

EFFECTS OF ROLE STRESSORS APPRAISED AS CHALLENGES AND
HINDRANCES ON WORK OUTCOMES

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ABSTRACT

EFFECTS OF ROLE STRESSORS APPRAISED AS CHALLENGES AND HINDRANCES ON WORK OUTCOMES

by Samantha K. Wetzelberger

This study examines the moderating effects of stressor appraisal as a challenge, hindrance, both, or neither among 237 full-time employees who completed surveys via MTurk. Utilizing the Transactional Model of stress, it was predicted that correlations between each of role ambiguity, role conflict, and role overload would negatively relate with general well-being, affective commitment, and job satisfaction, and positively relate with tedium, anxiety, and turnover intentions. Second, it was expected that when appraising a role stressor as a high challenge (vs. a high hindrance) the deleterious effects of stressors on outcomes would be weaker. The first prediction is supported; however, the second set of predictions are only partially supported. The appraisal of a stressor as a hindrance indicates stronger deleterious effects on psychological strains, specifically anxiety and tedium. Whereas, when stressors, specifically role conflict, are appraised as a challenge, there appears to be a modest buffering effect on general well-being and job satisfaction. Third, this study examined a three-way interaction between each of the role stressors, and the appraisal of a stressor as a (high or low) challenge and a (high or low) hindrance. Results indicate that role conflict appraised as a low hindrance and a high challenge mitigates the deleterious relationship between role conflict and tedium. In fact, when role conflict is appraised as a high hindrance and a low challenge, the positive relationship between role conflict and tedium intensifies. Furthermore, when role conflict is appraised as a high hindrance and as a high challenge, there is little to no protection from the deleterious effects of role conflict on tedium. These findings further highlight the importance of self-appraisal and indicate that challenge stressors do not always lead to positive outcomes, but perceiving stressors as challenges may help to mitigate negative outcomes.

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I want to conclude with one inspirational quote that my parents always reinforced in our family,

“All our dreams can come true, if we have the courage to pursue them.”

-Walt Disney

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INTRODUCTION

A preponderance of research examining job stress has focused on the negative effects of work-related stressors on individual and organizational strains (e.g., Bakker, Demerouti, & Euwema, 2005; Eatough, Chang, Miloslavic, & Johnson, 2011; Schaufeli, Bakker, & van Rhenen, 2009; Wunder, Dougherty, & Welsh, 1982). Researchers found that 42% of U.S. employees have purposefully changed jobs due to stressful work environments (Reina & Reina, 2016). Eighty-six percent of employees polled in 2012 said they were actively looking to change positions by 2013 due to stressors at their current place of employment (AMA, 2013). Per the Bureau of Labor Statistics, employees take off about 20 days per calendar year due to stressors and strains, including anxiety or a related disorder (Sauter et al., 1999). These findings suggest that organizations are facing negative outcomes due to job-related stressors.

Despite these findings, several studies found that not all stressors lead to detrimental outcomes; in some cases, stressors were related to positive outcomes, such as job satisfaction (Eatough et al., 2011; Podsakoff, LePine, & LePine, 2007). One explanation for these findings is that individuals may not uniformly appraise all stressors as hindrances that would tax their well-being. Some stressors are appraised as challenges and motivate one to overcome them (Lazarus & Folkman, 1984). Some individuals may even appraise stressors as both challenges and hindrances. Therefore, the current study aims to answer the question: What effect does an individual's appraisal of a stressor, as a challenge, a hindrance, both, or neither have on the stressor-strain relationship?

Challenge vs. Hindrance

Job-related stressors perceived as challenges are associated with potential gains for individuals; stressors that are perceived as hindrances constrain or interfere with work achievement and lead to negative work outcomes (Cavanaugh, Boswell, Roehling, & Boudreau, 2000; LePine, Podsakoff, & LePine, 2005). Stressors that are appraised as challenges yield greater organizational commitment (Cavanaugh et al., 2000; Podsakoff et al., 2007), but stressors that are perceived as hindrances yield anxiety, turnover intention, and counterproductive behavior, such as tardiness (e.g., Boswell, Olson-Buchanan, & LePine, 2004; Rodell & Judge, 2009).

The majority of previous studies examining job stressors classified them as either challenges or hindrances through *a priori* classification rather than through measuring the participants' perceptions of the stressors (e.g., Boswell et al., 2004; Cavanaugh et al., 2000; Culbertson, Huffman, & Alden-Anderson, 2010; Podsakoff et al., 2007; Rodell & Judge, 2009). This is an important distinction, because a researcher's *a priori* classification imposes a definition rather than allowing the study participants to interject their own meaning.

Furthermore, when stressors are classified as hindrances or challenges, the results have not always been as expected. For example, in a study of nurses, work pressure was perceived as more of a hindrance and emotional demands were perceived more as challenges, contradicting previous findings that work pressure is *always* a challenge (Bakker & Sanz-Vergel, 2013). These findings suggest that participants may appraise the same stressors as either challenges or hindrances, as well as intimating that the appraisal may be both a challenge and a hindrance, simultaneously. Thus, further research needs to

examine the stressor-strain relationship when the stressor is appraised by participants as a challenge, a hindrance, both, or neither.

Understanding the circumstances that lead to strains, such as employees' perceptions of stressors, can help organizations target interventions. Hargrove, Quick, Nelson, and Quick (2011) argue that the stressor is not alone the cause of outcomes, but instead the resulting outcomes are a result of an individual's perception of a stressor. In fact, the same stressor can have both a positive and a negative impact on an individual, depending on how one appraises the said stressor (Dhabar, 2011; Hargrove et al., 2011). Still, some stressors require organizational interventions and individual-focused interventions. One could argue that a stressor appraised as a hindrance, but also a challenge (vs. not a challenge), should reduce negative consequences and if it does not than perhaps the intervention needs to be at the organizational level (Lamontagne, Keegel, Louie, Ostry, & Landsbergis, 2007).

To help determine the locus of responsibility for coping, the current study does not impose *a priori* classifications of stressors and instead measures participants' perceptions of the stressors by asking respondents to appraise each stressor along two continua for challenge and hindrance. Additionally, this study tests the moderating effects of each appraisal on role stressor-strain relationships, as well as the three-way interaction between a stressor and both appraisals. Findings from the current study may help provide a better perspective on stress management interventions determining whether the stressor needs reappraisal or organizational efforts to reduce them.

Researchers (e.g., Cavanaugh et al., 2000; Podsakoff et al., 2007) suggested examining the interaction effect between challenge stressors and hindrance stressors, but

Hollebeek and Haar's (2012) study of two distinct samples of New Zealand employees (i.e., Study 1 was of employee of a single organization in a large metropolitan city involved in a variety of industries and Study 2 was of indigenous Maori employees) is one of the only studies to actually examine an interaction effect. In Study 1, higher levels of challenge stressors and hindrance stressors significantly increased employee loyalty, whereas lower levels of challenge stressors and higher levels of hindrance stressors did not. In contrast, in Study 2 high levels of hindrance stressors significantly decreased employee loyalty and perceived organizational support no matter the level of challenge stressors. Their findings suggest that when employees have work to accomplish their loyalty increases, but loyalty decreases when employees are faced with impediments to getting the job done.

A constraint of Hollebeek and Haar's (2012) study is that they imposed the hindrance and challenge labels on the stressors rather than measuring participants' perceptions of the stressors. Therefore, it is not clear from their results if the same stressor can be perceived as both a hindrance and a challenge. This begs the question: would perceiving stressors as challenges mitigate the statistical positive effects of stressors perceived as hindrances on strains or would perceiving stressors as hindrances intensify the positive relationship between stressors perceived as challenges and strains? This type of three-way interaction is only approached in Hollebeek and Haars' (2012) study. Their study is actually a two-way interaction for which they imposed whether stressors are either challenges or hindrances in order to assess a three-way interaction. The present study addresses this limitation by assessing individuals' perceptions of each

stressor as a challenge and a hindrance per the Transactional Model of stress (Lazarus & Folkman, 1984).

Theoretical Framework: Transactional Model

The Transactional Model of stress forwards that stressors (defined as stimuli in the environment that can be perceived as demands, constraints, or opportunities) can cause strains when they are appraised as a threat and when coping resources are not available to mitigate the negative consequences of the stressors (Lazarus & Folkman, 1984). Thus, strains are expected to increase when a stressor is appraised as a hindrance. Likewise, the appraisal of a stressor as a challenge is expected to mitigate the deleterious consequences.

The present study extends the current state of research by suggesting that one can appraise stressors as both hindrances and challenges. A stressor appraised high (vs. low) on hindrance will have the strongest positive relationship with strains, particularly when the appraisal of the stressor as a challenge is low. For this reason, this study specifically looks at both a two-way interaction of the moderating effect of stressor appraisal (hindrance or challenge) on the relationship between perceived role stressors (e.g., role ambiguity, role conflict, and role overload) and strains (e.g., anxiety, tedium, general well-being, lack of organizational commitment, turnover intentions, and job satisfaction). It also examines the three-way interaction of hindrance appraisal and challenge appraisal of role stressors on strains. Taking into consideration Hollebeek and Haar's (2012) findings, stronger deleterious outcomes (such as higher anxiety, lower organizational commitment, and higher turnover intentions) are expected when challenge stressors are appraised as low and hindrance stressors are appraised as high than when challenge

stressors are appraised as high and hindrance stressors appraised as low or when they are appraised the same. Therefore, the assumption is that participants' appraisal of a stressor as a hindrance will mitigate the ameliorative effects that the appraisal of the same stressor as a challenge would otherwise have on strains.

Study Goals

The current study extends the status quo of the research and tests the simultaneous impact of challenge stressors and hindrance stressors on strains. The objectives are: (1) to examine the relationships between role stressors on strains, (2) to examine if appraisal of stressors as challenges mitigates the deleterious consequences of stressors on strains, (3) to examine if appraisal of stressors as hindrances exacerbates the deleterious consequences of stressors on strains, and (4) to examine how the appraisal of stressors as both challenges and hindrances relate to strains.

The current study provides a novel contribution to the literature by testing the possible three-way interaction of stressors and appraisal of stressors as challenges and as hindrances (Figure 1). The assumption is that stressors lead to strains, but *how* an individual appraises stressors (as either, neither, or both hindrances and challenges) will provide greater insight into the sources of strains. Therefore, the study will test if the relationship between stressors and strains changes when the stressors are appraised as both challenge and hindrance or when appraised as low (or high) challenge and high (or low) hindrance.

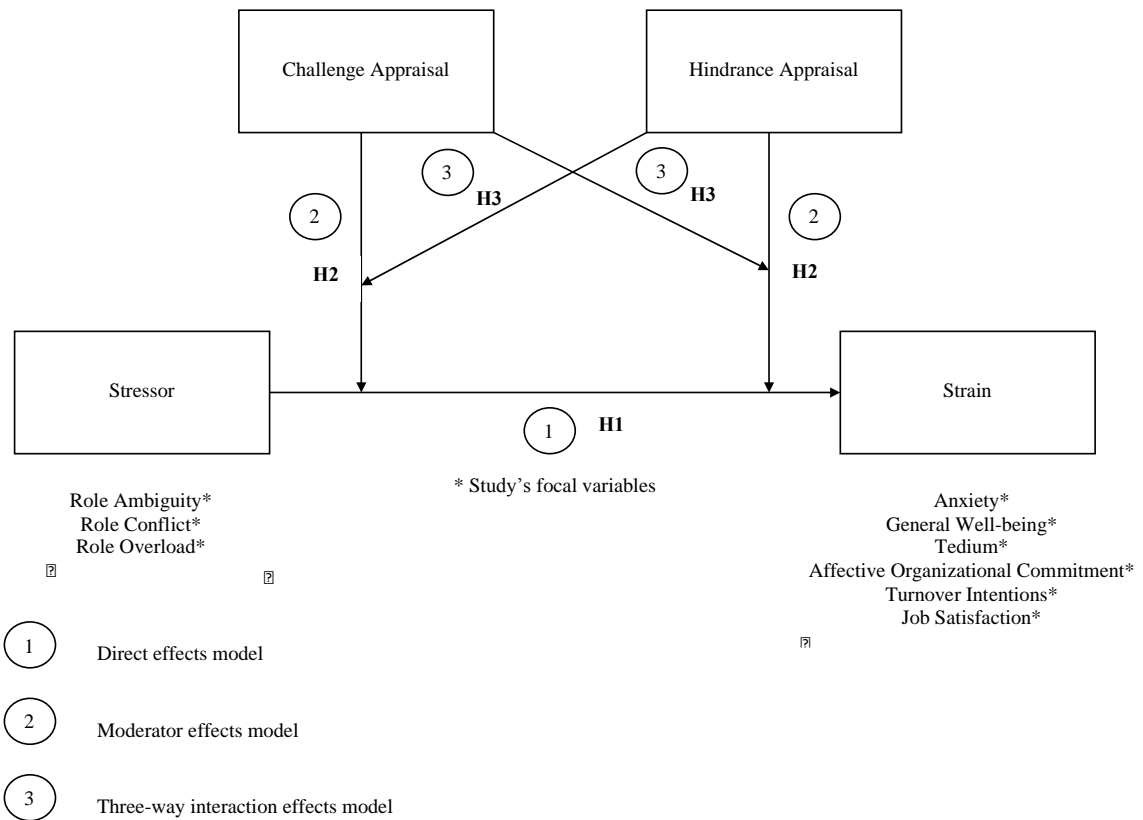


Figure 1. Moderating effect of challenge and hindrance stressors on the stressor-strain relationship.

In the next sections, these stressors and strains will be described in greater detail. Additionally, the transactional theory of stress, which has shaped the past 40 years of stress research theories, will be described (e.g., Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Karasek, 1979; Hobfoll, 1989). Finally, additional findings on the effects of perceived stressors as challenges or hindrances on work attitudes and work outcomes will be presented to further justify why self-reported appraisal of stressors as challenges and hindrances is needed instead of *a priori* classifications.

