2 = .22	R^2 = .22
		Adjusted R^2 = .11	Adjusted R^2 = .10	Adjusted R^2 = .39	Adjusted R^2 = .21	Adjusted R^2 = .21
		F = .11	F = 1.73	**F = 4.40***	**F = 14.08****	**F = 10.97****
		ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01***	**ΔR^2 = .02****	**ΔR^2 = .01****

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
	OJS	.28** (.05)	.11* (.06)	.42** (.06)	-.34** (.08)	-.39** (.07)
	Structural consistency	-.19** (.05)	.17** (.07)	.22** (.06)	.29** (.09)	.28** (.08)
	Consistency	.00 (.04)	.21** (.05)	.22** (.04)	.22** (.06)	.23** (.05)
	OJS x Structural consistency	.21** (.05)	-.17** (.06)	-.20** (.06)	-.35** (.07)	-.36** (.07)
	OJS x Consistency	.17** (.03)	.10* (.04)	.05 (.03)	-.23** (.04)	-.22** (.04)
	Structural consistency x Consistency	-.12* (.04)	.04 (.05)	.16** (.04)	.25** (.06)	.23** (.06)
	OJS x Structural consistency x Consistency	.05 (.03)	-.13** (.03)	-.15** (.03)	-.14** (.04)	-.13** (.04)
		R^2 = .08	R^2 = .10	R^2 = .39	R^2 = .18	R^2 = .19
		Adjusted R^2 = .07	Adjusted R^2 = .09	Adjusted R^2 = .38	Adjusted R^2 = .17	Adjusted R^2 = .18
		F = .80	**F = 6.73****	**F = 13.92****	**F = 7.90****	**F = 7.31****
		ΔR^2 = .00	**ΔR^2 = .01****	**ΔR^2 = .02****	**ΔR^2 = .01****	**ΔR^2 = .01****
	OJS	.10* (.05)	.23** (.06)	.59** (.06)	.03 (.07)	-.03 (.07)
	Structural consistency	.00 (.05)	.11* (.07)	.09* (.06)	-.03 (.08)	-.03 (.07)
	Constraints	-.39** (.03)	.09 (.04)	.19** (.03)	.56** (.04)	.54** (.04)
	OJS x Structural consistency	.08 (.04)	-.10* (.06)	-.05 (.05)	-.05 (.06)	-.09* (.06)
	OJS x Constraints	-.08 (.02)	-.18** (.03)	-.13** (.03)	-.03 (.04)	-.04 (.04)
	Structural consistency x Constraints	-.01 (.03)	.06 (.04)	.06 (.04)	.23** (.04)	.20** (.04)
	OJS x Structural consistency x Constraints	.13** (.02)	.02 (.03)	-.05 (.03)	-.25** (.04)	-.28** (.03)
		R^2 = .18	R^2 = .09	R^2 = .36	R^2 = .31	R^2 = .30
		Adjusted R^2 = .17	Adjusted R^2 = .08	Adjusted R^2 = .36	Adjusted R^2 = .30	Adjusted R^2 = .29
		F = 6.89**	F = .20	F = 1.06	**F = 28.05****	**F = 35.01****
		ΔR^2 = .01**	ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .04****	**ΔR^2 = .05****
	E	.09 (.04)	.17** (.04)	.40** (.04)	.08 (.06)	.09 (.06)
	Structural consistency	-.04 (.05)	.09 (.07)	.21** (.06)	-.01 (.09)	-.04 (.08)
	Clarity	.04 (.04)	.11* (.05)	.12** (.05)	.06 (.06)	.06 (.06)
	E x Structural consistency	.03 (.04)	-.08 (.05)	-.09* (.04)	.02 (.06)	-.04 (.06)
	E x Clarity	-.04 (.02)	.06 (.03)	.04 (.03)	-.01 (.04)	.04 (.03)
	Structural consistency x Clarity	.01 (.04)	-.01 (.05)	.14** (.05)	.04 (.06)	.00 (.06)
	E x Structural consistency x Clarity	.00 (.00)	-.01 (.03)	-.15** (.03)	.02 (.04)	.01 (.03)
		R^2 = .02	R^2 = .09	R^2 = .32	R^2 = .02	R^2 = .01
		Adjusted R^2 = .00	Adjusted R^2 = .07	Adjusted R^2 = .31	Adjusted R^2 = .00	Adjusted R^2 = .00
		F = .01	F = .02	**F = 12.26****	F = .22	F = .02
		ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01****	ΔR^2 = .00	ΔR^2 = .00
	E	.20** (.03)	.14** (.04)	.33** (.04)	.03 (.06)	.03 (.05)
	Structural consistency	.02 (.05)	.11* (.06)	.21** (.06)	-.05 (.08)	-.08 (.08)
	Consequences	-.23** (.03)	.22** (.04)	.29** (.04)	.31** (.06)	.26** (.05)
	E x Structural consistency	.07 (.04)	-.08 (.05)	-.04 (.04)	-.06 (.06)	-.08 (.05)

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
	E x Consequences	.07 (.02)	.05 (.03)	-.01 (.03)	.11* (.04)	.09* (.03)
	Structural consistency x Consequences	-.11* (.04)	-.02 (.05)	.01 (.04)	.12* (.06)	.13** (.06)
	E x Structural consistency x Consequences	-.05 (.02)	-.05 (.03)	-.12** (.03)	-.03 (.04)	.01 (.03)
		R^2 = .07	R^2 = .12	R^2 = .36	R^2 = .11	R^2 = .09
		Adjusted R^2 = .06	Adjusted R^2 = .10	Adjusted R^2 = .35	Adjusted R^2 = .10	Adjusted R^2 = .08
		F = 1.08	F = .98	***F* = 8.59****	F = .32	F = .01
		ΔR^2 = .00	ΔR^2 = .01	**ΔR^2 = .01****	ΔR^2 = .00	ΔR^2 = .00
	E	.15* (.04)	.20** (.05)	.36** (.05)	.03 (.07)	.04 (.07)
	Structural consistency	-.02 (.06)	.13* (.07)	.28** (.07)	-.01 (.09)	-.06 (.09)
	Consistency	.01 (.04)	.19** (.05)	.22** (.05)	.14* (.07)	.13* (.06)
	E x Structural consistency	.04 (.04)	-.14* (.05)	-.17** (.05)	-.07 (.07)	-.07 (.07)
	E x Consistency	.09 (.02)	.19** (.03)	.11** (.03)	-.02 (.04)	.03 (.03)
	Structural consistency x Consistency	-.04 (.04)	.02 (.05)	.12** (.05)	.11 (.07)	.09 (.07)
	E x Structural consistency x Consistency	-.06 (.02)	-.13* (.03)	-.23** (.02)	.02 (.03)	.04 (.03)
		R^2 = .02	R^2 = .12	R^2 = .35	R^2 = .03	R^2 = .03
		Adjusted R^2 = .01	Adjusted R^2 = .11	Adjusted R^2 = .34	Adjusted R^2 = .02	Adjusted R^2 = .01
		F = 1.30	***F* = 6.07***	***F* = 25.59****	F = .09	F = .46
		ΔR^2 = .00	**ΔR^2 = .01***	**ΔR^2 = .03****	ΔR^2 = .00	ΔR^2 = .00
	E	.09 (.03)	.24** (.05)	.45** (.05)	.12** (.05)	.12* (.05)
	Structural consistency	.01 (.04)	.10* (.06)	.18** (.06)	-.05 (.07)	-.08 (.06)
	Constraints	-.39** (.03)	.07 (.04)	.07 (.04)	.49** (.04)	.50** (.04)
	E x Structural consistency	.02 (.03)	-.07 (.04)	-.01 (.04)	.02 (.05)	.00 (.05)
	E x Constraints	-.07 (.02)	-.12* (.03)	-.03 (.03)	.14** (.03)	.14** (.03)
	Structural consistency x Constraints	-.02 (.03)	.04 (.04)	.00 (.04)	.10* (.04)	.08 (.04)
	E x Structural consistency x Constraints	.07 (.02)	.02 (.03)	.00 (.03)	-.07 (.03)	-.12* (.03)
		R^2 = .16	R^2 = .09	R^2 = .30	R^2 = .30	R^2 = .28
		Adjusted R^2 = .15	Adjusted R^2 = .08	Adjusted R^2 = .29	Adjusted R^2 = .29	Adjusted R^2 = .27
		F = 1.56	F = .11	F = .01	F = 2.34	***F* = 6.34***
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01***
4	MSQ	.11* (.05)	.34** (.06)	.62** (.06)	.09 (.08)	.04 (.08)
	Vested interest	.18** (.04)	.03 (.05)	-.01 (.05)	-.21** (.06)	-.24** (.06)
	Clarity	.02 (.04)	.05 (.05)	-.02 (.05)	.03 (.06)	.04 (.06)
	MSQ x Vested interest	.04 (.04)	.00 (.06)	.03 (.05)	-.14** (.07)	-.12* (.07)
	MSQ x Clarity	.00 (.03)	.06 (.04)	.07 (.03)	-.03 (.05)	.01 (.04)
	Vested interest x Clarity	.00 (.03)	.02 (.04)	.02 (.04)	-.01 (.06)	-.03 (.05)
	MSQ x Vested interest x Clarity	-.03 (.03)	-.11* (.04)	-.05 (.03)	-.01 (.05)	-.02 (.04)
		R^2 = .05	R^2 = .14	R^2 = .36	R^2 = .09	R^2 = .10