LITERATURE REVIEW

Stressor-Strain Relationship

Job stress is the process of work-related stressors leading to strains (Glazer & Beehr, 2005). *Stressors* are demands, constraints, or opportunities that yield deleterious consequences when they are perceived as threats (Aldwin, 2007; Selyé, 1973, 1975). These consequences manifest as psychological, physiological, or behavioral outcomes (Lazarus, DeLongis, Folkman, & Gruen, 1985). Stressors, or noxious stimuli, are the sources of strains, aversive reactions, or outcomes (Aldwin, 2007; Jex & Beehr, 1991; Wallace, Edwards, Arnold, Frazier, & Finch 2009).

Types of stressors. There are three categories of stressors: (1) physical, (2) psychological, and (3) social. Physical stressors refer to stimuli from the physical environment, such as temperature, noise, or lack of space or privacy (Mayo, Sanchez, Pastor, & Rodríguez, 2012). Psychological stressors refer to stimuli that are in the mind of the person, such as concern over the economic situation (Lazarus & Folkman, 1984). Social stressors refer to stimuli that are social in nature (Dormann & Zapf, 2004). Psychological and social stressors are typically categorized as psychosocial, because social stressors are perceived and the focus is normally the perception of one's experiences within his or her roles.

Three often-studied psychosocial stressors, referred to as role stressors, are role ambiguity, role conflict, and role overload (Beehr & Glazer, 2005). Role stressors are defined as psychosocial demands, constraints, or opportunities (i.e., expectation) that an individual perceives in his or her work roles (Beehr & Glazer, 2005). It is important to note that role stressors are *perceived* and that individuals may perceive an expectation

differently depending upon their ability and self-efficacy; this different appraisal inevitably affects whether strain results. Each of the three focal role stressors, role ambiguity, role conflict, and role overload, positively correlate with employee outcomes, such as anxiety and turnover intentions (Glazer & Beehr, 2005; Rizzo, House, & Lirtzman, 1970; Spector & Jex, 1991). These role stressors are generic and therefore measures pertaining to these stressors can be employed and generalized across different work contexts.

The current study focuses on generic stressors because the population is a general sample of working adults. Although some studies have found job-specific stressors to have stronger significant relationships to predictors, they are not generalizable across occupations or work environments (Bacharach & Bamberger, 1992; Cohen, Kamarck, & Mermelstein, 1983). Moreover, Beehr, King, and King (1990) found generic stressor measures are better predictors of strains than are job-specific stressors. Specifically, in their study on the effects of social support for registered nurses from Michigan, they found a stronger correlation between generic role conflict and outcomes (e.g., depression, general job satisfaction, emotional exhaustion, and depersonalization) than between job-specific nursing role conflict and the aforementioned outcomes.

Role ambiguity. One experiences role ambiguity when there is a lack of input or information from the environment to guide behavior, thereby reducing predictability (Rizzo et al., 1970). An imbalance of information one has available and the information required to fulfill one's role often leads to an inadequate understanding of work expectations (Beehr & Glazer, 2005). For example, when a sales representative does not have a clear yearly sales goal, he or she cannot determine whether or not enough products

were sold. Role ambiguity has a direct negative relationship with job satisfaction and positive relationship with turnover intentions, along with an indirect negative relationship with organizational commitment amongst blue-collar and white-collar employees (Schaubroeck, Cotton, & Jennings, 1989).

Role conflict. Role conflict stems from inconsistencies between behavioral demands and expectations (Rizzo et al., 1970). This inconsistency causes an employee to experience two or more conflicting job role demands, such as how he or she should complete a task, and may yield subsequent strain (Beehr & Glazer, 2005). For example, the manager of a coffeehouse may be expected to perform supervisory tasks (e.g., ordering inventory or making employee schedules), but if an employee does not show up for his or her scheduled shift, the manager must fulfill the duties of a barista (e.g., making coffee or checking customers out), thus resulting in inter-role conflict (Beehr & Glazer, 2005). Research on public-sector employees (Addae, Parboteeah, & Velinor, 2008) has shown that employees who experience higher levels of role ambiguity and role conflict are less likely to identify with their organization's values and goals (i.e., affective organizational commitment). Further, through meta-analysis, Örtqvist and Wincent (2006) found role conflict had a negative relationship with job performance and organizational commitment and a positive relationship with the propensity to quit. Additionally, Eatough et al.'s (2011) meta-analytical study identified an indirect negative relationship between role ambiguity and role conflict with organizational citizenship behavior through job satisfaction. Finally, Schmidt, Roesler, Kusserow, and Rau's (2014) meta-analysis found that role ambiguity and role conflict have moderate yet significant

and positive relationships with depression, which research suggests is comorbid with anxiety.

Role overload. Role overload occurs when one perceives role demands as exceeding his or her personal resources (Beehr & Glazer, 2005; Jex, 2002; Lazarus & Folkman, 1984; Wunder et al., 1984). Role overload can be operationalized as quantitative or qualitative role overload. Qualitative role overload occurs when an individual lacks the qualifications (i.e., skills and abilities) to fulfill one's role (Jex, 2002). Quantitative role overload refers to the perception of role demands as exceeding one's resources (e.g., time; Lazarus & Folkman, 1984; Örtqvist & Wincent, 2006; Rizzo et al., 1970; Wunder et al., 1984). This study focuses on quantitative role overload (i.e., measuring participants' perceptions of their expected work demands). Role overload is distinct from workload. Workload is the *amount* of work required of an individual to do to adequately perform one's job within a specified period of time (Brown & Benson, 2005; Jex, 2002).

Role stressors as challenges or hindrances. Researchers commonly examine role stressors in relation to personal and organizational outcomes, but few studies have examined the extent to which individuals' appraisal of stressors influences the relationship between role stressors and potential outcomes. Appraisal is an important variable to consider in studies examining stressors and strains because it results from the participants' perceptions of role stressors and influences if and when strains develop (Lazarus & Folkman, 1984).

Realizing that researchers have missed the important point that some stressors are more noxious than others, scholars imposed role stressors into the category of hindrance

or challenge (Cavanaugh et al., 2000; LePine et al., 2005). Role conflict and role ambiguity were typically classified as hindrances that influence turnover intentions (see Podsakoff et al., 2007 meta-analysis), whereas role overload has been classified as a hindrance (e.g., Cavanaugh et al., 2000) or a challenge (e.g., Podsakoff et al., 2007). However, imposing a challenge or hindrance label masks the subjective nature of appraisal and findings should be interpreted with caution. Few studies, such as Rodríguez, Kożusznik, and Peiró (2013), have asked respondents to the extent of which each stressor is a challenge and/or a hindrance. An individual's appraisal of a stressor as a challenge, a hindrance, both, or neither has major implications on organizational stress management and impacts how an organization may address perceived role stressors. This study attempts to mitigate any previous confusion by allowing respondents to appraise each stressor as a challenge, a hindrance, both, or neither. Thus, the current study specifically focuses on how an individual reports perceiving their current role expectations and demands.

Additionally, Webster, Beehr, and Love (2011) are the only researchers to specifically study the relationship between role stressors and strains when stressors are appraised as a challenge, a hindrance, both, or neither. They found that when role conflict and workload were appraised as hindrances there was a positive relationship with exhaustion, physical symptoms (e.g., physical health), job dissatisfaction, and turnover intentions (Webster et al., 2011). When role ambiguity was appraised as a hindrance, a similar positive relationship with exhaustion, physical symptoms, and job dissatisfaction was found, but role ambiguity did not have a significant relationship with turnover intentions (Webster et al., 2011).

Webster et al.'s (2011) findings draw attention to the inconsistent findings within research literature regarding the effects of hindrance stressors. Previous studies (e.g., Podsakoff et al., 2007) have found hindrance stressors positively correlate with turnover intentions (i.e., a negative outcome). However, Webster and colleagues found that role ambiguity, which is typically classified as a hindrance stressor, did not have a significant relationship with turnover intentions and this calls into question if the classification of role ambiguity as solely a hindrance stressor is appropriate.

Furthermore, unlike what has been found in previous studies, when role ambiguity was appraised as a challenge stressor there was a positive correlation with exhaustion (Webster et al., 2011). When workload was appraised as a challenge, there was a significant positive relationship with exhaustion and physical symptoms (Webster et al., 2011). Indeed, challenge stressors previously have only correlated with positive outcomes (e.g., job satisfaction and organizational commitment); nevertheless, Webster et al.'s (2011) findings suggest challenge stressors can correlate with negative outcomes.

Therefore, the current study asks participants to appraise survey items pertaining to each of role ambiguity, role conflict, and role overload in terms of the extent to which the stressor is a challenge and to which it is a hindrance. The purpose of eliciting hindrance and challenge appraisals is to refine the relationships found between role stressors and outcomes (specifically turnover intentions) and guide organizations on interventions that would be beneficial to implement.

Strains. Outcomes refer to the response (negative or positive) that an individual has to a stressor (Beehr & Glazer, 2005). Negative outcomes resulting from stressors are often referred to as strains (McGowan, Gardner, & Fletcher, 2006). Strains are

physiological, behavioral, and/or psychological outcomes that result from stressors that are not managed. Physiological strains may include heart disease, headaches, vision problems, and other biological or physical ailments to one's body (Spector & Jex, 1998). Behavioral strains refer to outcomes related to decreased performance, such as absenteeism and withdrawal behaviors (Beehr & Glazer, 2005; Jex, 2002). Psychological strains refer to the emotional responses to a stressor (e.g., worry, depression, and feelings of depersonalization, emotional exhaustion, and tedium; Beehr & Glazer, 2005). The current study will assess three psychological strains: anxiety, tedium, and general well-being.

Anxiety. Anxiety refers to "... a state physio-psychological sensation addressing people's perceptions of psychological and physiological states (i.e., feeling tightness in the chest or nervousness)" (Glazer & Beehr, 2005, p. 469). Indeed, Glazer and Beehr (2005) found some difference in the magnitude of the relationship between role stressors and strains across cultures, but all three role stressors were found to significantly predict anxiety. Therefore, an increase in role stressors significantly increases anxiety. Additionally, when operationalizing anxiety as an individual's emotional reaction or state of psychological distress due to a stressor, Boswell et al. (2004) found both challenge stressors and hindrance stressors positively relate to anxiety. Research has also found higher levels of anxiety to increase the risk of adverse health conditions (i.e., depression; Schmidt et al., 2014) and decrease job satisfaction and performance (Spector & Jex, 1991).

Tedium. Tedium refers to a chronic interpersonal stressor characterized by the experience of physical, emotional, and attitudinal exhaustion where one feels *burnout*

(Pines & Kafry, 1978). Burnout is a complex construct incorporating feelings of emotional exhaustion, depersonalization (cynicism and detachment from job), and feelings of reduced personal accomplishment (Enzmann, Schaufeli, Janssen, & Rozeman, 1998; Maslach, Schaufeli, & Leiter, 2001). The Maslach Burnout Inventory (MBI) is the most widely used measure of burnout in occupational stress research (e.g., Demerouti et al., 2001; Perrewé et al., 2002). In a study of nurses and civil engineers from the United States, Bacharach, Bamberger, and Conley (1991) found significant positive correlations between role conflict and role ambiguity with burnout, which negatively correlated with job satisfaction. Additionally, in a study of tax accountants, all three role stressors positively related with burnout (Fogarty, Singh, Rhoads, & Moore, 2000).

General well-being. General well-being refers to an individual's psychological well-being (i.e., overall effectiveness of psychological functioning; Wright & Cropanzano, 2000). Psychological well-being consists of three components: (1) a subjective experience (i.e., the extent to which an individual believes he or she is happy), (2) a combination of positive and negative emotions, and (3) a global judgment about an individual's whole life (Diener, Suh, Lucas, & Smith, 1999; Rathi & Rastogi, 2008). A study of random employees and managers contacted through a networking site found role conflict and role ambiguity have a negative relationship with well-being (Panaccio & Vandenberghe, 2009).

Outcomes. Organizational outcomes are those that impact the organization more than the individual (Beehr & Glazer, 2005). The organizational outcomes addressed in the current study are organizational commitment, turnover intentions, and job satisfaction. Previously, researchers (e.g., Glazer & Beehr, 2005) have found these

organizational outcomes to have significant relationships to role stressors. Whereas, other organizational outcomes (e.g., performance and emotional exhaustion) either have not been found to have significant relationships with role stressors or do not have as strong of a relationship (e.g., see LePine et al., 2005 meta-analysis; see Örtqvist & Wincent, 2006 meta-analysis).

Affective organizational commitment. Affective organizational commitment is the emotional psychological bond an employee has towards his or her organization due to the fulfillment of expectations and needs (Hollebeek & Haar, 2012; Meyer & Allen, 1991). Through a feeling of emotional attachment, identification, and involvement in the organization, individuals invest in their organization (Lazarus & Folkman, 1984). In a study of university employees and students, O'Reilly and Chatman (1986) found internalization and identification to the organization to negatively relate to turnover intentions for university employees and students. Meyer, Stanley, Herscovitch, and Topolnytskya's (2002) meta-analysis on the consequences of affective organizational commitment strongly correlates with positive organizational outcomes (e.g., better attendance, better performance, and more organizational citizenship behavior) and personal outcomes (i.e., less self-reported stress and less work–family conflict). Furthermore, Addae et al. (2008) found role conflict and role ambiguity (respectively) negatively related to affective organizational commitment in their sample of public sector employees.

Turnover intentions. Turnover intentions refer to an individual's conscious desires and plans to leave an organization (Tett & Meyer, 1993). These intentions involve the final stages of withdrawal where one is voluntarily terminated (Tett & Meyer, 1993).

Turnover intentions can lead to organizations to increase spending on selection and training, and affect work attitudes (Tett & Meyer, 1993). More specifically, role conflict and role overload appraised as hindrances positively related with turnover intention (Webster et al., 2011). Wunder et al. (1984) found a significant indirect path between role stressors and employee turnover through job satisfaction, organizational commitment, and intention to leave amongst managerial-professionals at a U.S. manufacturing company; this was consistent with earlier findings by Rizzo et al. (1970).

Job satisfaction. Job satisfaction refers to the degree toward which an individual feels positively or negatively about his or her job (Kim, Leong, & Lee, 2005; Yousef, 2002). Researchers (e.g., Babakus, Cravens, Johnston, & Moncrief, 1996; Bedeian & Armenakis 1981; Lambert, Hogan, Paolina, & Clarke, 2005) have found that role ambiguity, role conflict, and role overload negatively correlate with job satisfaction. However, in a study of retail workers, Babin and Boles (1998) found that although role conflict negative related with job satisfaction, role ambiguity had no significant relationship with job satisfaction. Babin and Boles' study suggests a need to further examine the relationship between role stressors and job satisfaction. A meta-analysis performed about a decade later revealed that hindrance stressors negatively related with job satisfaction, whereas challenge stressors had no significant relationship with job satisfaction (Podsakoff et al., 2007). Although role conflict and role ambiguity have been previously classified as hindrance stressors (Cavanaugh et al., 2000), considering Podsakoff et al.'s (2007) findings, Babin and Boles' inconsistent findings with other research could be due to an individual's differential appraisal of a stressor as a challenge or a hindrance. In the case of the retail workers, role ambiguity may have been more of a

challenge instead of a hindrance resulting in a non-significant relationship with job satisfaction. Therefore, the current study measures how the differential appraisal (i.e., challenge and hindrance) of role stressors affects job satisfaction.

Theoretical Framework

The current study utilizes Lazarus and Folkman's (1984) Transactional Model of stress to create the main theoretical framework. It also draws on elements from Cavanaugh and colleagues (2000) challenge and hindrance model in order to conceptualize the potential consequences on the stressor-strain relationship when an individual appraises a stressor as a challenge or a hindrance. The Transactional Model of stress (Lazarus & Folkman, 1984) is the foundation for all subsequent models of the stressor-strain relationship, including the challenge and hindrance model which focuses on the effects of positive stressors (i.e., challenge stressors) and negative stressors (i.e., hindrance stressors) on strains. The rationale for utilizing the Transactional Model to conceptualize the relationship between stressors and strains will be presented first and then followed by the rationale for not utilizing alternative models of the stressor-strain relationship.

The Transactional Model of stress (Lazarus & Folkman, 1984) presents cognitive appraisals as a crucial part of the stressor-strain process. Individuals' perceptions of events shape their emotional and behavioral responses that, in turn, predict their responses to stressors. For example, one can perceive an event as leading to eustress (i.e., a positive psychological response) or as leading to distress (i.e., a negative psychological response). The emotional response affects whether one interprets the event as a challenge or a hindrance (Lazarus et al., 1985). Stressors are not only harmful stimuli. They are

events or constraints that when appraised as harmful, threatening, or challenging can lead to strain (Lazarus, 2007). However, not all stressors are bad (Lazarus 2007) and can ready an individual to anticipate and cope with demands (Lazarus, 1990).

Cognitive appraisal comprises of two types of appraisals: primary appraisal and secondary appraisal. Primary appraisal is the assessment of a stressor as (a) causing harm/loss (i.e., something that has already occurred), (b) a threat (i.e., the possibility of harm in the future), or (c) challenge to goal attainment (Lazarus & Folkman, 1984). The majority of research (e.g., Bakker & Sanz-Vergel, 2013; Cavanaugh et al., 2000) has combined the assessment of a stressor as causing harm/loss and a threat into the term “hindrance.” Lazarus (2001) added that individuals search for positive elements during a demanding situation, or the benefit of a stressor, when assessing a stressor. The appraisal of a stressor as a benefit is considered to be the same as the appraisal of a stressor as a challenge. The current study examines two forms of primary appraisal: hindrance appraisal and challenge appraisal.

Secondary appraisal refers to the assessment of what can be done about the threat. In this stage, the individual evaluates the availability of coping resources (Lazarus & Folkman, 1984) and employs the appropriate strategies. The individual’s employment of a coping strategy either focuses on managing a stressor (i.e., problem-focused coping) or on regulating one’s own emotions to a stressor (i.e., emotion-focused coping; Lazarus, 1999). It is important to note that while the term “primary” and “secondary” can easily be mistaken for one form of appraisal being less important than the other or occurring at different times by reason of each form of appraisal being a part of a “common” appraisal

process, the difference is in the content of the appraisal (Dewe, O'Driscoll, & Cooper, 2012; Lazarus, 1999).

Through the appraisal process, an individual unconsciously or consciously ponders if the stressor(s) is a threat or not (Lazarus & Folkman, 1984; Lazarus et al., 1985). This contemplation (whether unconscious or conscious) is part of the stressor appraisal process, whereby a person (1) determines if the stressor is a threat or benign, and if determined to be a threat (2) the person determines if he or she has the coping resources to deal with it (Lazarus, 1990). Thus, the appraisal process refers to an individual's evaluation of a stressor which influences the individual's well-being (Lazarus & Folkman, 1984; Sonnentag & Frese, 2003). Webster et al. (2011) found a partial mediation of the primary appraisal process on the stressor-strain relationship, suggesting that appraisal may be a necessary process component that signals how one would cope with stressors in pursuance of mitigating strains. If a person is unable to cope with the stressor, particularly one that is perceived to be a threat, it can directly or indirectly lead to outcomes such as anxiety, low organizational commitment, and high turnover intention (Addae et al., 2008; Eatough et al., 2011; Glazer & Beehr, 2005; Spector & Jex, 1991).

Alternative Theories

Despite the current study's focus on the appraisal of stressors as challenges and/or hindrances and the extent to which an individual's appraisal moderates the stressor-strain relationship, there are other theories that address components embedded within the main theoretical foundation. Such additional theories are (1) Karasek's (1979) job demand-control model, (2) Johnson and Hall's (1988) job demand-control-support

model, (3) Demerouti et al.'s (2001) job demand-resource model, (4) Hobfoll's (1989) conservation of resource theory, and (5) Cavanaugh et al.'s (2000) challenge and hindrance model. These alternative theories are presented to provide additional support for the model utilized in this study.

Job Demands-Control Model and Job Demands-Control-Support Model.

Karasek's (1979) Job Demands-Control (JDC) model forwards the idea that having a sense of control or autonomy over work-related decisions moderates when stressors will lead to strains. When job demands are high, strains are greater for people who have little control over their work experiences. Job demands are "...psychological stressors involved in accomplishing the workload" (Karasek, 1979, p. 291). Job control (originally decision latitude) is a cognitive construct based on "...the extent to which an employee has authority to make decisions and utilize skills concerning the job" (Dawson, O'Brien, & Beehr, 2015, p. 2).

When the JDC model is properly tested (e.g., Beehr, Glaser, Canali, & Wallwey, 2001), however, neither job control nor autonomy mitigate the negative effects of high stressors on strains. Moreover, Boswell et al.'s (2004) study on a non-executive sample found a nonsignificant interaction between job control and challenge stressors for all the measured dependent variables (i.e., loyalty, withdrawal behavior, job search, and intention to quit) except when participants felt a high level of job challenge (i.e., provided job enrichment and feelings of possible gain). This suggests that higher perceptions of stressors as challenges are needed for job control to have a significant moderating effect on outcome variables. These findings could be due to the assumption that when an individual experiences challenge stressors they possessed a level of control over a

situation and the opportunity for personal growth (Lazarus & Folkman, 1984).

Regardless, Boswell and colleagues' findings draw attention to the subjective nature of control and how individuals appraise and value control.

Johnson and Hall (1988) extended the JDC model by adding social support to the model. The main tenant of their Job Demand-Control-Support (JDCS) model is the buffering hypothesis, which proposes a three-way interaction effect between demands, control, and support. High levels of job control and support reduce the strength of the positive correlation between demands and strain. It is the combination of job control and social support that facilitates coping and provides protection from illness and strain. Several researchers have tested these theories (e.g., Beehr & Drexler, 1986; Dwyer & Ganster, 1991; Schaubroeck & Fink, 1998; van der Doef & Maes, 1999), but few tested it precisely as it was stipulated in Johnson and Hall's study.

When the JDCS model was properly tested (e.g., Rodríguez, Bravo, Peiró, & Schaufeli, 2001), the three-way interaction between job demands, control, and support yielded nonsignificant variance in strain. Dawson et al. (2015) surmised that the operationalization of job demands as only challenge stressors, as opposed to both challenge stressors and hindrance stressors, explain Rodríguez et al.'s (2001) nonsignificant result. Dawson and colleagues' study on full-time U.S. workers found significant buffering effects of increased control and support, but the effect was only found for hindrance stressors (i.e., interpersonal conflict, role conflict, and organizational conflict) and not for challenge stressors. Thus, they propose to change the model to "job hindrance-control-support." Ergo, hindrance stressors were found to have a stronger negative relationship with job-related anxiety and physical symptoms when perceived

levels of job control and support were high, thereby demonstrating a buffering relationship when employees perceived higher levels of control and support (Dawson et al., 2015). Hindrance stressors (i.e., stressors that seem unmanageable and exceeding one's abilities and resources; Lazarus & Folkman, 1984) coupled with social support may increase an individual's self-efficacy therefore making a stressor seem more manageable. Even in light of these findings, the JDCS model, like the JDC model, does not consider individual differences and the subjective nature of appraisal (Jex, 2002).

The JDC model and the JDCS model relate to the goal of this study in so far as they postulate there are variables that moderate the stressor-strain relationships; it can be argued that perceived control and social support contribute to the appraisal of a stressor as a challenge (if believed to be high) or a hindrance (if perceived to be low). However, the major issue lies in the lack of consideration for individual difference, such as how an individual values control and social support (Dewe et al., 2012). An individual may find high levels of control to be a hindrance when demands are high due to not knowing how or what to do in order to effectively complete a task, whereas another individual would find high levels of control to be a challenge when demands are high due to the autonomy to complete demands how they see fit. In light of this study's goal to examine the subjective appraisal process of stressors, the JDC model and the JDCS model do not adequately depict the focal relationships as the Transactional Model does, which focuses on the subjective appraisal process on the stressor-strain relationship.

Job Demands-Resources Theory. Demerouti et al. (2001) developed the Job Demands-Resources (JD-R) model, which is a refinement of the JDC and the JDCS models. They postulate that job demands (e.g., overload) and job resources (e.g.,

autonomy, feedback, and social support) affect how employees cope with stressors and therefore job resources mitigate the negative consequences of stressors on strains. Researchers (e.g., Bakker, et al., 2005; Schaufeli et al., 2009) have found evidence of this relationship in education. When an employee experienced high job demands with low job resources there was a negative relationship with organizational commitment and a positive relationship with turnover intentions. However, employees expressed positive work attitudes (e.g., enjoyment and commitment) when job demands and resources were both high (Bakker, van Veldhoven, & Xanthopoulou, 2010). This finding suggests that attitudes are largely affected by the resource to demand ratio.

Similar to the JDC model, the JD-R model lacks consideration of the subjective nature of individuals appraising job demands and job resources. Studies on Dutch call center agents and Belgian police officers (van den Broeck, de Cuyper, de Witte, & Vansteenkiste, 2010) and nurses in The Netherlands (Bakker & Sanz-Vergel, 2013) showed hindrance demands to have a greater correlation to negative outcomes (i.e., increased exhaustion and decreased vigor, work engagement, and flourishing) than challenge demands. However, neither study measured the subjective nature appraising job demands and job resources nor the environmental differences of each situation.

Lazarus and Folkman (1984) suggest that when stressors are perceived to be hindrances they exceed personal abilities and/or resources and create obstacles and threats to attaining goals. In contrast, stressors perceived as challenges test the limits of an individual's ability or personal resources, but do not exceed his or her abilities or personal resources; this provides opportunities for growth. If an individual perceives job demands to have little to no effect on his or her well-being, that person may be more

inclined to see the situation as non-threatening (Lazarus & Folkman, 1984). Thus, the potential costs and/or benefits of various demands and resources on the individual's well-being affect the primary appraisal of the situation as a challenge or a threat (Webster, Beehr, & Christiansen, 2010).

Although the JD-R model does relate to the goal of this study through its consideration of how variables (including the job demands and resources) moderate the stressor-strain relationship, it does not account for the value or importance that an individual gives to a demand and/or resource (Hobfoll, 1989; Lazarus, 1990; Lazarus & Folkman, 1984). Hence, the current study utilizes the Transactional Model as its main framework to account for individual's subjective appraisal of stressors in his or her given environment.

Conservation of Resources Theory. According to Conservation of Resources (COR) theory, individuals strive to protect, maintain, and accumulate resources that are of value to themselves (Hobfoll, 1989) and help them to navigate life's demands and challenges (Dewe et al., 2012). Hobfoll (1989) postulates that an individual experiences strain when there is: (1) actual or perceived threat to resources or (2) inadequate gain of resources compared to the required investment. This creates two competing tenets: resource conservation and resources acquisition. Resource conservation suggests that a disproportionate amount of resources lost with resources gained results in strain (Hobfoll, 1989). Individuals are less likely to invest resources when potential gain seems improbable due to the potential loss of resources. Resource acquisition proposes "...people must invest resources in order to protect against resource loss, recover from losses, and gain resources" (Hobfoll, 1989, p. 63). Hobfoll also argues for the

incorporation of objective measures of “actual” fit (e.g., an individual possessing necessary resources and abilities) instead of an individual’s appraisal of fit. One would objectively measure “actual” fit by examining a particular sample’s appraisal of fit in the environment (Lazarus, 2001).

The COR theory relates to the goal of the current study because of its proposed idea of resource conservation. Resource conservation could explain why, when a stressor is simultaneously appraised as a challenge and as a hindrance, the appraisal of the stressor as a hindrance mitigates the positive effect of appraisal as a challenge (e.g., Hollebeek & Haar, 2012; Podsakoff et al., 2007; Rodríguez et al., 2013).