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
		Adjusted R^2 = .04	Adjusted R^2 = .13	Adjusted R^2 = .36	Adjusted R^2 = .08	Adjusted R^2 = .09
		F = .32	***F* = 5.22***	F = 1.54	F = .09	F = .10
		ΔR^2 = .00	**ΔR^2 = .01***	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	MSQ	.24** (.05)	.29** (.06)	.50** (.05)	-.01 (.07)	-.04 (.07)
	Vested interest	.13** (.04)	.01 (.05)	.00 (.04)	-.16** (.06)	-.18** (.05)
	Consequences	-.24** (.03)	.16** (.04)	.22** (.04)	.29** (.06)	.24** (.05)
	MSQ x Vested interest	.04 (.04)	.07 (.05)	.07 (.05)	-.09* (.07)	-.06 (.06)
	MSQ x Consequences	.02 (.03)	.06 (.04)	.01 (.03)	.12** (.05)	.12** (.04)
	Vested interest x Consequences	-.04 (.03)	-.16** (.04)	-.06 (.04)	-.08 (.05)	-.10* (.05)
	MSQ x Vested interest x Consequences	.08 (.03)	.05 (.04)	.00 (.03)	-.02 (.05)	-.05 (.04)
		R^2 = .11	R^2 = .17	R^2 = .40	R^2 = .17	R^2 = .16
		Adjusted R^2 = .09	Adjusted R^2 = .16	Adjusted R^2 = .39	Adjusted R^2 = .16	Adjusted R^2 = .15
		F = 2.76	F = 1.43	F = .01	F = .15	F = 1.43
		ΔR^2 = .01	ΔR^2 = .01	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	MSQ	.16** (.06)	.38** (.07)	.60** (.07)	.03 (.09)	-.02 (.08)
	Vested interest	.15** (.04)	.02 (.05)	.01 (.05)	-.18** (.06)	-.21** (.06)
	Consistency	-.04 (.04)	.05 (.05)	.06 (.05)	.12* (.07)	.14** (.06)
	MSQ x Vested interest	.01 (.05)	.01 (.06)	.01 (.05)	-.09 (.08)	-.08 (.07)
	MSQ x Consistency	.03 (.03)	.15** (.03)	.11** (.03)	.01 (.05)	.05 (.04)
	Vested interest x Consistency	.06 (.04)	-.02 (.05)	.03 (.04)	-.10 (.06)	-.08 (.06)
	MSQ x Vested interest x Consistency	.03 (.03)	-.08 (.03)	-.09* (.03)	-.05 (.04)	-.07 (.04)
		R^2 = .06	R^2 = .15	R^2 = .38	R^2 = .10	R^2 = .11
		Adjusted R^2 = .04	Adjusted R^2 = .14	Adjusted R^2 = .37	Adjusted R^2 = .09	Adjusted R^2 = .10
		F = .47	F = 2.87	***F* = 4.77***	F = 1.14	F = 1.86
		ΔR^2 = .01	ΔR^2 = .01	**ΔR^2 = .01***	ΔR^2 = .00	ΔR^2 = .00
	MSQ	.15** (.04)	.43** (.06)	.64** (.05)	.04 (.06)	-.01 (.06)
	Vested interest	.09* (.03)	.01 (.05)	-.01 (.04)	-.09* (.05)	-.12** (.05)
	Constraints	-.32** (.02)	.12** (.03)	.12** (.03)	.41** (.04)	.38** (.03)
	MSQ x Vested interest	-.01 (.04)	-.04 (.05)	.03 (.05)	-.04 (.06)	-.02 (.06)
	MSQ x Constraints	-.16** (.02)	-.19** (.03)	-.11** (.03)	.23** (.04)	.22** (.03)
	Vested interest x Constraints	.03 (.02)	-.08 (.03)	-.04 (.03)	-.10* (.03)	-.13** (.03)
	MSQ x Vested interest x Constraints	.00 (.02)	.06 (.03)	.01 (.03)	-.07 (.03)	-.09* (.03)
		R^2 = .19	R^2 = .16	R^2 = .38	R^2 = .35	R^2 = .34
		Adjusted R^2 = .18	Adjusted R^2 = .15	Adjusted R^2 = .37	Adjusted R^2 = .34	Adjusted R^2 = .33
		F = .01	F = 1.28	F = .06	F = 2.51	***F* = 4.30***
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .01***
	OJS	.15** (.04)	.16** (.05)	.51** (.05)	-.12** (.07)	-.18** (.06)

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
	Vested interest	.18** (.04)	-.01 (.05)	-.03 (.04)	-.23** (.06)	-.26** (.05)
	Clarity	.04 (.03)	.16** (.04)	.13** (.04)	.11* (.05)	.11* (.05)
	OJS x Vested interest	-.07 (.04)	.03 (.05)	.08* (.04)	.06 (.06)	.09* (.05)
	OJS x Clarity	.05 (.03)	.02 (.04)	.05 (.03)	-.13** (.04)	-.13** (.04)
	Vested interest x Clarity	.04 (.03)	.00 (.04)	-.02 (.04)	-.10* (.05)	-.11* (.04)
	OJS x Vested interest x Clarity	-.06 (.03)	-.04 (.03)	-.06 (.03)	.08 (.04)	.09* (.04)
		R^2 = .07	R^2 = .07	R^2 = .34	R^2 = .11	R^2 = .14
		Adjusted R^2 = .05	Adjusted R^2 = .05	Adjusted R^2 = .33	Adjusted R^2 = .10	Adjusted R^2 = .13
		F = 1.68	F = .79	F = 2.46	F = 3.01	**F = 4.15***
		ΔR^2 = .01	ΔR^2 = .00	ΔR^2 = .01	ΔR^2 = .01	**ΔR^2 = .00***
	OJS	.26** (.04)	.16* (.05)	.48** (.05)	-.17** (.07)	-.23** (.06)
	Vested interest	.13** (.04)	.01 (.05)	.00 (.04)	-.17** (.06)	-.20** (.05)
	Consequences	-.21** (.03)	.23** (.04)	.27** (.04)	.32** (.05)	.28** (.05)
	OJS x Vested interest	-.03 (.03)	.03 (.04)	.07 (.04)	.01 (.06)	.05 (.05)
	OJS x Consequences	.12** (.03)	.04 (.04)	-.01 (.03)	-.08 (.04)	-.10* (.04)
	Vested interest x Consequences	-.02 (.03)	-.13** (.04)	-.10* (.03)	-.10* (.05)	-.13** (.04)
	OJS x Vested interest x Consequences	.04 (.03)	.09* (.04)	.05 (.03)	.08 (.05)	.04 (.04)
		R^2 = .12	R^2 = .12	R^2 = .39	R^2 = .18	R^2 = .19
		Adjusted R^2 = .11	Adjusted R^2 = .11	Adjusted R^2 = .39	Adjusted R^2 = .17	Adjusted R^2 = .18
		F = .88	**F = 4.57***	F = 1.62	F = 3.42	F = .92
		ΔR^2 = .00	**ΔR^2 = .01***	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00
	OJS	.19** (.04)	.15** (.06)	.49** (.05)	-.20** (.07)	-.27** (.07)
	Vested interest	.17** (.04)	-.02 (.05)	-.04 (.04)	-.23** (.06)	-.26** (.05)
	Consistency	.01 (.04)	.19** (.05)	.20** (.04)	.17** (.06)	.18** (.05)
	OJS x Vested interest	-.09* (.04)	.03 (.05)	.08 (.05)	.09* (.06)	.12** (.06)
	OJS x Consistency	.12** (.03)	.10* (.04)	.08* (.03)	-.16** (.04)	-.15** (.04)
	Vested interest x Consistency	.08 (.03)	-.02 (.04)	-.02 (.04)	-.15** (.05)	-.14** (.05)
	OJS x Vested interest x Consistency	-.01 (.02)	.00 (.03)	-.01 (.03)	.08 (.04)	.06 (.04)
		R^2 = .08	R^2 = .08	R^2 = .35	R^2 = .15	R^2 = .18
		Adjusted R^2 = .07	Adjusted R^2 = .07	Adjusted R^2 = .34	Adjusted R^2 = .14	Adjusted R^2 = .17
		F = .09	F = .01	F = .05	F = 2.95	F = 1.95
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .01	ΔR^2 = .01
	OJS	.10* (.04)	.28** (.05)	.63** (.05)	.02 (.06)	-.05 (.06)
	Vested interest	.09 (.04)	.02 (.05)	.02 (.05)	-.08 (.06)	-.11** (.05)
	Constraints	-.33** (.02)	.12** (.03)	.20** (.03)	.46** (.04)	.42** (.04)
	OJS x Vested interest	-.04 (.04)	-.02 (.05)	.02 (.05)	-.02 (.06)	.00 (.05)
	OJS x Constraints	-.06 (.02)	-.16** (.03)	-.13** (.03)	.03 (.04)	.01 (.03)

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
	Vested interest x Constraints	.01 (.02)	-.09 (.03)	-.07 (.03)	-.15** (.03)	-.18** (.03)
	OJS x Vested interest x Constraints	-.07 (.02)	.03 (.03)	.08* (.03)	.04 (.03)	.03 (.03)
		R^2 = .18	R^2 = .08	R^2 = .36	R^2 = .28	R^2 = .28
		Adjusted R^2 = .17	Adjusted R^2 = .07	Adjusted R^2 = .36	Adjusted R^2 = .27	Adjusted R^2 = .28
		F = 2.43	F = .32	***F* = 4.47***	F = .94	F = .43
		ΔR^2 = .01	ΔR^2 = .00	**ΔR^2 = .00***	ΔR^2 = .00	ΔR^2 = .00
	E	.08 (.03)	.21** (.04)	.49** (.04)	.10* (.05)	.08 (.05)
	Vested interest	.19** (.04)	.03 (.05)	.05 (.05)	-.20** (.06)	-.24** (.06)
	Clarity	.04 (.03)	.13** (.04)	.10* (.04)	.04 (.06)	.03 (.05)
	E x Vested interest	.03 (.03)	-.02 (.04)	-.01 (.04)	-.13** (.05)	-.08 (.04)
	E x Clarity	-.03 (.02)	.07 (.03)	.09* (.03)	-.01 (.03)	.02 (.03)
	Vested interest x Clarity	.01 (.03)	.03 (.04)	.02 (.04)	-.04 (.05)	-.06 (.05)
	E x Vested interest x Clarity	-.02 (.02)	-.08 (.03)	-.09* (.03)	-.02 (.03)	-.01 (.03)
		R^2 = .05	R^2 = .08	R^2 = .28	R^2 = .09	R^2 = .10
		Adjusted R^2 = .04	Adjusted R^2 = .07	Adjusted R^2 = .27	Adjusted R^2 = .08	Adjusted R^2 = .08
		F = .22	F = 3.38	***F* = 4.73***	F = .15	F = .02
		ΔR^2 = .00	ΔR^2 = .00	**ΔR^2 = .00***	ΔR^2 = .00	ΔR^2 = .00
	E	.19** (.03)	.18** (.04)	.41** (.04)	.03 (.05)	.01 (.05)
	Vested interest	.16** (.04)	.04 (.05)	.05 (.04)	-.16** (.06)	-.18** (.05)
	Consequences	-.21** (.03)	.23** (.04)	.29** (.04)	.27** (.05)	.22** (.05)
	E x Vested interest	.03 (.03)	.04 (.03)	.02 (.03)	-.09* (.04)	-.05 (.04)
	E x Consequences	.05 (.02)	.05 (.03)	.01 (.03)	.11** (.03)	.10* (.03)
	Vested interest x Consequences	-.03 (.03)	-.14** (.04)	-.04 (.04)	-.09 (.05)	-.11* (.04)
	E x Vested interest x Consequences	.07 (.02)	.04 (.03)	-.02 (.02)	-.02 (.03)	-.08 (.03)
		R^2 = .09	R^2 = .12	R^2 = .33	R^2 = .17	R^2 = .16
		Adjusted R^2 = .08	Adjusted R^2 = .11	Adjusted R^2 = .33	Adjusted R^2 = .16	Adjusted R^2 = .15
		F = 2.26	F = .93	F = .18	F = .24	F = 3.56
		ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .00	ΔR^2 = .01
	E	.14* (.04)	.23** (.05)	.47** (.05)	.05 (.06)	.04 (.06)
	Vested interest	.16** (.04)	.02 (.05)	.03 (.05)	-.19** (.06)	-.24** (.06)
	Consistency	.00 (.04)	.17** (.05)	.19** (.05)	.10* (.06)	.10* (.06)
	E x Vested interest	.01 (.03)	-.01 (.04)	-.03 (.04)	-.10 (.05)	-.05 (.05)
	E x Consistency	.06 (.02)	.19** (.03)	.16** (.03)	-.01 (.03)	.03 (.03)
	Vested interest x Consistency	.06 (.03)	.00 (.04)	.05 (.04)	-.10* (.06)	-.11* (.05)
	E x Vested interest x Consistency	.05 (.02)	-.04 (.02)	-.04 (.02)	-.04 (.03)	-.04 (.03)
		R^2 = .05	R^2 = .10	R^2 = .30	R^2 = .10	R^2 = .11
		Adjusted R^2 = .04	Adjusted R^2 = .09	Adjusted R^2 = .29	Adjusted R^2 = .09	Adjusted R^2 = .10