COR theory has notable similarities to the Transactional Model in the simultaneous consideration of the environment and individual’s cognitions. However, the COR theory does not focus on why individuals appraise stressors in particular ways and, in fact, criticizes the Transactional Model for overemphasizing personal appraisal (Dewe et al., 2012). Because the current study’s proposed relationships are rooted in individual appraisal, the COR theory’s lack of attention and importance on individual appraisal makes the Transactional Model a better fit for this study.

Challenge and Hindrance Model. The challenge-hindrance model expands on Selyé’s (1973, 1975) distress and eustress framework of stress by recognizing that some stressors may be perceived negatively and others positively. Distress refers to a noxious response to stressors that are perceived as potentially harmful and damaging (Lazarus, 1993; Selyé, 1993). Eustress refers to “...a positive psychological response to a stressor as indicated by the presence of positive psychological states” (McGowan et al., 2006, p.

93). Its manifestation does not indicate there is no distress, but that there are stressors which are perceived positively.

Originally, research focused mainly on the negative effects of stressors on strains and neglected the positive effects some stressors have on well-being and work-related attitudes. By drawing from the Transactional Model of stress regarding how an employee's perception of a stressor (i.e., as a challenge or a hindrance) affects the stressor-strain relationship, Cavanaugh et al. (2000) analyzed the dichotomy of positive and negative stress by operationalizing them as challenge and hindrance stressors, respectively. Challenge stressors refer to "work-related demands or circumstances that, although potentially stressful, have associated potential gains for individuals" (Cavanaugh et al., 2000, p. 68). Some examples of challenge stressors are: job overload, time pressure, and high levels of responsibility (Cavanaugh et al., 2000). In contrast, hindrance stressors do not involve gains but instead "tend to constrain or interfere with an individual's work achievement and ... do not tend to be associated with potential gains for the individual" (Cavanaugh et al., 2000, p. 68). Examples of hindrance stressors include: organizational politics, red tape, and concerns about job security (Cavanaugh et al., 2000).

Cavanaugh and colleagues (2000) examined whether self-reported work stress led to different outcomes depending upon the type of stressors being evaluated. To do this, they obtained survey materials from previous studies (e.g., Bretz, Boudreau, & Judge, 1993; Judge, Boudreau, & Bretz, 1994) on self-reported stress and rated each survey item as describing a challenge stressor, a hindrance stressor, or neither/both. They removed the items categorized as "neither/both" and the resulting 11 items were used in the study.

After validating the 11-items, they found that challenge and hindrance stressors related to work outcomes, but in opposite directions: Challenge stressors positively correlated with job satisfaction and hindrance stressors negatively correlated with job satisfaction. To further examine these results, Cavanaugh and colleagues obtained data from a sample of 1,388 managers used in a previous study (Bretz et al., 1993), which had shown nonsignificant findings, and reanalyzed the data using the challenge and hindrance stressor categorizations. They found significant correlations that were consistent with the broader study results. These findings support the notion that challenge and hindrance stressors should not be considered a unidimensional construct.

LePine and colleagues (2005) provided more evidence for the challenge-hindrance model. In their meta-analysis, they examined the relationships of challenge and hindrance stressors with strains, motivation, and performance. They found evidence that, even though challenge and hindrance stressors had a nontrivial relationship with each other, there were differential relationships between the type of stressor and the outcome.

Because the Transactional Model asserts that coping resources mitigate the negative consequences of stressors, the findings of the LePine et al. (2005) study contradict this notion by indicating that the type of stressor alone moderates the effect. However, the studies included in the meta-analysis of LePine and colleagues imposed a *priori* classification of stressors instead of measuring participants' appraisals of the stressors. Because of this, further research is needed to determine if these effects remain when participants appraise the stressors.

In a study of Belgian police officers, van den Broeck et al. (2010) argued that, while they found a positive moderate correlation between hindrance stressors and

challenge stressors suggesting shared features, it is still important to use separate assessments of these constructs because of the distinct and differential effect between the type of stressor and the outcome. Therefore, the current study utilizes a multidimensional approach (i.e., two separate scales for appraisal of stressors as challenges and hindrances) to analyze the differential effects of challenge stressors and hindrance stressors.

Differentiated outcomes of appraisal. Previous research classifies challenge stressors as leading to positive emotions (Cavanaugh et al., 2000; LePine et al., 2005; Rodell & Judge, 2009) and hindrance stressors as causing negative emotions (Widmer, Semmer, Kälin, Jacobshagen, & Meier, 2011). Therefore, it is postulated that individuals experiencing hindrance stressors believe no amount of effort will help them achieve their goals (Cavanaugh et al., 2000) and this prompts behaviors that are intended to protect oneself from strain (Dawson et al., 2015).

Utilizing a non-executive sample from a western U.S. university, Boswell et al. (2004) found hindrance stressors were associated with less loyalty, increased job search, and intent to quit, while challenge-related stressors were associated with enhanced loyalty and less withdrawal. Rodell and Judge's (2009) study of full-time employees in the southeastern U.S. from a broad range of industries found that both forms of stressors were negatively related to anxiety and, through anxiety, indirectly related to organizational citizenship behavior. Thus, overall challenge and hindrance stressors impact discretionary behaviors.

In a study of full-time alumni from a U.S. southwestern university, Culbertson et al. (2010) found hindrance stressors mediated the relationship of affect and loyalty to work family-conflict. However, they did not find challenge stressors to have a significant

mediating relationship with loyalty and work-conflict facilitations (Culbertson et al., 2010). Webster et al. (2010) found hindrance stressors to have a negative indirect relationship with citizenship behavior through physical strains (e.g., eye strain and backache) and job satisfaction.

The present study contends that challenge stressors do not facilitate positive perceptions of multiple roles, but instead (similarly to perceived hindrance stressors) contribute to role conflict. Challenge stressors positively relate to job satisfaction and negatively relate to job search (i.e., intentions to leave), while hindrance stressors have the opposite effect (Cavanaugh et al., 2000). In their meta-analysis, Podsakoff and colleagues' (2007) found that challenge stressors (previously classified by Cavanaugh et al., 2000) positively related with job satisfaction and organizational behavior, and through these effects have an indirect negative relationship with turnover intentions, turnover, and withdrawal behavior. They found an opposite relationship for hindrance stressors. Additionally, even though Webster et al. (2010) found hindrance stressors to positively relate to physical strains, challenge stressors did not have a significant relationship to physical strains. Such findings reinforce the need to account for the differential nature of a stressor (i.e., as a challenge or a hindrance) because of the inverse nature of the relationship between the type of stressor and the outcomes.

Caution interpreting findings. The challenge-hindrance model postulates that stressors are appraised as either challenges or hindrances, but not as both. Furthermore, the model neglects to take into consideration the subjective nature of an individual's appraisal of stressors as challenges and/or hindrances. The Transactional Model,

however, asserts that cognitive appraisal of stressors is a crucial part of the stressor-strain process.

Cavanaugh and colleagues' (2000) challenge-hindrance model exemplify this issue by operationalizing specific stressors as either challenge stressors or hindrance stressors. However, when *a priori* classifications of stressors were not imposed (i.e., by allowing respondents to make separate appraisals for each stressor measure), stressors positively related to both challenge and hindrance appraisals of the associated stressors (e.g., Bakker & Sanz-Vergel, 2013; Webster et al., 2011). These inconsistent findings suggest that classifying a stressor exclusively as a challenge or a hindrance is overly simplistic.

Webster and colleagues (2011) tested the challenge-hindrance model's previous operational assumptions of certain stressors (specifically role stressors) as either a challenge or hindrance by having (nonteaching employees at a Midwestern university in the U.S.) participants respond to a challenge appraisal item and a hindrance appraisal item for each stressor measure. They found that stressors appraised as challenges and hindrances, were positively related to physical strain. Additionally, stressors appraised as hindrances were positively related to psychological strain. They also found a nonsignificant relationship between type of appraisal and work-related outcomes (i.e., job dissatisfaction and turnover intentions).

Bakker and Sanz-Vergel (2013) assessed the extent that nurses perceived work pressures and emotional demands as challenges or hindrances. To do this, they asked nurses to indicate the extent to which they perceived work pressure and emotional demands as hindrances or as challenges. The results indicated that work pressure was

perceived as a hindrance more than as a challenge and emotional demands were perceived more as a challenge than a hindrance. These findings contradict previous findings (e.g., LePine et al., 2005) that work pressure is *always* a challenge (Bakker & Sanz-Vergel, 2013). Bakker and Sanz-Vergel surmised that the occupational sector of the sample be considered when researchers classify job demands/stressors as a challenge or a hindrance. Thus, per their advice, since the current sample is not job or context specific, *a priori* classification is not prudent. These findings also call into question if it is overly simplistic to impose classification of stressors as either challenge or hindrance stressors. While Rodell and Judge's (2009) results showed that both challenge and hindrance stressors have a significant negative relationship with counterproductive behavior, they cautioned against the oversimplification of these stressors and expressed the need to further examine if researchers should impose *a priori* classifications of challenges or hindrances.

Even though the challenge-hindrance model veers from the Transactional Model, it draws attention to the need for conducting further research on: (1) the positive and negative effects of a stressor, (2) the moderating effects that individuals' cognitive appraisal of a stressor (i.e., challenge and/or hindrance) may have on the stressor-strain relationship, and (3) the possible interaction effect of an individual's appraisal of a stressor as both a challenge and a hindrance. To date, no research has focused on the lattermost need.

Subjective appraisal of stressors. Rodríguez et al. (2013) aimed to produce and validate a multidimensional questionnaire that would represent a set of demanding situations that could be subjectively appraised by an individual as both distress and

eustress the Valencia Eustress-Distress Appraisal Scale (VEDAS). Utilizing Williams and Cooper's (1998) previously validated Pressure Management Indicator (PMI) as a basis for their questionnaire items, items were appraised on two six-point ordinal scales (i.e., distress and eustress). Using a sample of predominately female Spanish social care professionals, Rodríguez et al. (2013) instructed each participant to rate stressful situations as eustress and distress (note: their instructions stated that each situation could be both eustress and distress in order to avoid priming the participants).

In a six-month test-retest, Rodríguez et al. (2013) found high internal consistency reliability of their measure (distress appraisal: $\alpha = .91$ and eustress appraisal: $\alpha = .89$) and validity of their test in relation to other surveys (e.g., burnout, engagement, satisfaction, and general psychological health). Distress appraisal positively correlated with burnout, but negatively correlated with satisfaction and general psychological health. Eustress appraisal also positively related with engagement, but negatively correlated with burnout.

Rodríguez et al.'s (2013) study provides empirical evidence that researchers need to consider that participants may appraise stressors simultaneously as challenges and as hindrances (as proposed in the Transactional Model). Their results also allude to a possible three-way interaction on how a stressor is appraised by participants. For example, when a situation is appraised by an individual as both a distressor and a challenge, the distress appraisal could hamper the positive effects of challenge appraisal so that the eustress appraisal may not have a positive effect (i.e., increased organizational commitment, lower anxiety, or turnover intentions) for the organization or the individual. Thus, it is reasonable to postulate that if a stressor is perceived as a hindrance and as a challenge, then the positive effects associated with a challenge stressor would be reduced

by the negative effects of a hindrance stressor. Conversely, if stressors are perceived as a low hindrance and a high challenge, the negative effects associated with hindrance stressors would be mitigated.

Given the possible interaction between perceiving a stressor as both a hindrance and a challenge, the current study proposes a three-way interaction effect on strains. Thus, like Rodríguez et al. (2013), this study assesses the possibility of stressors being appraised as a hindrance and a challenge. It does not impose a general heuristic of stressors as being more of a challenge or more of a hindrance, but instead has respondents impose their own appraisals of stressors as hindrances and challenges.

Interaction effect. According to Hollebeek and Haar's (2012) two sample study on New Zealand metropolitan employees (Study 1) and indigenous Maori employees (Study 2), challenge stressors negatively correlated with job satisfaction. They also found that hindrance stressors and challenge stressors had a significant interaction effect with employee loyalty. In Study 1, on blue collar workers, employee loyalty was at its highest when there were high levels of challenge stressors and low levels of hindrance stressors. However, when there were low levels of challenge stressors and high levels of hindrance stressors employee loyalty was at its lowest. In Study 2, when challenge stressors and hindrance stressors were both low, employee loyalty was at its highest. In both samples, respondents who reported having high levels of hindrance stressors had a weaker overall increase in employee loyalty than those with high levels of challenge stressors; this finding supports an interaction effect.

In light of Hollebeek and Haar's (2012) findings, the current study will examine the interaction effect of role stressors appraised as challenges, hindrances, both, or neither

on psychological strains and organizational outcomes. Thus, the current study postulates that when both challenge stressors and hindrance stressors are appraised as low there will be weaker negative outcomes (i.e., lower anxiety, lower tedium, higher general well-being, higher organizational commitment, lower turnover intentions, and high job satisfaction). In comparison, when stressors are appraised as low challenge and high hindrance, there will be stronger relationship with negative outcomes (i.e., higher anxiety, higher tedium, lower general well-being, lower organizational commitment, high turnover intentions, and lower job satisfaction).

Research Summary and Goals

Because people perceive stressors differently, they will also differ in the extent to which they will experience strains (if any). For example, some people could appraise a stressor as a hindrance that prevent them from attaining a goal, thus leading to strains (Lazarus et al., 1985), whereas other people might appraise the same stressor as a challenge, thus having little (deleterious) effects on strains.

Because the transactional framework recognizes that aspects of individuals' subjective appraisal of situations may moderate when stressors relate to strains, the current study utilizes this framework above all others. Further, this study will assess appraisal of job demands and stressors differently while trying to assess if there are any similarities for specific job demands. The value of the Transactional Model is that it purports cognitive processes as a linchpin between stressors and strains. According to the Transactional Model of stress, Lazarus and Folkman (1984) propose that stressors lead to strains through appraisal. In the JDC model, Karasek (1979) proposes that perception of one's situation as under control is a cognitive construct and this cognitive construct

mitigates the impact that the perception of a stressor has on strains. Additionally, Cavanaugh et al. (2000) asserts that stressors can be both positive and negative and this causes differential outcomes on the individual and the organization. Taking both theoretical perspectives into consideration, this study will examine the appraisal of stressors (i.e., as a challenge and a hindrance) as a moderator variable in the relationship between perceived stressors and strains.

Furthermore, Karasek (1979) found that low control has negative consequences, and Demerouti et al. (2001) contend that having resources mitigates the negative effects of stressors on strains. Thus, the current study will test if a positive appraisal of stressors interacts with perceived stressors and buffers the negative implications of perceived stressors on strains. Finally, drawing on the first principle of COR theory, which states resource losses are more salient than resource gains (Hobfoll, 1989), and taking into consideration that appraising a stressor as hindrance is a form of resource loss, it is expected that the benefits of appraising stressor as a challenge will be reduced when also appraising it as a hindrance.

In short, the present study has four aims: (1) to examine the relationships between role stressors on strains, (2) to examine if appraisal of stressors as challenges mitigates the deleterious consequences of stressors on strains, (3) to examine if appraisal of stressors as hindrances exacerbates the deleterious consequences of stressors on strains, and (4) to examine how the appraisal of stressors as challenges and hindrances relate to strains. The study hypotheses begin with the expected relationship between stressors and strains and then extend to the more complex two-way and three-way interaction effects.

Hypotheses

Hypothesis 1. Role stressors will significantly correlate with strains and outcomes.

Psychological strains.

- a:* Role stressors (each of i. role ambiguity, ii. role conflict, and iii. role overload) will positively relate with anxiety.
- b:* Role stressors (each of i. role ambiguity, ii. role conflict, and iii. role overload) will negatively relate with tedium.
- c:* Role stressors (each i. role ambiguity, ii. role conflict, and iii. role overload) will negatively relate with general well-being.

Organizational outcomes.

- d:* Role stressors (each of i. role ambiguity, ii. role conflict, and iii. role overload) will negatively relate with affective organizational commitment.
- e:* Role stressors (each of role ambiguity, ii. role conflict, and iii. role overload) will positively relate with turnover intention.
- f:* Role stressors (each of i. role ambiguity, ii. role conflict, and iii. role overload) will negatively relate with job satisfaction.

Hypothesis 2. Hindrance appraisal and challenge appraisal of each stressor will moderate the extent to which a role stressor relates to psychological strains (i.e., anxiety, tedium, and general well-being) and organizational outcomes (i.e., affective commitment, turnover intention, and job satisfaction).

Psychological strains.

a: When a stressor is perceived as a hindrance, the positive relationship between the role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) and anxiety will be stronger than when it is not appraised as a hindrance.

b: When a stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is perceived as a challenge, the effects of each role stressor on anxiety will not differ from when they are not perceived as challenges.

c: When a stressor is perceived as a hindrance, the positive relationship between the role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) and tedium will be stronger than when it is not appraised as a hindrance.

d: When a stressor is perceived as a challenge, the positive relationship between the role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) and tedium will be weaker than when it is not appraised as a challenge.

e: When a stressor is perceived as a hindrance, the negative relationship between the role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) and general well-being will be stronger than when it is not appraised as a hindrance.

f: When a stressor is perceived as a challenge, the negative relationship between the role stressor (each of i. role ambiguity, ii. role conflict, and iii. role

overload) and general well-being will be weaker than when it is not appraised as a challenge.

Organizational outcomes.

g: When a stressor is perceived as a hindrance, the negative relationship between the role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) and affective organizational commitment will be stronger than when it is not appraised as a hindrance.

h: When a stressor is perceived as a challenge, the positive relationship between the role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) and affective organizational commitment will be stronger than when it is not appraised as a challenge.

i: When a stressor is perceived as a hindrance, the positive relationship between the role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) and turnover intention will be stronger than when it is not appraised as a hindrance.

j: When a stressor is perceived as a challenge, the positive relationship between the role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) and turnover intention will be weaker than when it is not appraised as a challenge.

k: When a stressor is perceived as a hindrance, the negative relationship between the role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) and job satisfaction will be stronger than when it is not appraised as a hindrance.

l: When a stressor is perceived as a challenge, the negative relationship between the role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) and job satisfaction will be weaker than when it is appraised as a challenge.

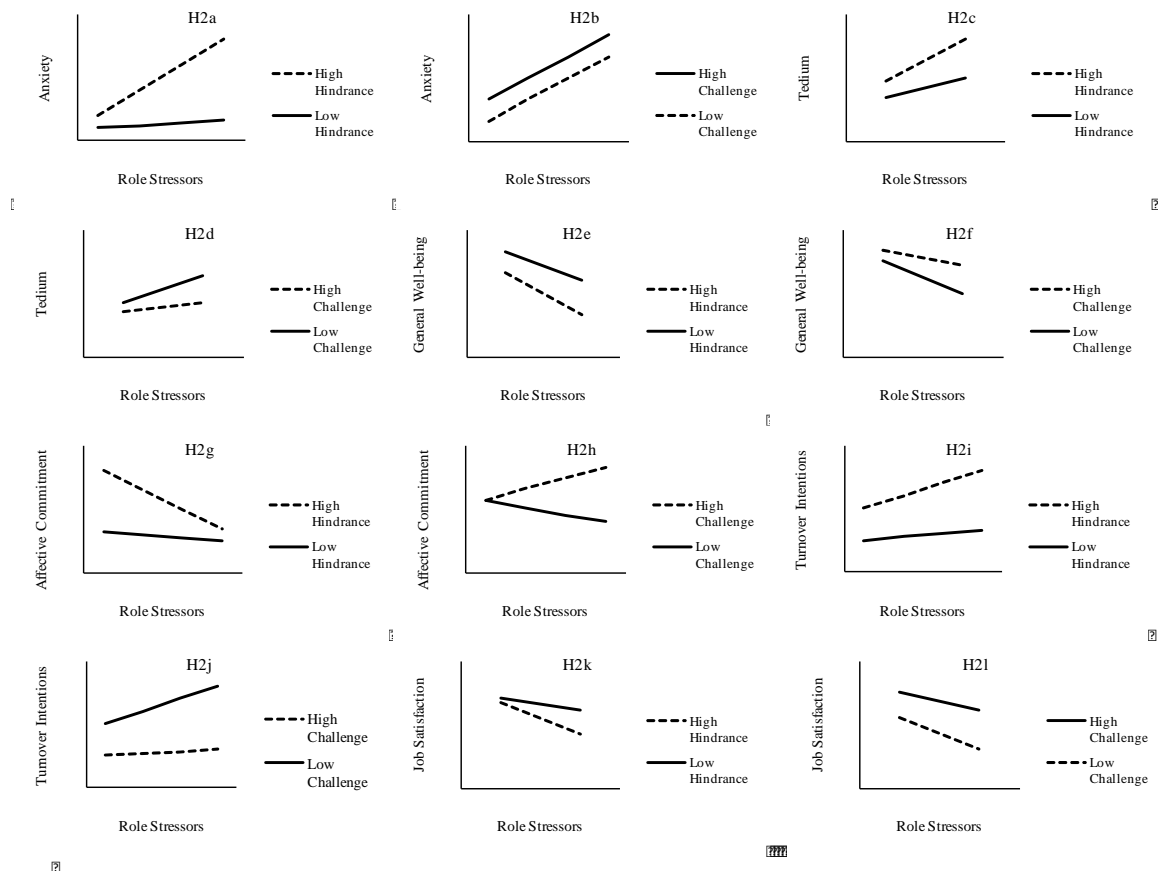


Figure 2. Two-way interaction hypotheses to be tested.

Hypothesis 3. The interaction between each stressor (role ambiguity, role overload, and role conflict) and appraisal of a stressor as a challenge (or a hindrance) will be further moderated by appraisal of a stressor as a hindrance (or a challenge). The expected relationships between increasing role stressors (each of i. role ambiguity, ii. role conflict, and iii. role overload) and individual and organizational outcomes under various appraisal conditions are presented in Table 1.

Table 1

Hypotheses of a Three-way Interaction of Role Stressor Appraisal

Combination	Appraisal		Impact on Outcome Variable will be...
	Hindrance	Challenge	
1 (H _{3a-f})	High	Low	a. Stronger positive relationship with Anxiety b. Stronger positive relationship with Tedium c. Stronger negative relationship with GWB d. Stronger negative relationship with AOC e. Stronger positive relationship with TI f. Stronger negative relationship with JSat
2 (H _{3g-l})	Low	High	g. Weaker positive relationship with Anxiety h. Weaker positive relationship with Tedium i. Weaker negative relationship with GWB j. Weaker negative relationship with AOC k. Weaker positive relationship with TI l. Weaker negative relationship with JSat
3 (H _{3m-r})	High	High	m. Stronger positive relationship with Anxiety n. Stronger positive relationship with Tedium o. Stronger negative relationship with GWB p. Stronger negative relationship with AOC q. Stronger positive relationship with TI r. Stronger negative relationship with JSat
4 (H _{3s-x})	Low	Low	s. Weaker positive relationship with Anxiety t. Weaker positive relationship with Tedium u. Weaker negative relationship with GWB v. Weaker negative relationship with AOC w. Weaker positive relationship with TI x. Weaker negative relationship with JSat

Note. AOC = Affective Organizational Commitment; TI = Turnover Intention; JSat = Job Satisfaction; GWB = General Well-Being.

High hindrance low challenge.

Psychological strains.

a: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised highly as a hindrance, but is appraised as less of a challenge, there will be a stronger positive relationship between the stressor and anxiety than when a stressor is appraised as either both a hindrance and a challenge or a stressor is appraised highly as a challenge and as less of a hindrance.

b: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised highly as a hindrance, but is appraised as less of a challenge, there will be a stronger positive relationship between the stressor and tedium than when a stressor is as either both a hindrance and a challenge or a stressor is appraised highly as a challenge and less of a hindrance.

c: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised highly as a hindrance, but is appraised as less of a challenge, there will be a stronger negative relationship between the stressor and general well-being than when a stressor is appraised as either both a hindrance and a challenge or a stressor is appraised highly as a challenge and less of a hindrance.

Organizational outcomes.

d: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised highly as a hindrance, but is appraised as less of a challenge, there will be a stronger negative relationship between the stressor

and affective organizational commitment than when a stressor is appraised as either both a hindrance and a challenge or a stressor is appraised highly as a challenge and less of a hindrance.

e: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised highly as a hindrance, but is appraised as less of a challenge, there will be a stronger positive relationship between the stressor and turnover intentions than when a stressor is appraised as either both a hindrance and a challenge or a stressor is appraised highly as a challenge and as less of a hindrance.

f: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised highly as a hindrance, but is appraised as less of a challenge, there will be a stronger negative relationship between the stressor and job satisfaction than when a stressor is appraised as either both a hindrance and a challenge or a stressor is appraised highly as a challenge and less of a hindrance.

Low hindrance high challenge.

Psychological strains.

g: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised as a low hindrance, but is appraised highly as a challenge, there will be a weaker positive relationship between the stressor and anxiety than when a stressor is appraised as either both a hindrance and a challenge or a stressor is appraised highly as a hindrance and as less of a challenge.

h: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised as a low hindrance, but is appraised highly as a challenge, there will be a weaker positive relationship between the stressor and tedium than when a stressor is appraised as either both a hindrance and a challenge or a stressor is appraised highly as a hindrance and as less of a challenge.

i: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised as a low hindrance, but is appraised highly as a challenge, there will be a weaker negative relationship between the stressor and general well-being than when a stressor is appraised as either both a hindrance and a challenge or a stressor is appraised highly as a hindrance and as less of a challenge.

Organizational outcomes.

j: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised as a low hindrance, but is appraised highly as a challenge, there will be a weaker negative relationship between the stressor and affective organizational commitment than when a stressor is appraised as either both a hindrance and a challenge or a stressor is appraised highly as a hindrance and as less of a challenge.

k: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised as a low hindrance, but is appraised highly as a challenge, there will be a weaker positive relationship between the stressor and turnover intentions than when a stressor is appraised as either both a

hindrance and a challenge or a stressor is appraised highly as a hindrance and as less of a challenge.

l: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised as a low hindrance, but is appraised highly as a challenge, there will be a weaker negative relationship between the stressor and job satisfaction than when a stressor is appraised as either both a hindrance and a challenge or a stressor is appraised highly as a hindrance and as less of a challenge.

High hindrance high challenge.

Psychological strains.

m: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised highly as both a challenge and a hindrance, there will be a stronger positive relationship between the stressor and anxiety than when a stressor is appraised highly as a challenge and as less of a hindrance or a stressor is appraised as less of a challenge and highly as a hindrance.

n: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised highly as both a challenge and a hindrance, there will be a stronger positive relationship between the stressor and tedium than when a stressor is appraised highly as a challenge and as less of a hindrance or a stressor is appraised as less of a challenge and highly as a hindrance.

o: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised highly as both a challenge and a hindrance, there will be a stronger negative relationship between the stressor and general well-

being than when a stressor is appraised highly as a challenge and less of a hindrance or a stressor is appraised as less of a challenge and highly as a hindrance.

Organizational outcomes.

p: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised highly as both a challenge and a hindrance, there will be a stronger negative relationship between the stressor and affective organizational commitment than when a stressor is appraised highly as a challenge and less of a hindrance or a stressor is appraised as less of a challenge and highly as a hindrance.

q: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised highly as both a challenge and a hindrance, there will be a stronger positive relationship between the stressor and turnover intentions than when a stressor is appraised highly as a challenge and as less of a hindrance or a stressor is appraised as less of a challenge and highly as a hindrance.

r: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised highly as both a challenge and a hindrance, there will be a stronger negative relationship between the stressor and job satisfaction than when a stressor is appraised highly as a challenge and less of a hindrance or a stressor is appraised as less of a challenge and highly as a hindrance.

Low hindrance low challenge.