		Outcome variables				
Model set	Predictor variables	In-role job performance	OCB-I	OCB-O	CWB-I	CWB-O
		$F = .96$	$F = .65$	$F = 1.03$	$F = .58$	$F = .72$
		$\Delta R^2 = .00$	$\Delta R^2 = .00$	$\Delta R^2 = .00$	$\Delta R^2 = .00$	$\Delta R^2 = .00$
	E	.09* (.03)	.29** (.04)	.54** (.04)	.08* (.05)	.05 (.04)
	Vested interest	.10* (.03)	.03 (.05)	.05 (.05)	-.08* (.05)	-.12** (.05)
	Constraints	-.34** (.02)	.09 (.03)	.10* (.03)	.42** (.04)	.40** (.03)
	E x Vested interest	.01 (.03)	-.02 (.04)	-.03 (.04)	-.07 (.04)	-.02 (.04)
	E x Constraints	-.06 (.02)	-.11* (.02)	-.06 (.02)	.17** (.03)	.16** (.02)
	Vested interest x Constraints	.03 (.02)	-.07 (.03)	-.07 (.03)	-.10* (.03)	-.13** (.03)
	E x Vested interest x Constraints	-.04 (.02)	-.02 (.02)	.06 (.02)	-.05 (.02)	-.08 (.02)
		$R^2 = .17$	$R^2 = .08$	$R^2 = .27$	$R^2 = .33$	$R^2 = .32$
		Adjusted $R^2 = .16$	Adjusted $R^2 = .07$	Adjusted $R^2 = .26$	Adjusted $R^2 = .32$	Adjusted $R^2 = .31$
		$F = .75$	$F = .09$	$F = 1.54$	$F = 1.27$	$F = 2.97$
		$\Delta R^2 = .00$	$\Delta R^2 = .00$	$\Delta R^2 = .00$	$\Delta R^2 = .00$	$\Delta R^2 = .01$

Note. $N = 539$. All coefficients and statistics are from the second step of the hierarchical regression analyses. All regression coefficients are standardized. Standard errors are represented in parentheses following the regression coefficients. Significant F-test statistics are represented in bold. * $p < .05$. ** $p < .01$.

Table 7

Overview of Hierarchical Regression Analysis Results for Hypotheses 1 and 2

	In-role job performance					OCB				
Analysis category	*K*	Mean	*SDr*	95% CI	Direction expected	*K*	Mean	*SDr*	95% CI	Direction expected
Attitude strength	17	0.01	0.01	.01, .01	5	34	0.00	0.01	.00, .00	3
Attitude extremity	7	0.01	0.01	.00, .02	1	14	0.00	0.00	.00, .00	3
Attitude certainty	4	0.01	0.01	.00, .02	3	8	0.00	0.00	.00, .00	0
Structural consistency	3	0.01	0.02	-.01, .03	1	6	0.01	0.01	.00, .01	0
Vested interest	3	0	0.01	-.01, .01	0	6	0.00	0.00	.00, .00	0
Situational strength	12	0.01	0.02	.00, .02	0	24	0.01	0.01	.01, .01	0
Clarity	3	0.00	0.00	.00, .00	0	6	0.01	0.01	.00, .01	0
Consequences	3	0.01	0.01	.00, .02	0	6	0.00	0.00	.00, .01	0
Consistency	3	0.02	0.04	-.02, .07	0	6	0.02	0.01	.01, .02	0
Constraints	3	0.01	0.01	.00, .02	1	6	0.01	0.01	.00, .02	5

	CWB					All Job Performance Variables				
Analysis category	*K*	Mean	*SDr*	95% CI	Direction Expected	*K*	Mean	*SDr*	95% CI	Direction Expected
Attitude strength	34	0.01	0.01	.01, .01	6	85	0.01	0.01	.00, .01	14
Attitude extremity	14	0.00	0.01	.00, .01	2	35	0.00	0.01	.00, .01	6
Attitude certainty	8	0.02	0.01	.01, .02	2	20	0.01	0.01	.01, .01	5
Structural consistency	6	0.02	0.02	.00, .03	2	15	0.01	0.02	.00, .02	3
Vested interest	6	0.01	0.01	.00, .02	0	15	0.01	0.01	.00, .01	0
Situational strength	24	0.01	0.02	.01, .02	0	60	0.01	0.01	.01, .01	8
Clarity	6	0.01	0.01	.00, .01	0	15	0.00	0.01	.00, .01	0
Consequences	6	0.01	0.01	.01, .02	2	15	0.01	0.01	.00, .01	2
Consistency	6	0.01	0.02	.00, .02	0	15	0.02	0.02	.01, .02	0
Constraints	6	0.03	0.02	.01, .04	0	15	0.02	0.02	.01, .03	6

Note. $N = 539$. K = number of regression models conducted to test each interaction. SDr = average of observed ΔR^2. 95% CI = 95% credibility intervals, computed as $\Delta R^2 \pm 1.96\ SDr$. Direction expected = number of models with statistically significant ΔR^2 in the second step.

Table 8

Overview of Hierarchical Regression Analysis Results for Hypothesis 3

	In-role job performance					OCB				
Analysis category	*K*	Mean	*SDr*	95% CI	Direction expected	*K*	Mean	*SDr*	95% CI	Direction expected
Clarity										
Attitude extremity	7	0.00	0.01	.00, .01	0	14	0.00	0.00	.00, .00	0
Attitude certainty	4	0.01	0.01	.00, .01	2	8	0.00	0.00	.00, .00	0
Structural consistency	3	0.00	0.00	.00, .00	0	6	0.01	0.01	.00, .01	0
Vested interest	3	0.00	0.01	.00, .01	0	6	0.00	0.01	.00, .01	0
Consequences										
Attitude extremity	7	0.00	0.00	.00, .00	0	14	0.00	0.00	.00, .00	0
Attitude certainty	4	0.00	0.00	.00, .00	0	8	0.00	0.00	.00, .00	0
Structural consistency	3	0.00	0.00	.00, .00	0	6	0.01	0.01	.00, .01	0
Vested interest	3	0.00	0.01	.00, .01	0	6	0.00	0.01	.00, .01	0
Consistency										
Attitude extremity	7	0.00	0.00	.00, .00	0	14	0.00	0.01	.00, .01	0
Attitude certainty	4	0.00	0.00	.00, .00	0	8	0.00	0.00	.00, .00	0
Structural consistency	3	0.00	0.00	.00, .00	0	6	0.01	0.01	.00, .02	0
Vested interest	3	0.00	0.00	.00, .00	0	6	0.00	0.01	.00, .01	0
Constraints										
Attitude extremity	7	0.01	0.01	.00, .01	0	14	0.00	0.00	.00, .00	0
Attitude certainty	4	0.01	0.01	.00, .02	0	8	0.00	0.00	.00, .00	0
Structural consistency	3	0.01	0.01	.00, .01	0	6	0.00	0.00	.00, .00	0
Vested interest	3	0.00	0.01	.00, .01	0	6	0.00	0.00	.00, .00	0

	CWB					All Job Performance Variables				
Analysis category	*K*	Mean	*SDr*	95% CI	Direction Expected	*K*	Mean	*SDr*	95% CI	Direction Expected
Clarity										
Attitude extremity	14	0.00	0.00	.00, .00	0	35	0.00	0.00	.00, .00	0
Attitude certainty	8	0.00	0.00	.00, .00	0	20	0.00	0.00	.00, .00	2
Structural consistency	6	0.00	0.00	.00, .00	0	15	0.00	0.00	.00, .00	0
Vested interest	6	0.00	0.00	.00, .00	0	15	0.00	0.00	.00, .00	0
Consequences										
Attitude extremity	14	0.00	0.00	.00, .00	0	35	0.00	0.00	.00, .00	0
Attitude certainty	8	0.00	0.00	.00, .01	0	20	0.00	0.00	.00, .00	0
Structural consistency	6	0.01	0.01	.00, .01	0	15	0.00	0.00	.00, .01	0
Vested interest	6	0.00	0.00	.00, .00	0	15	0.00	0.00	.00, .00	0
Consistency										
Attitude extremity	14	0.00	0.01	.00, .01	0	35	0.00	0.01	.00, .00	0
Attitude certainty	8	0.01	0.00	.00, .01	0	20	0.00	0.00	.00, .01	0
Structural consistency	6	0.00	0.01	.00, .01	0	15	0.01	0.01	.00, .01	0
Vested interest	6	0.00	0.01	.00, .01	0	15	0.00	0.00	.00, .01	0
Constraints										
Attitude extremity	14	0.01	0.01	.01, .01	0	35	0.01	0.01	.00, .01	0
Attitude certainty	8	0.01	0.00	.00, .01	0	20	0.01	0.01	.00, .01	0
Structural consistency	6	0.02	0.02	.00, .04	0	15	0.01	0.02	.00, .02	0
Vested interest	6	0.00	0.01	.00, .01	0	15	0.00	0.00	.00, .00	0

Note. $N = 539$. K = number of regression models conducted to test each interaction. SDr = average of observed ΔR^2. 95% CI = 95% credibility intervals, computed as $\Delta R^2 \pm 1.96\ SDr$. Direction expected = number of models with statistically significant ΔR^2 in the third step.