Psychological strains.

s: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised as low challenge and low hindrance, there will be a weaker positive relationship between the stressor and anxiety than when a stressor is appraised highly as both a challenge and a hindrance or a stressor is appraised highly as a hindrance and as less of a challenge.

t: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised as low challenge and low hindrance, there will be a weaker positive relationship between the stressor and tedium than when a stressor is appraised highly as both a challenge and a hindrance or a stressor is appraised highly as a hindrance and as less of a challenge.

u: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised as low challenge and low hindrance, the negative relationship between the stressor and general well-being will be a weaker negative relationship to when a stressor is appraised highly as both a challenge and a hindrance.

Organizational outcomes.

v: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised as low challenge and low hindrance, there will be a weaker negative relationship between the stressor and affective organizational commitment than when a stressor is appraised highly as both a challenge and a hindrance.

w: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised as low challenge and low hindrance, there will be a

weaker positive relationship between the stressor and turnover intentions than when a stressor is appraised highly as both a challenge and a hindrance or a stressor is appraised highly as a hindrance and as less of a challenge.

x: When a role stressor (each of i. role ambiguity, ii. role conflict, and iii. role overload) is appraised as low challenge and low hindrance, the negative relationship between the stressor and job satisfaction will be a weaker negative relationship to when a stressor is appraised highly as both a challenge and a hindrance.

High Hindrance

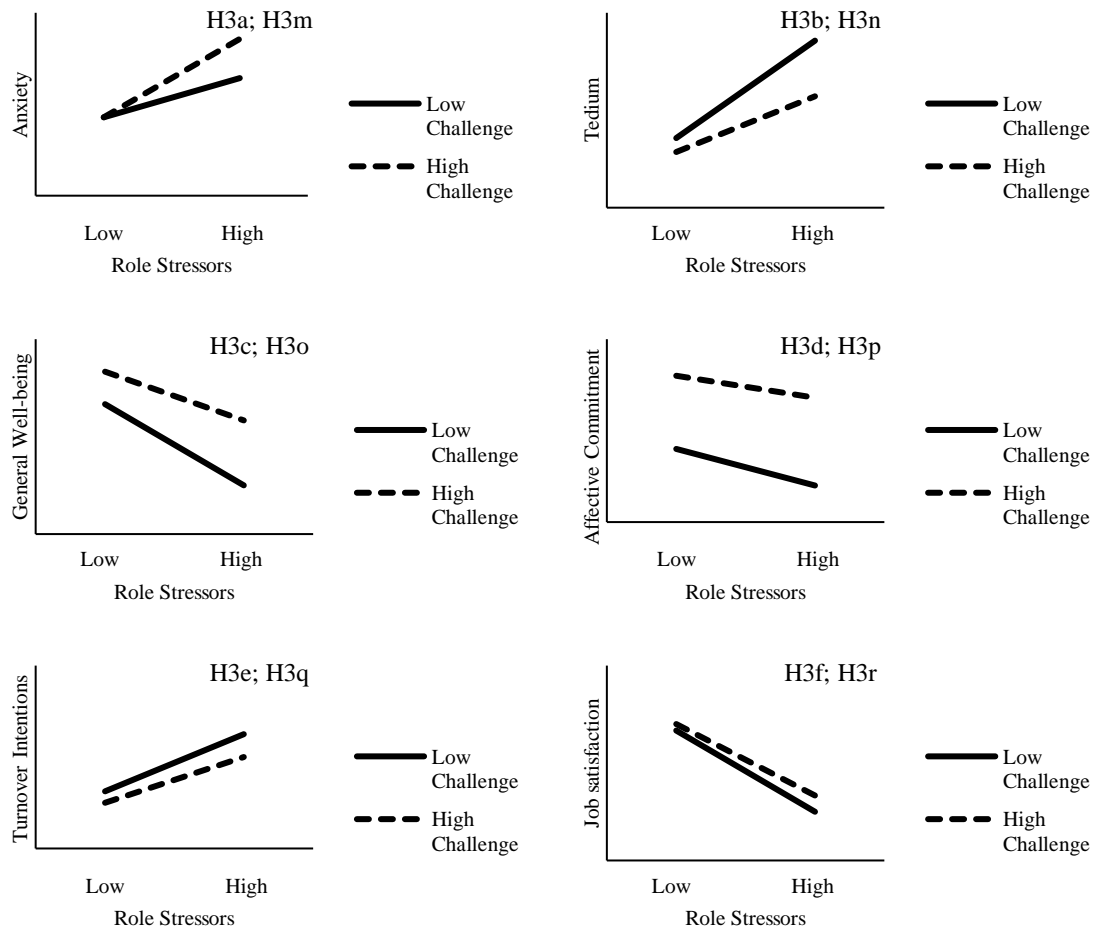


Figure 3. Three-way interaction hypotheses to be tested for stressors appraised as a high hindrance.

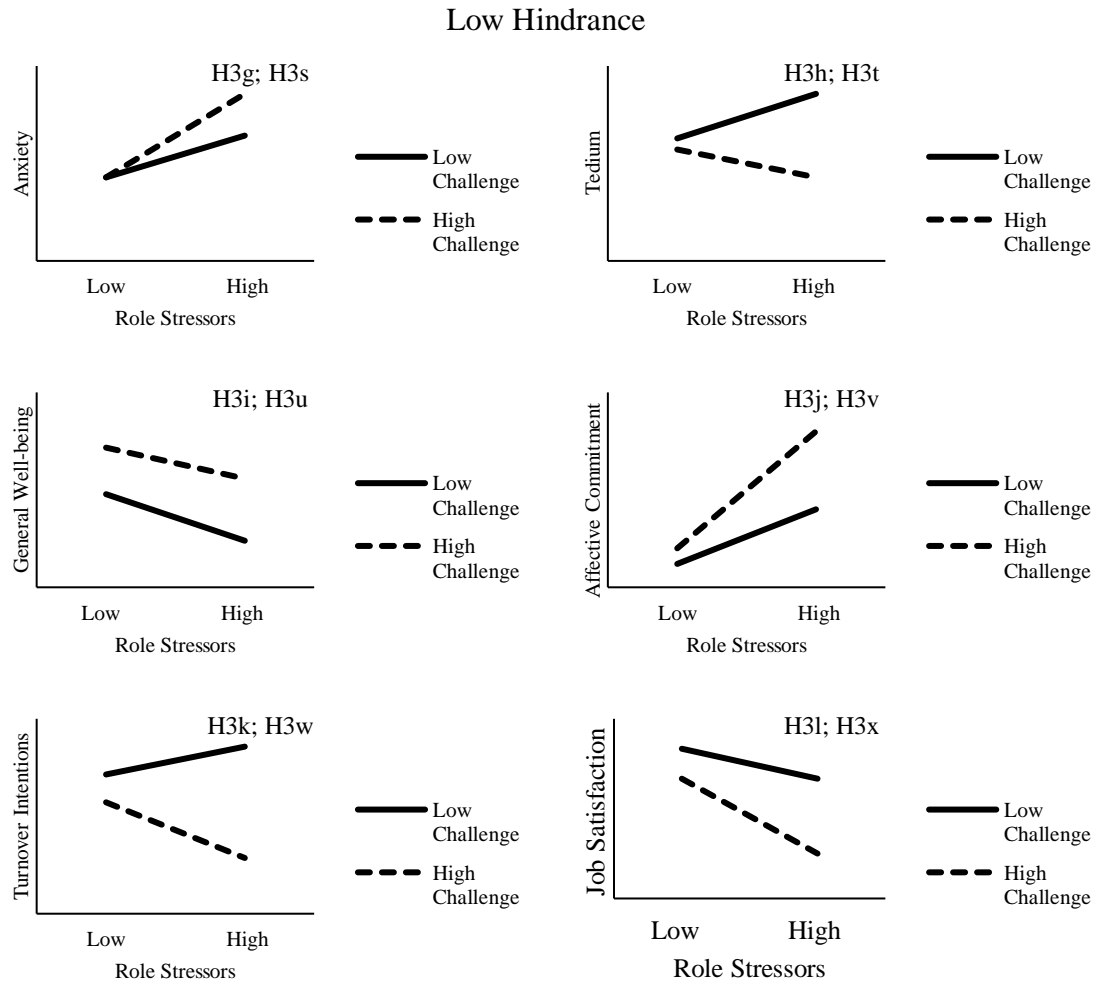


Figure 4. Three-way interaction hypotheses to be tested for stressors appraised as a low hindrance.

METHOD

Data for this study are part of a larger study consisting of three waves of data collection on meaningfulness in life and work stress. The current study presents analyses derived from Time 2, but compares participant demographics from Time 1.

Procedures

Three surveys prepared in Qualtrics, a platform for hosting surveys, was administered via the MTurk platform through TurkPrime. MTurk is an Amazon supported internet marketplace that maintains a community of potential online study participants looking to make some money by completing surveys. Researchers wanting access to online study participants would post studies, also referred to as “Human Intelligence Tasks” (HITs), to be completed by respondents for a fee the researcher establishes (Casler, Bickel, & Hackett, 2013). MTurk provides the opportunity to quickly obtain a more diverse group of participants with a consistent methodology verses using traditional methods with university pools (Buhrmester, Kwang, & Gosling, 2011; Casler et al., 2013). Some researchers (e.g., Buhrmester et al., 2011) contend that results from MTurk are at least as reliable as their counterparts. TurkPrime integrates with MTurk to provide a platform predominantly utilized in the behavioral science field due to its focus of functions (e.g., higher level of control over HITs or greater control over sample representativeness) necessary in behavioral research (Litman, Robinson, & Abberbock, 2016). Utilizing TurkPrime was necessary in order to exclude participants that previously had completed prior HITs and further to include workers in preceding HITs who passed prior attention checks (Litman et al., 2016). Additionally, TurkPrime enable batch emails distribution of surveys to select qualified respondents once the second survey was

activated. All the data collected were anonymous with only participant MTurk IDs from the first survey administration being utilized to contact some of the respondents to complete the subsequent surveys. Below is additional procedural information related to the first two survey administrations.

Survey 1. The first survey was distributed through the MTurk interface, TurkPrime, targeting 320 participants from the United States who would be eligible to continue on to the next survey. Therefore, the first survey was administered to 720 potential participants. For the purpose of this study, the first survey was used as a demographic screener (i.e., working at least 35 hours per week and not self-employed). By employing the first survey, the research team omitted respondents who worked more than 60% of their *paid* work time from home (i.e., outside of a company location), this was important considering the study's focus on generic work role stressors. Further, respondents were not considered for the second survey if they did not successfully complete several attention check questions adequately. For example, adequate responses to the attention questions were "strongly disagree" or "disagree" to the question "I do not pay close attention to the items in survey questionnaires" and "strongly agree" or "agree" to the question "I always answer to the best of my abilities to survey questionnaires." Each respondent was paid 70 cents to complete the first survey. Data collection began early May 2017 and closed at the end of June 2017, about seven weeks total.

Survey 2. The measures evaluated for the present study were drawn specifically from the second survey, however, some demographic information from the first survey was utilized (a complete listing of demographic information utilized can be found in Appendix A) to describe the sample. For this study, to obtain a medium power (.80) and

theoretical significance ($\alpha = .05$) of six outcome variables regressed on three role stressors, two moderating variables, and their interactions, approximately 120 completed surveys would be needed (Cohen, 1990; Cohen, Cohen, & West, 2014; MacCallum, Browne, & Sugawara, 1996). Each respondent was paid \$2.50 for completing the survey. Collection for the second survey started about 5 to 6 weeks after respondents submitted their answers for Survey 1. Survey 2 data collection began mid-May 2017 and ran through early August 2017, lasting approximately 15 weeks.

Participants

Survey 1. Demographic information, such as sex, age, marital status, number of dependents, employment status, and education level, was collected. Additionally, job title, number of years working in present occupation, number of years working in present organization were also ascertained. A summary of the socio-demographical representation of the sample is presented in Table 2.

Of the 720 HITs, 31 (4.3%) did not complete the survey and only 8 (25.8%) of those who did not complete the survey completed the demographics in its entirety. Six hundred and eighty-nine respondents successfully completed the entire survey. Of those 689 respondents, 7.6% were self-employed, 64.4% of the sample worked 35 hours or more per week, 11.5% worked fewer than 35 hours per week, 9.6% were disabled and not able to work, 5.1% were not employed but were looking for work, and 1.2% were not employed and not looking for work. In regard to time worked from home per week, 88.1% worked 60% or fewer of their hours from home. While 49.4% of the respondents who completed Survey 1 were female, only 41.4% of those who did not finish the survey were female. Furthermore, 47.4% of those who completed the survey had a Bachelor's

degree compared to 37.5% who did not have a Bachelor's degree and did not complete the survey. Additionally, of those who completed the survey 75.6% were White/Euro American, 9.2% were Black/African American, and 7.2% were Hispanic, Latino, or of Spanish origin, however, of those who did not complete the survey only 50% were White/Euro- American and 37.5% were Hispanic, Latino, or Spanish origin.

Of the respondents, 79 (11.5%) worked part-time and 445 (54.5%) worked full-time. Of the respondents who indicated they had full-time employment, over half (54.5%) were male. Comparatively, of those who indicated they had part-time employment, 38% were male. Just under one-third (29.3%) of full-time workers' highest academic degree was a high school degree, whereas 51.5% had a Bachelor's degree. In contrast, under half (45%) of part-time workers' highest academic degree was that of a high school degree. Hispanic participants represented 12.8% of the part-time workers, but only 6.5% of the full-time workers. Finally, 27.8% of respondents who worked part-time worked 60% or more of the time from home, whereas 9.2% of respondents who worked full-time worked 60% or more of the time from home.

Of the 720 respondents who responded to the survey, only the 445 respondents worked full-time (i.e., 35 hours per week or more) and completed the survey, but of those respondents, 41 worked from home 60% or more of the time per week and 8 did not have a direct supervisor. Therefore those 49 respondents were not invited to complete Survey 2. Additionally, 32 respondents did not correctly answer the attention check questions (e.g., "My responses to survey questionnaires are truthful") in Survey 1 and were,

therefore, also eliminated. In total, 49.5% of the respondents or 359 respondents from Survey 1 were invited to complete Survey 2.