Table 9

Standard deviations, standard deviation ratios, and Bartlett's test results of performance variables across situational strength levels

Situational strength facet	Outcome variable														
	In-role job performance			OCB-I			OCB-O			CWB-I			CWB-O		
	SD	*SD Ratio*	*Bartlett's K^2*	*SD*	*SD Ratio*	*Bartlett's K^2*	*SD*	*SD Ratio*	*Bartlett's K^2*	*SD*	*SD Ratio*	*Bartlett's K^2*	*SD*	*SD Ratio*	*Bartlett's K^2*
Clarity															
High	.79	**1.24**	**11.96****	1.12	1.05	.76	1.31	.93	1.43	1.73	.76	19.57**	1.62	.72	28.12**
Low	**.98**			1.18			1.22			1.32			1.17		
Consequences															
High	.91	.97	.27	1.05	**1.19**	**7.94****	1.09	**1.25**	**12.66****	1.84	.55	90.22**	1.73	.51	113.43**
Low	.88			**1.25**			**1.36**			1.02			.89		
Consistency															
High	.84	1.13	3.61	1.02	**1.22**	**10.11****	1.16	1.09	2.56	1.81	.66	46.16**	1.71	.60	66.52**
Low	.95			**1.24**			1.27			1.19			1.03		
Constraints															
High	.96	.75	22.47**	1.10	**1.15**	**5.94***	1.25	1.10	2.35	1.83	.39	210.49**	1.72	.37	241.12**
Low	.72			**1.27**			1.38			.72			.63		
All															
High	.82	1.01	1.31	.95	**1.49**	**7.71****	.82	**1.51**	**29.04****	2.17	.36	73.13**	2.16	.30	108.90**
Low	.83			**1.42**			**1.24**			.78			.65		

Note. High and low indicate levels of situational strength. SD Ratios were calculated by dividing the standard deviations of those participants experiencing low situational strength over those experiencing high situational strength. Significant results in the direction expected are in bold.

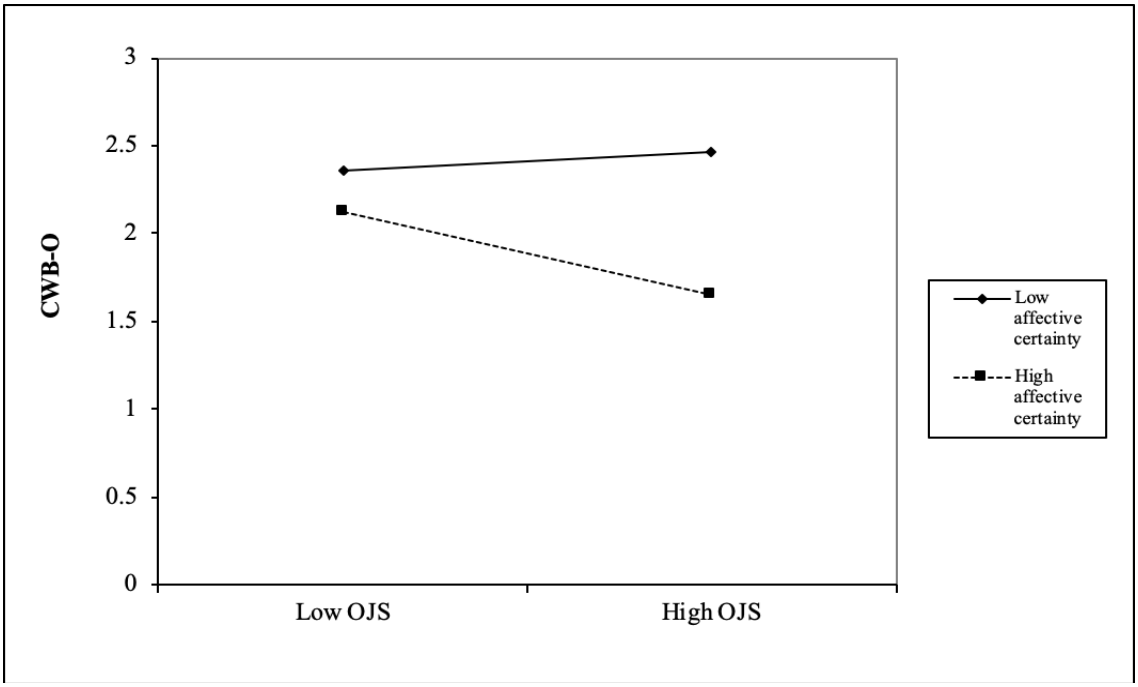

Figure 1. Interaction between OJS and affective certainty on counterproductive work behavior targeted at the organization (CWB-O). $N = 539$. The slope was greater for the high affective certainty group ($b = -.24$) compared to the low affective certainty group ($b = .06$).

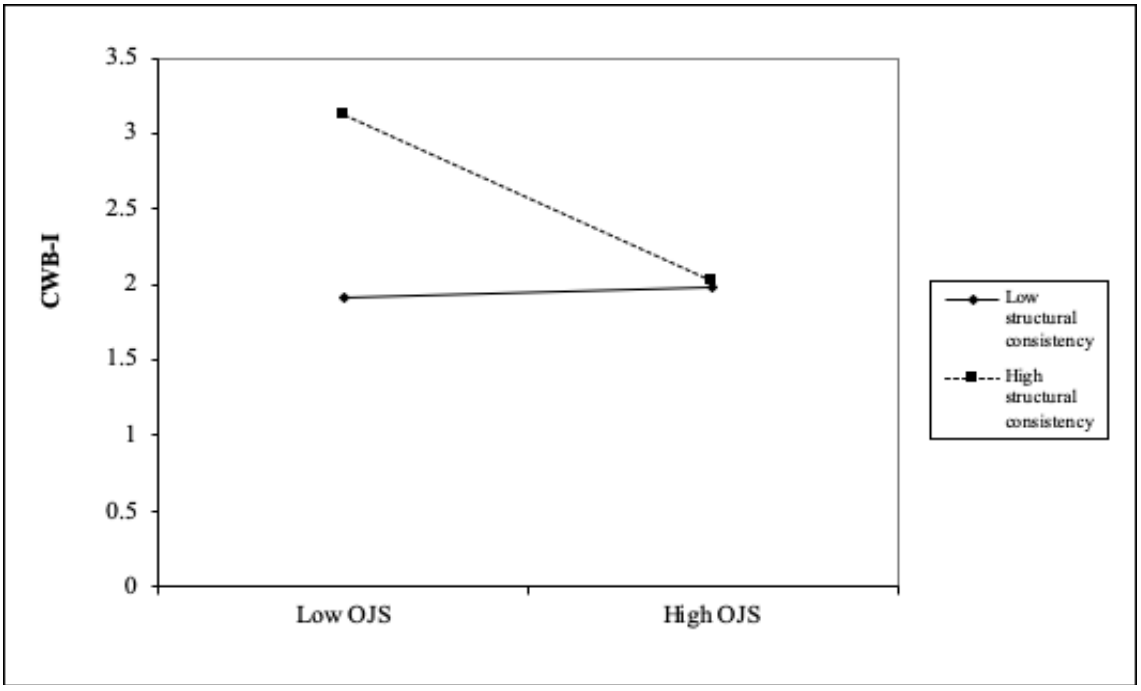

Figure 2. Interaction between OJS and structural consistency on counterproductive work behavior targeted at the individual (CWB-I). $N = 539$. The slope was greater for the high structural consistency group ($b = -.55$) compared to the low structural consistency group ($b = .03$).

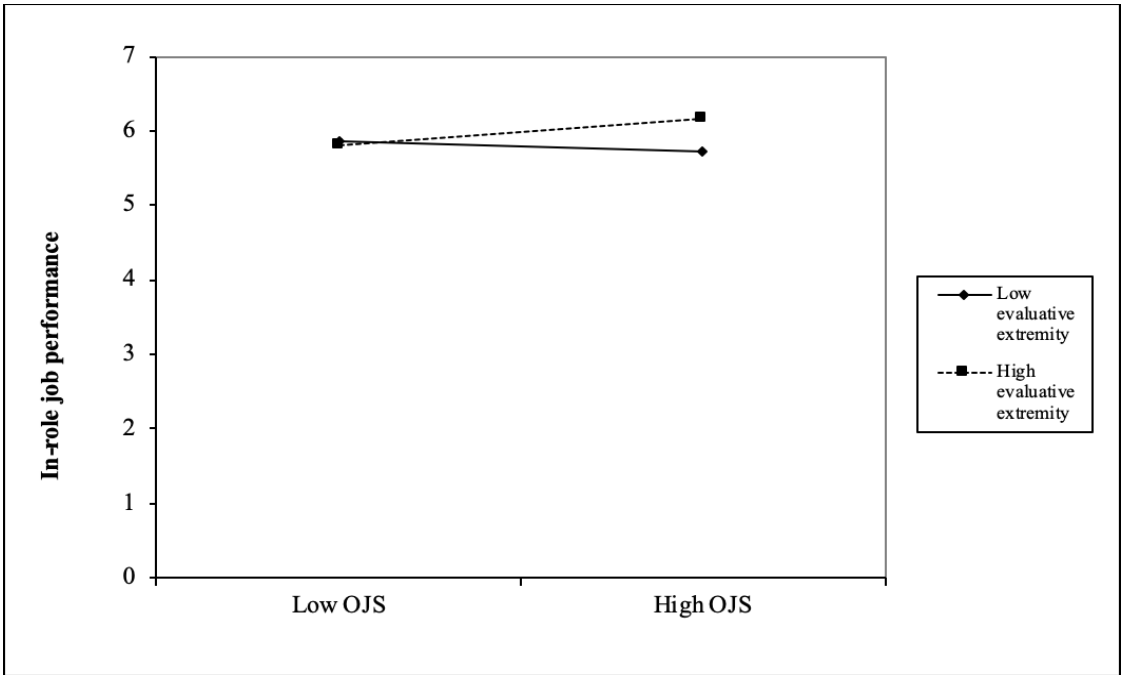

Figure 3. Interaction between OJS and evaluative extremity on in-role job performance. $N = 539$. The slope was greater for the high evaluative extremity group ($b = .19$) compared to the low evaluative extremity group ($b = -.07$).

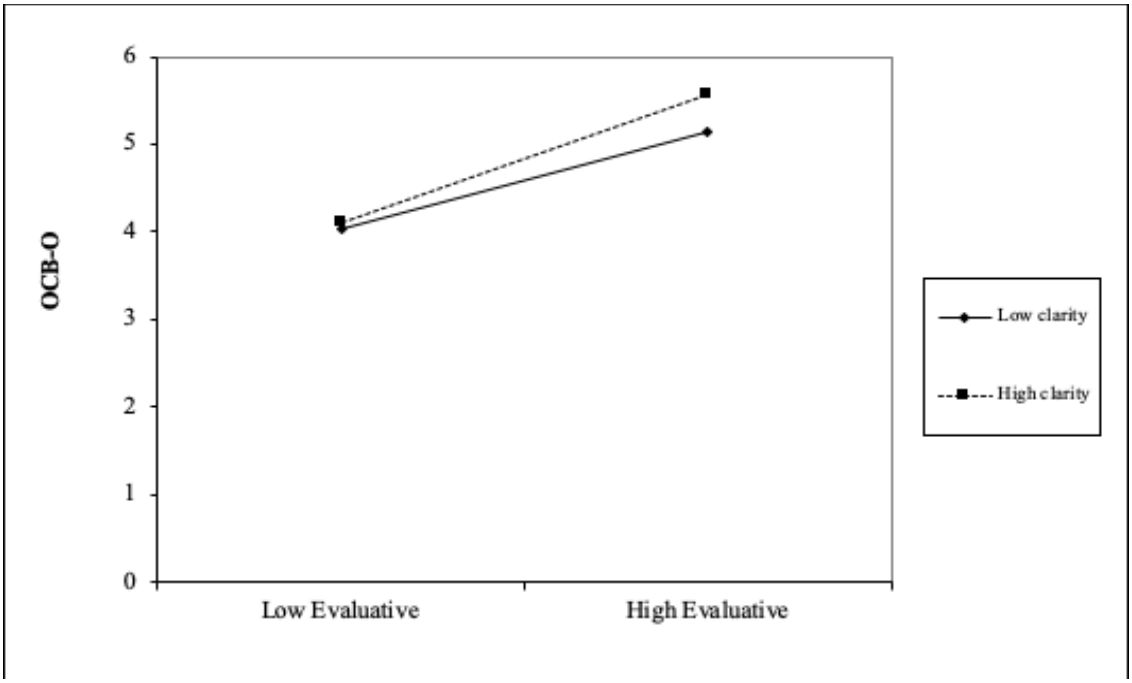

Figure 4. Interaction between evaluative job satisfaction and clarity on organizational citizenship behavior targeted at the organization (OCB-O). $N = 539$. The slope was greater for the high clarity group ($b = .56$) compared to the low clarity group ($b = .42$).