Of the 359 respondents qualified for Survey 2, 54.9% were male and the average age was 34.3 ($SD = 9.4$) years. The average age was comparative to the full Survey 1 sample with an average age of 34.3 ($SD = 11.2$) years. Over half (51.8%) of the respondents had a Bachelor's degree and 12.8% had a Master's degree. Compared to the Survey 1 full sample, where 42.5% of respondents were single and 34% were married or remarried, 37.9% were single for the respondents that qualified for Survey 2 and 39.3% were married or re-married. Of the respondents qualified for Survey 2, 26.2% worked 41 or more hours per week, nearly 10% more than the full sample of Survey 1 and 30.1% worked in management, professional, or a related field. On average the respondents had worked 8.9 ($SD = 7.3$) years in their occupation and 5.7 ($SD = 6.2$) years at their current company,

Table 2

Socio-demographics for Survey 1

		Survey 1						
Variables		Full ^a <i>N</i> = 720	Finished ^b <i>n</i> = 689	Not Finished ^c <i>n</i> = 31	Full-time/ Part-time ^d <i>n</i> = 524	Full-time ^e <i>n</i> = 445	Part-time ^f <i>n</i> = 79	Survey 2 Eligible ^g <i>n</i> = 359
Finished	Yes	95.7%					100%	
	No	4.3%						
Sex	Male	50.9%	50.6%	58.6%	51.9%	54.4%	38.0%	54.9%
	Female	49.1%	49.4%	41.4%	48.1%	45.6%	62.0%	45.1%
Average Age	<i>M</i>	34.4	34.2	37.5	34.0	34.2	33.1	34.3
	<i>SD</i>	11.2	11.0	14.4	10.1	9.2	13.8	9.4
Education level	High School Degree	34.6%	34.3%	50.0%	31.7%	29.3%	45.0%	27.6%
	Bachelor's Degree	47.2%	47.4%	37.5%	48.9%	51.5%	35.0%	51.8%
	Master's Degree	10.6%	10.7%		11.9%	11.5%	13.8%	12.8%
	Doctorate	2.2%	2.2%		2.3%	1.8%	5.0%	1.7%
	Other	5.4%	5.3%	12.5%	5.2%	5.9%	1.3%	6.1%
Marital Status	Single	42.4%	42.4%	40.7%	41.0%	39.3%	50.6%	37.9%
	Married/Re-married	34.1%	34.6%	22.2%	35.5%	37.5%	24.1%	39.3%
	Living with partner(s)	14.5%	14.4%	18.5%	14.7%	13.9%	19.0%	13.1%
	Divorced	6.3%	6.0%	14.8%	6.5%	6.7%	5.1%	7.2%
	Separated	1.7%	1.7%		1.5%	1.8%		1.7%
	Widowed/Widower	0.6%	0.6%		0.4%	0.2%	1.3%	0.3%
	Other	0.4%	0.3%	3.7%	0.4%	0.4%		
Ethnicity	American Indian/Alaska Native	0.7%	0.7%		0.8%	0.9%		0.6%

	Asian	5.5%	5.6%		5.9%	5.8%	6.4%	6.7%
	Black/African American	9.1%	9.2%		8.8%	9.0%	7.7%	8.4%
	Hispanic, Latino, Or Spanish Origin	7.6%	7.2%	37.5%	7.5%	6.5%	12.8%	6.4%
	Middle Eastern/North Africans	0.7%	0.7%		0.8%	0.9%		1.1%
	Native Hawaiian/Pacific Islander	0.2%	0.2%		0.4%	0.4%		0.0%
	White/Euro-American	75.3%	75.6%	50.0%	74.8%	75.3%	71.8%	76.0%
	Other	1.0%	0.9%	12.5%	1.1%	1.1%	1.3%	0.8%
Number of dependents	None	57.9%	56.8%	90.3%	48.4%	48.9%	45.7%	48.8%
	Under 18	26.5%	27.2%	6.5%	33.2%	34.1%	28.4%	35.7%
	18-26	8.1%	8.2%	3.2%	8.7%	7.6%	14.8%	7.8%
	27 and older	7.5%	7.8%	0%	9.7%	9.4%	11.1%	8.9%
Employment Status	1-19 hours a week	2.9%	3.1%		4.2%		27.2%	
	20-34 hour a week	8.3%	8.4%	4.0%	11.2%		72.8%	
	35-40 hours a week	47.8%	47.2%	64.0%	62.0%	73.3%		73.8%
	41 or more hours a week	16.8%	17.2%	8.0%	22.6%	26.7%		26.2%
	Self-employed	7.3%	7.6%					
	Not employed, looking for work	4.9%	5.1%					
	Not employed, NOT looking for work	1.1%	1.2%					
	Retired	0.7%	0.7%					
Occupation	Disabled	10.1%	9.6%	24.0%				
	Management, professional, and related	23.5%	23.5%	22.2%	25.0%	27.8%	9.0%	31.1%
	Service	18.9%	18.4%	55.6%	17.3%	14.8%	30.8%	14.5%
	Sales and office	19.6%	19.6%	22.2%	20.3%	20.5%	19.2%	18.4%
	Farming, fishing, and forestry	0.3%	0.3%		0.2%	0.2%		0.3%
	Construction, extraction, and maintenance	2.8%	2.9%		3.1%	3.4%	1.3%	3.6%

	Production, transportation, and material moving	5.0%	5.1%		5.6%	5.6%	5.1%	5.3%
	Government	3.0%	3.1%		3.5%	3.8%	1.3%	4.2%
	Other	9.9%	10.0%		11.1%	10.4%	15.4%	10.0%
Ave. number of years in occupation	<i>M</i>	8.1	8.1	6.3	8.2	8.6	6.0	8.9
	<i>SD</i>	7.5	7.5	6.2	7.1	7.2	6.2	7.3
Ave. number of years at organization	<i>M</i>	5.2	5.3	5.0	5.4	5.6	3.9	5.7
	<i>SD</i>	5.8	5.9	4.2	5.8	6.0	4.4	6.2
Supervise Others	Yes	35.7%	36.1%	11.1%	38.0%	41.8%	16.7%	45.4%
	No	64.3%	63.9%	88.9%	62.0%	58.2%	83.3%	54.6%
Attention Check-truthful	Agree/Strongly Agree	96.0%	95.9%	90.8%	95.6%	95.8%	94.7%	90.8%
Attention Check-362		98.7%	99.0%	60.0%	98.1%	98.4%	96.3%	98.5%
Direct Supervisor	Yes	80.1%	80.1%	94.2%	89.3%	91.4%	77.5%	94.2%
	No	16.2%	16.2%	5.6%	9.4%	7.4%	20.0%	5.6%
	Not applicable	3.7%	3.7%	0.3%	1.3%	1.1%	2.5%	0.3%
Percent (%) of work from home	60% or less	88.1%	88.1%		88.0%	90.8%	72.2%	
	More than 60%	11.9%	11.9%		12.0%	9.2%	27.8%	

Note. *M*= Mean. *SD* = Standard deviation. ^aEntire sample of Survey 1 respondents (including those with missing data).

^bRespondents from the entire sample who completed Survey 1 in its entirety. ^cOf the 31 who did not complete Survey 1, 22 completed some of the demographics and only 8 fully completed the demographics. ^dRespondents working full-time or part-time and who completed Survey 1. ^eRespondents who completed Survey 1 and worked 35 or more hours per week. ^fRespondents who completed Survey 1 and worked fewer than 35 hours per week. ^gRespondents who completed Survey 1 in its entirety and were eligible to go on to Survey 2.

approximately the same as the full sample of Survey 1 ($M = 8.1$, $SD = 7.5$; $M = 5.2$, $SD = 5.8$, respectively). More than half (54.6%) of the respondents who qualified for Survey 2 do not supervise other employees.

Survey 2. Respondents from Survey 2 also had to pass through attention checks. Of the 359 invited participants, 309 completed their HITs, 243 passed the seven attention checks, and 6 were further eliminated because of inconsistencies of reported sex, age (differences greater than one year), and ethnicity from Survey 1 to Survey 2. One of the important manipulation checks was actually an understanding of the definition of two key variables: challenge and hindrance. After being presented with the definitions of these two appraisal approaches and before rating each stressor and each stressor appraisal, a check of the respondents' understanding of the definitions was presented. Respondents rated whether each of the two definitions, (1) "Challenge stressors tend to be associated with positive outcomes" and (2) "Hindrance stressors tend to be associated with positive outcomes," was 'correct' or 'incorrect.' A choice of 'I do not know' was also presented. Participants who responded, "I do not know" for either of the questions or "incorrect" for question 1 and "correct" for question 2, were dropped from the study. Thirty-seven participants did not qualify to continue with the study and were not permitted to complete the survey. The final sample consisted of 237 participants. Demographic information, including sex, age, ethnicity, and academic degree were also collected in Survey 2. Socio-demographic data for Survey 2 are presented in Table 3.

Table 3

Socio-demographics for Survey 2

Variables		Survey 2 clean ^a <i>n</i> = 237	Survey 2 full sample <i>N</i> = 308
Sex	Male	57.8%	56.5%
	Female	42.2%	43.5%
Age	<i>M</i>	35.6	35.2
	<i>SD</i>	9.2	9.5
Ethnicity	American Indian/Alaska Native	0.4%	0.3%
	Asian	6.8%	6.2%
	Black/African American	5.5%	6.8%
	Hispanic, Latino, Or Spanish	4.2%	4.9%
	Origin		
	Middle Eastern/North Africans	0.0%	0.6%
	Native Hawaiian/Pacific Islander	0.4%	0.3%
	White/Euro-American	81.4%	78.9%
	Other	1.3%	1.9%
Employment Status	Employed- Full Time		96.8%
	Employed-Part-time		1.3%
	Unemployed		1.0%
	Self-Employed (Full/part-time)		1.0%
Highest Academic degree	High School Degree	27.0%	26.6%
	Bachelor's Degree	51.1%	54.2%
	Master's Degree	14.3%	12.3%
	Doctorate	1.7%	1.6%
	Other	5.9%	5.2%
Attention Check- Do not pay attention	Strongly Disagree	-	94.9%
Attention Check- Best of abilities	Strongly Agree	-	90.5%
Attention Check- Employment status	Full-time	-	98.0%
Attention Check- Sum	4	-	99.7%
Attention Check Challenge	Correct ^b	-	97.7%
Attention Check- Hindrance	Incorrect ^c	-	94.8%
Attention Check- Days in year	362	-	99.3%

Note. ^aSurvey 2 Clean refers to the respondents who completed the survey and passed all the attention check items. ^b“Correct” is the correct response required to pass the attention check item “Challenge stressors tend to be associated with positive outcomes.”

^c“Incorrect” refers to the correct response required to pass the attention check item “Hindrance stressors tend to be associated with positive outcomes.”

Participants' ages ranged from 19 to 62 years with a mean age of 35.56 ($SD = 9.16$) years. Of the participants, 81.4% were White/Euro-American and 6.8% were Black/African American. Finally, 51.1% had a Bachelor's degree and 27.0% had a High School degree.

Measures

Several measures employed an ordinal scale ranging from 1 to 7. Higher scores referred to greater amounts of or greater agreement with the item and higher mean scores indicated greater prevalence of the variable of interest. All survey items are presented in Appendix B.

Role stressors. Fifteen items were used to assess the three role stressors, five items for each role stressor were rated on an agreement scale, ranging from 1, "strongly disagree," to 7, "strongly agree" (Glazer & Beehr, 2005). Items for role ambiguity were reverse scored, as the items reflect role clarity and in order to use language that consistently refers to "stressors," scores of 1 were exchanged for scores of 7, 2 for 6, and onward. The mean of the five role ambiguity items, after reverse scoring, refers to greater perceived role ambiguity. Also, one role overload item was reverse scored (see Appendix B). One item was dropped because observed variables must be unidimensional (i.e., associate with one underlying factor; Anderson & Gerbing, 1988). However, the dropped item exhibited cross-loading on role overload and role ambiguity above the accepted limit of .32 (Costello & Osborne, 2005). An example role ambiguity ($\alpha = .81$) item is "I have clear, planned goals and objectives for my job." An example role conflict item ($\alpha = .77$) is "I do things that are apt to be accepted by one person and not accepted by other." Finally, four (instead of five) items measured role overload ($\alpha = .85$) for example, "I

often notice a marked increase in my work load.” These strong alphas are consistent with Glazer and Beehr (2005), who validated the measure in four countries. Factor loadings ranged from .44 to .87 for role ambiguity, .54 to .83 for role conflict, and from .73 to .84 for role overload (see Table 4).

Challenge and hindrance stressor appraisal. For each stressor item, respondents were asked to evaluate the stressor, on a seven-point Likert-type scale ranging from 1, “not at all” to 7, “very true,” as a challenge and as a hindrance, as previously utilized by Webster et al. (2011). The challenge appraisal item was “I find this a challenge to my work.” The hindrance appraisal item was “I find this a hindrance to my work.” To ensure proper interpretation of challenge and hindrance, I provided definitions. Challenge referred to “‘work-related demands or circumstances that, although potentially stressful,’ tend to *enable work achievement* and, therefore, may be *associated with potential gains and positive outcomes for individuals*.” Hindrance referred to “‘work-related demands or circumstances that tend to *constrain or interfere with an individual’s work achievement*’ and, therefore, may be *associated with potential losses and negative outcomes for individuals*.” Participants were reminded that items could be assessed as both a challenge and a hindrance (as per the suggestion of Rodríguez et al., 2013). The measure yielded strong alpha reliabilities for role ambiguity challenge ($\alpha = .86$), role ambiguity hindrance ($\alpha = .85$), role conflict challenge ($\alpha = .74$), role conflict hindrance ($\alpha = .75$), role overload challenge ($\alpha = .75$), and role overload hindrance ($\alpha = .80$).