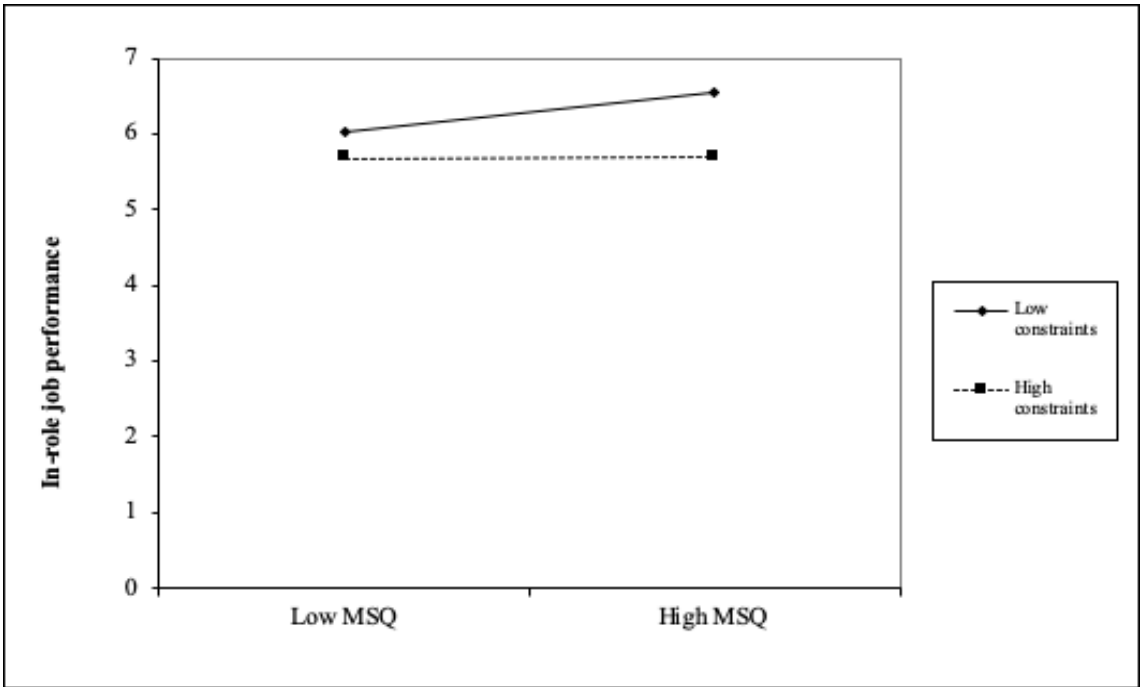

Figure 5. Interaction between MSQ and constraints on in-role job performance. $N = 539$. The slope was greater for the low constraints group ($b = .29$) compared to the high constraints group ($b = .01$).

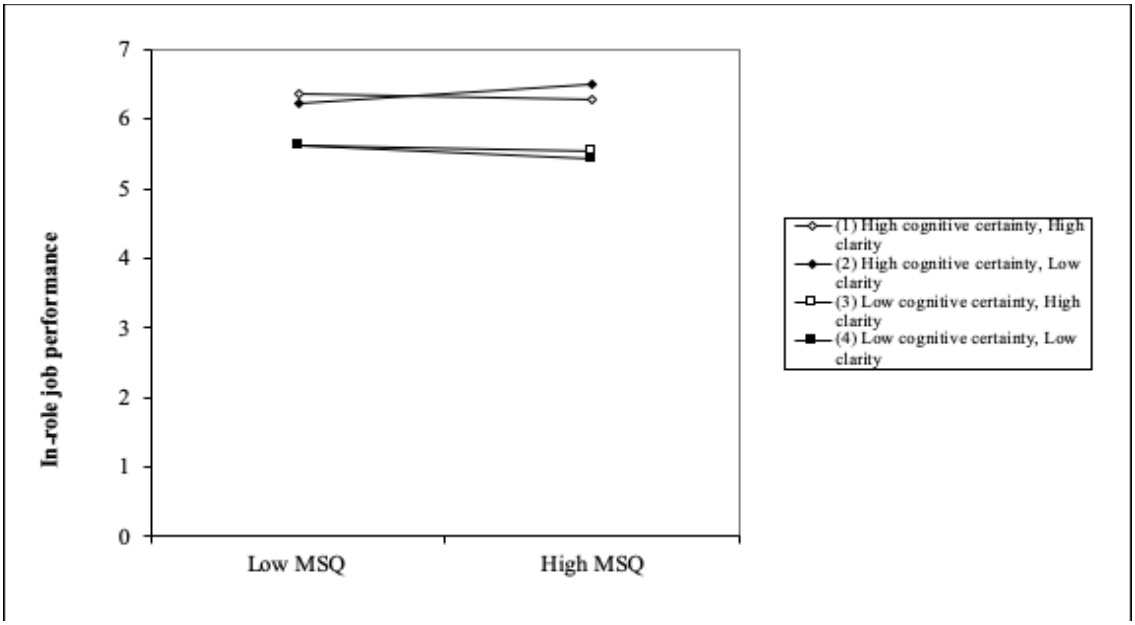

Figure 6. The interaction between MSQ, cognitive extremity, and clarity on in-role job performance. The slope was the greatest for the high cognitive certainty, low clarity group (b = .16). Further, the slope was lowest for the low cognitive certainty, low clarity group (b = -.11).

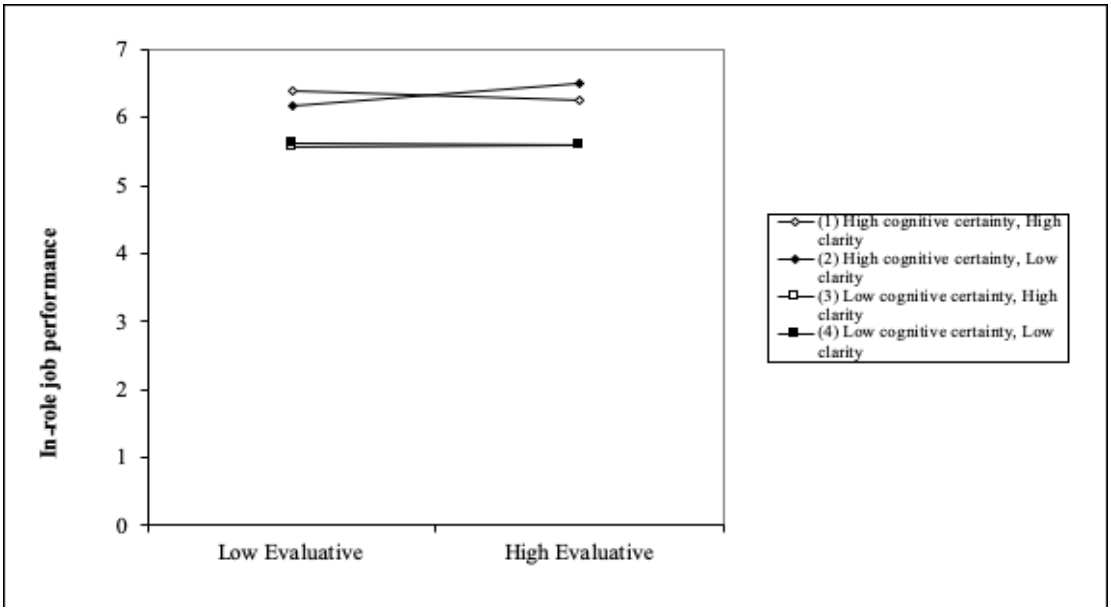

Figure 7. The interaction between evaluative job satisfaction, cognitive certainty, and clarity on in-role job performance. The slope was the greatest for the high cognitive certainty, low clarity group (b = .13). Further, the slope was the lowest for the low cognitive certainty, high clarity group (b = .02).

APPENDIX A

COVER LETTER TO PARTICIPANTS

Dear Participant:

You are being invited to participate in a research study by completing a survey conducted by graduate student Joseph Dagosta and Professor of Psychology Nathan Bowling about the influence of workplace situations and job satisfaction on job performance. There are no known risks for your participation in this research. The information collected may not benefit you directly. The information learned in this study may be helpful to others. The information you provide will help us understand how job attitudes and workplace situations influence the job satisfaction–job performance relationship. Your completed survey will be stored securely online.

The survey will take at least 15-30 minutes and at most 60 minutes to complete. You will be compensated with $1.00 for completing the survey. Please complete the entire survey in one sitting. You will NOT be able to partially complete the survey and return to it at a later time. Please be sure you have available the allotted amount of time before beginning the survey. You will have a maximum of 60 minutes to complete the survey.

Individuals from the Department of Psychology, the Institutional Review Board (IRB), Office of Research and Sponsored Programs and other regulatory agencies may inspect these records. In all other respects, however, the data will be held in confidence to the extent permitted by law. Should the data be published, your identity will not be disclosed.

Taking part in this study is voluntary. By completing this survey, you agree to take part in this research study. You do not have to answer any questions that make you uncomfortable. You may choose not to take part at all. If you decide to be in this study you may stop taking part at any time. If you decide not to be in this study or if you stop taking part at any time, you will not lose any benefits for which you may qualify.

If you have any questions, concerns, or complaints about the research study, please contact: Joseph Dagosta (email: dagosta.2@wright.edu) or his faculty advisor Dr. Nathan Bowling (email: nathan.bowling@wright.edu). If you have any questions about your rights as a research subject, you may call the Wright State IRB Office at (937) 775-4462. You can discuss any questions about your rights as a research subject with a member of the IRB or staff. The IRB is an independent committee made up of people from the University community, staff of the institutions, as well as people from the community not connected with these institutions. The IRB has reviewed this research study.

Sincerely,
Joseph Dagosta

APPENDIX B

Weiss et al.'s (1967) Minnesota Satisfaction Questionnaire (MSQ) items

1. Being able to keep busy all the time.
2. The chance to work alone on the job.
3. The chance to do different things from time to time.
4. The chance to become "somebody" in the community.
5. The way my boss handles his or her workers.
6. The competence of my supervisor in making decisions.
7. Being able to do things that don't go against my conscience.
8. The way my job provides for steady employment.
9. The chance to do things for other people.
10. The chance to tell people what I do.
11. The chance to do something that makes use of my abilities.
12. The way company policies are put into practice.
13. My pay and the amount of work I do.
14. The chances for advancement on this job.
15. The freedom to use my own judgment.
16. The chance to try my own methods of doing the job.
17. The working conditions.
18. The way my coworkers get along with each other.
19. The praise I get for doing a good job.
20. The feeling of accomplishment I get from the job.

Note. Responses to each item are made on a 7-point graphic rating scale from 1 (*very unsatisfied*) to 7 (*very satisfied*).

APPENDIX C

Brayfield and Rothe's (1951) Overall Job Satisfaction (OJS) scale items

1. My job is like a hobby to me.
2. My job is usually interesting enough to keep me from getting bored.
3. It seems that my friends are more interested in their jobs. (R)
4. I consider my job rather unpleasant. (R)
5. I enjoy my work more than my leisure time.
6. I am often bored with my job. (R)
7. I feel fairly well satisfied with my present job.
8. Most of the time I have to force myself to go to work. (R)
9. I am satisfied with my job for the time being.
10. I feel that my job is no more interesting than others I could get. (R)
11. I definitely dislike my work. (R)
12. I feel that I am happier in my work than most people.
13. Most days, I am enthusiastic about work.
14. Each day of work seems like it will never end. (R)
15. I like my job better than the average worker does.
16. My job is pretty uninteresting. (R)
17. I find real enjoyment in my work.
18. I am disappointed that I ever took this job. (R)

Note. Responses to each item are made on a 7-point graphic rating scale from 1 (*strongly disagree*) to 7 (*strongly agree*). R indicates a reverse-scored item.

APPENDIX D

Schleicher et al.'s (2015) Evaluation scale items

1. I feel fairly well satisfied at my current job.
2. I am satisfied with my job for the time being.

Note. Responses to each item are made on a 7-point graphic rating scale from 1 (*very unsatisfied*) to 7 (*very satisfied*).

APPENDIX E

Meyer et al.'s (2014) Situational Strength – Clarity scale items

1. On this job, specific information about work-related responsibilities is provided.
2. On this job, easy-to-understand information is provided about work requirements.
3. On this job, straightforward information is provided about what an employee needs to do to succeed.
4. On this job, an employee is told exactly what to expect.
5. On this job, precise information is provided about how to properly do one's job.
6. On this job, specific information is provided about which tasks to complete.
7. On this job, an employee is told exactly what is expected from him or her.

Note. Responses to each item are made on a 7-point graphic rating scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

APPENDIX F

Meyer et al.'s (2014) Situational Strength – Consequences scale items

1. On this job, an employee's decisions have extremely important consequences for other people.
2. On this job, very serious consequences occur when an employee makes an error.
3. On this job, important outcomes are influenced by an employee's actions.
4. On this job, other people are put at risk when an employee performs poorly.
5. On this job, mistakes are more harmful than they are for almost all other jobs.
6. On this job, tasks are more important than those in almost all other jobs.
7. On this job, there are consequences if an employee deviates from what is expected.

Note. Responses to each item are made on a 7-point graphic rating scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

APPENDIX G

Meyer et al.'s (2014) Situational Strength – Consistency scale items

1. On this job, different sources of work information are always consistent with each other.
2. On this job, responsibilities are compatible with each other.
3. On this job, all requirements are highly compatible with each other.
4. On this job, procedures remain completely consistent over time.
5. On this job, supervisor instructions match the organization's official policies.
6. On this job, informal guidance typically matches official policies.
7. On this job, information is generally the same, no matter who provides it.

Note. Responses to each item are made on a 7-point graphic rating scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

APPENDIX H

Meyer et al.'s (2014) Situational Strength – Constraints scale items

1. On this job, an employee is prevented from making his or her own decisions.
2. On this job, constraints prevent an employee from doing things in his or her own way.
3. On this job, an employee is prevented from choosing how to do things.
4. On this job, an employee's freedom to make decisions is limited by other people.
5. On this job, outside forces limit an employee's freedom to make decisions.
6. On this job, procedures prevent an employee from working in his or her own way.
7. On this job, other people limit what an employee can do.

Note. Responses to each item are made on a 7-point graphic rating scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

APPENDIX I

Williams and Anderson's (1991) in-role job performance scale items

1. I adequately complete assigned duties.
2. I fulfill responsibilities specified in the job description.
3. I perform tasks that are expected of me.
4. I meet formal performance requirements of the job.
5. I engage in activities that will directly affect my performance.
6. I neglect aspects of the job I am obligated to perform. (R)
7. I fail to perform essential duties. (R)

Note. Responses to each item are made on a 7-point graphic rating scale from 1 (*never*) to 7 (*always*). R indicates a reverse-scored item.

APPENDIX J

Lee and Allen's (2002) OCB-I and OCB-O scale items

OCB-I
1. I help others who have been absent.
2. I willingly give my time to help others who have work-related problems.
3. I adjust my work schedule to accommodate other employees' requests for time off.
4. I go out of the way to make newer employees feel welcome in the work group.
5. I show genuine concern and courtesy toward coworkers, even under the most trying business or personal situations.
6. I give up time to help others who have work or non-work problems.
7. I assist others with their duties.
8. I share personal property with others to help their work.
OCB-O
1. I attend functions that are not required but that help the organizational image.
2. I keep up with developments in the organization.
3. I defend the organization when other employees criticize it.
4. I show pride when representing the organization in public.
5. I offer ideas to improve the functioning of the organization.
6. I express loyalty toward the organization.
7. I take action to protect the organization from potential problems.
8. I demonstrate concern about the image of the organization.

Note. Responses to each item are made on a 7-point graphic rating scale from 1 (*never*) to 7 (*always*). R indicates a reverse-scored item.

APPENDIX K

Bennett and Robinson's (2000) CWB-I and CWB-O scale items

CWB-I
1. I made fun of someone at work.
2. I said something hurtful to someone at work.
3. I made an ethnic, religious, or racial remark at work.
4. I cursed at someone at work.
5. I played a mean prank on someone at work.
6. I acted rudely toward someone at work.
7. I publicly embarrassed someone at work.
CWB-O
1. I have taken property from work without permission.
2. I spent too much time fantasizing or day dreaming instead of working.
3. I falsified a receipt to get reimbursed for more money than you spent on business expenses.
4. I have taken an additional or longer break than is acceptable at my workplace.
5. I come in late to work without permission.
6. I littered your work environment.
7. I neglected to follow my boss's instructions.
8. I intentionally worked slower than I could have worked.
9. I discussed confidential company information with an unauthorized person.
10. I used an illegal drug or consumed alcohol on the job.
11. I put little effort into my work.
12. I dragged out work in order to get overtime.

Note. Responses to each item are made on a 7-point graphic rating scale from 1 (*never*) to 7 (*always*).