Table 4

Factor Loadings for Principal Components Factor Analysis with Oblimin Rotation of Role Stressors

Item	RA	RC	RO
It seems like I have too much work for one person to do.			.84
On my present job, the amount of work seems to interfere with how well I can do the job.			.79
I often notice a marked increase in my workload.			.75
I receive an assignment without the manpower to complete it.			.73
I am given enough time to do what is expected of me on my job. (R)	.39		.68
Explanation is clear of what has to be done. (R)	.87		
I know exactly what is expected of me. (R)	.84		
I have clear, planned goals and objectives for my job. (R)	.78		
I know I have divided my time properly. (R)	.74		
I feel certain about how much authority I have. (R)	.44		
I do things that are apt to be accepted by one person and not accepted by another.		.83	
I work with two or more groups who operate quite differently.		.74	
I have to do things that should be done differently	.40	.65	
I receive incompatible requests from two or more people.		.64	
I work on unnecessary things.		.54	

Note. Only factor loadings above .40 are presented. RA = Role Ambiguity, RC = Role Conflict, and RO = Role Overload.

Psychological strains. Three variables represent psychological strains.

Job-related anxiety. Like Glazer and Beehr (2005), four items from Parker and DeCotiis' (1983) job stress measure were included to capture job-related anxiety ($\alpha = .87$). An example item is "I have felt fidgety or nervous as a result of my job" and "My job gets to me more than it should." Factor loading ranged from .56 to .71 (see Table 5).

Tedium. Nine items from Malach-Pines' (2005) Burnout measure were employed to assess tedium ($\alpha = .95$). One item from the original scale (i.e., "trapped") was accidentally omitted from the survey. Participants were asked to rate each of nine single-

worded items reflecting tedium. Respondents were asked “When you think about your work overall, how often do you feel the following?” Examples of single-worded items are “Hopeless” and “Depressed.” The rating scale ranged from 1, “never” to 7, “always.” Factor loading ranged from .52 to .83 (see Table 5).

General well-being. Eleven items were adapted from Goldberg and Hillier’s (1979) 12-item General Health Questionnaire to measure physical and psychological distress. The twelfth item (i.e., “felt constantly under strain”) was not included in the survey because the phrasing “under strain” can be confused with ‘under pressure,’ which connotes a stimulus rather than a response (Jex, Beehr, & Roberts, 1992). To maintain consistency with other items in the section, the eleven retained items were modified by rewording them into “I” statements. For example, the statement “able to enjoy my normal day-to-day activities” was reworded to “I have been able to enjoy my normal day-to-day activities.” The measure yielded strong reliability, $\alpha = .92$. Factor loadings ranged from .43 to .78 (see Table 5).

Organizational outcomes. Three variables represent organizational outcomes.

Affective organizational commitment. Eight items were adapted from Meyer and Allen’s (1991) original scale to measure affective organizational commitment ($\alpha = .92$). Example items are “I do not feel like ‘part of the family’ at my organization” (reverse-coded) and “I would be very happy to spend the rest of my career with this organization.” Factor loadings ranged from .50 to .85 (see Table 6).

Turnover intention. Three items were used to assess turnover intention. Glazer and Beehr (2005) adapted the items from the Michigan Organizational Assessment

Questionnaire ($\alpha = .94$). An example item is “I will actively look for a new job in the next year.” Factor loading ranged from .87 to .91 (see Table 6).

Job satisfaction. One item, adapted from the Michigan Organizational Assessment questionnaire (Cammann, Fichman, Jenkins, & Klesh, 1983), was used to measure overall job satisfaction. Literature suggests that a single item for job satisfaction is as robust and appropriate as using multiple item measures (Wanous, Reichers, & Hudy, 1997). The item is, “Overall, I am satisfied working at this organization.”

Statistical Analyses

Internal consistency analysis was employed to test the main variables' reliabilities. Principal components factor analyses were performed to validate the theorized constructs. All dependent variables were subjected to a principal components factor analysis with Oblimin-rotation due to the assumption of unidimensionality (i.e., testing for one factor). A forced factor analysis was performed on items which are theoretically related to organizational outcomes yielding two factors: affective organizational commitment and turnover intention. Further, for items theoretically related to psychological strains, a forced three-factor structure analysis was performed on: anxiety, tedium, and well-being. For the three role stressors, a forced factor analysis, specifically a three-factor model, was performed yielding the expected stressors: role ambiguity, role overload, and role conflict.

From this point on, only composite variables of the items were used following previously validated composites from literature (Netemeyer, Johnston, & Burton, 1990). Next, tests were run to ensure the data met the four main statistical assumptions: normality, homoscedasticity, linearity, and multicollinearity. Following the direction of

Pearson, D'Agostino, and Bowman (1977) and Seier (2002) to assess normality, graphical analysis along with measures of kurtosis and skewness were tested for all variables. In spite of slight deviations, it can be assumed that the variables examined follow a normal distribution. Further, Wilks Shapiro (Shapiro & Wilks, 1965) was tested for all variables resulting in significant p -values adding to the assumption of normality for the variables present in the current study. Scatterplots were obtained for each independent variable with each dependent variable to test for homoscedasticity. The plots displayed that each independent variable with each dependent variable displayed homoscedasticity. Then, the means of each measure were compared for the independent variables with the dependent variables to assess for linearity. By assessing the deviation of linearity as suggested by Panagiotidis (2002) looking for nonsignificant p -values, the results showed a consistent slope of change between the independent and dependent variables. Additionally, the Durbin and Watson (1950) was computed to assess that the error residuals were independent of each other (Jarque & Bera, 1980); meaning the errors of each measure do not correlate (Savin & White, 1977). By examining the results, it can be concluded that for each regression performed the Durbin Watson score was within the recommended range 1.5 to 2.5 (Savin & White, 1977); therefore, no autocorrelations were found. Finally, the variance inflation factor (VIF) was computed for the dependent variables to test the multicollinearity. In utilizing the recommendation that the VIF should be between 1 to 5 (O'Brien, 2007), the results showed no inflation in the estimated regression coefficients.

Table 5

Factor Loadings for Principal Components Factor Analysis with Oblimin Rotation of Psychological Strains

Item	Anxiety	Tedium	Well-being
My job gets to me more than it should.	.66		
Sometimes when I think about my job I get a tight feeling in my chest.	.60		
I have felt fidgety or nervous as a result of my job.	.71		
There are lots of times when my job drives me right up the wall.	.56	.55	
I have been feeling reasonably happy, all things considered.		.42	.62
I have been feeling unhappy or depressed. (R)	.47	.54	.47
I have been losing confidence in myself. (R)	.45	.48	.51
I have been thinking of myself as a worthless person. (R)		.43	.59
I have been able to enjoy my normal day-to-day activities.			.70
I have been able to face up to my problems.			.69
I have felt capable of making decisions about things.			.78
I have felt that I can't overcome my difficulties. (R)			.43
I have lost much sleep over worry. (R)			--
I have been able to concentrate on what I am doing.			.73
I have felt that I am playing a useful part in things.			.62
Hopeless		.83	
Depressed		.75	
Helpless		.76	
"I've had it"		.82	
Worthless/like a failure		.60	.47
Tired		.71	
Disappointed with people		.81	
Physically weak/sickly	.54	.52	
Difficulties sleeping	.69	.82	

Note. Only factor loadings above .40 are displayed.

Table 6

Factor Loadings for Principal Components Factor Analysis with Oblimin Rotation of Organizational Outcomes

Item	Affective Organizational Commitment	Turnover Intention
This organization has a great deal of personal meaning for me.	.78	.43
I do not feel a strong sense of belonging to my organization. (R)	.63	.61
I do not feel “emotionally attached” to this organization. (R)	.74	.44
I do not feel like “part of the family” at my organization. (R)	.55	.60
I would be very happy to spend the rest of my career with this organization.	.50	.68
I enjoy discussing my organization with people outside of it.	.71	
I really feel as if this organization’s problems are my own.	.85	
I think that I could easily become as attached to another organization as I am to this one. (R)	.57	.40
I will probably look for a new job in the next year.		.91
I will actively look for a new job in the next year.		.89
I often think about quitting.		.87

Note. Only factor loadings above .40 are displayed.

Once the statistical assumptions were verified, composite variables were created for all measures. Descriptive statistics (means and standard deviations) were then calculated along with correlations among all main variables. Correlation analyses were employed to test Hypothesis 1.

Next, demographic variables from Survey 1 (S1) and Survey 2 (S2) were compared to the current study’s outcomes variables to determine if any demographic variables needed to be employed as control variables. For quantitative demographic variables (i.e., age, number of dependents, number of supervisees, professional tenure, and organizational tenure), correlational analyses with this study’s outcome variable were

conducted; ANOVAs were employed for categorical demographic variables (i.e., sex, ethnicity, marital status, academic degree, eligibility to work in the USA, and occupation).

Preliminary analyses identified variables that should be used as controls for each dependent variable to test the hypotheses. For the psychological strain regressions, it was determined that the variable important to control for in the regression with anxiety as the outcome variable was marital status ($F(6, 236) = 2.42, p < .05$), because single and separated respondents indicated more anxiety than divorced and widowed respondents. Marital status was also controlled for in the regressions for general well-being ($F(6, 236) = 2.28, p < .05$), because divorced respondents indicated more general well-being than separated respondents. All the remaining correlations between demographics and outcome variables were non-significant.

For the organizational outcome regressions, when affective organizational commitment was the outcome variable, marital status and organizational tenure were controlled for ($F(6, 236) = 2.42, p < .05$, and $r = .19, p < .001$, respectively), because divorced and separated respondents indicated more affective organizational commitment than single and married/remarried respondents. Also, as respondents' organizational tenure increased, their affective organizational commitment increased. Similarly, marital status and organizational tenure were controlled for in the regressions for intention to leave ($F(6, 236) = 2.23, p < .05$, and $r = -.21, p < .01$, respectively), because single and separated respondents indicated more intention to leave than divorced and widowed respondents. Also, as respondents' organizational tenure increased, their intention to leave decreased. Finally, organizational tenure was controlled for in regressions of job

satisfaction ($r = .17, p < .01$), because as respondents' organizational tenure increased, their job satisfaction increased. Table 7 summarizes the variables used as controls in subsequent inferential analyses.

Table 7

Summary of Control Variables Used in Inferential Analyses (Regressions) for each Outcome

Outcomes	Control Variables
Psychological Strains	
Anxiety	Marital Status
Tedium	N/A
General Well-being	Marital Status
Organizational Outcomes	
Affective Organizational Commitment	Marital Status + Org. Tenure
Job Satisfaction	Org. Tenure

Note. Marital Status is represented by six dummy variables (Single, Married/Remarried, Separated, Divorced, Widowed/Widower, and Living with partner(s); additional option was Other). Org. Tenure = Organizational Tenure.

Hierarchical moderated multiple regression analyses were then employed to test Hypotheses 2 and 3. To test Hypothesis 2, the six outcome variables were each regressed on each role stressor, challenge or hindrance appraisal, and the interaction between the two. To test Hypothesis 3, an interaction variable for each role stressor and both appraisals (challenge and hindrance) was created. The six outcome variables were each regressed on each role stressor, challenge or hindrance appraisal, the two-way interaction between the focal role stressor and focal appraisal, as well as the two appraisals, followed by a three-way interaction between each role stressor and both appraisals. Significant three-way interactions were graphically analyzed to understand the nature and direction of the relationships.

RESULTS

Means, standard deviations, correlations, and Cronbach alpha (α) coefficients of the main study variables are presented in Table 8. In all instances of the principal components analyses with Oblimin rotation, factor loadings, and total variance explained were at satisfactory levels; thus, these measures behaved as intended. Factor loadings ranged from .44 to .96 (see Tables 4 through 6).

Correlations and Main Effects of Stressor Appraisal on Strains/Outcomes

Correlation analyses (see Table 8) were employed to test Hypothesis 1a to 1f (H_{1a-f}). As expected role stressors positively correlated with the psychological strains of anxiety and tedium along with the organizational outcome of turnover intention, but negatively correlated with the psychological strain of general well-being and the organizational outcomes of affective organizational commitment and job satisfaction. Hypotheses 1a to 1f were supported. Each of role ambiguity, role conflict, and role overload positively correlated with anxiety ($r_s = .38, .48, \text{ and } .47$, respectively, $p < .01$) and tedium ($r_s = .35, .39, .33$, respectively, $p < .01$). Role ambiguity, role conflict, and role overload negatively correlated with general well-being ($r_s = -.50, -.34, \text{ and } -.40$, respectively, $p < .01$). Furthermore, each of role ambiguity, role conflict, and role overload negatively correlated with affective organizational commitment ($r_s = -.36, -.20, \text{ and } -.25$, respectively, $p < .01$) and job satisfaction ($r_s = -.40, -.19, \text{ and } -.30$, respectively, $p < .01$). Role ambiguity, role conflict, and role overload each positively correlated with turnover intention ($r_s = .35, .26, \text{ and } .33$, respectively, $p < .01$).

Moderating Effects of Hindrance and Challenge Appraisal

Upon analysis of the data an error in the measurement of the appraisal of role ambiguity as a challenge and as a hindrance came to light. Because the role ambiguity items were to be reverse scored, the appraisal items (i.e., challenge and hindrance) should have been modified to provide clarity as to whether the appraisal is of lack of clarity or of ambiguity. Ironically, this neglected modification yielded incomprehensible results for role ambiguity appraisals. Responses to the appraisal of the ambiguity items, despite measurement consistency, are suspect of poor face validity; therefore, appraisals of role ambiguity items were not included in the remainder of this study.

Hypothesis 2a through 2f (H_{2a-f}) postulated that individual's appraisal of stressors (as challenge and hindrance) will moderate the stressor-psychological strain relationships. Additionally, Hypothesis 2e through 2l (H_{2e-l}) postulated that individual's appraisal of stressors (as a challenge and a hindrance) will moderate the stressor-organizational outcome relationship. The effects would be such that the effects of stressors on outcomes will be more innocuous when appraised as a challenge than when the stressor was not appraised as a challenge. Furthermore, the effects of a stressor on an outcome will be more deleterious when the stressor is appraised as a hindrance than when the stressor is not appraised as a hindrance.

A hierarchical and moderated multiple regression analysis was performed regressing each of the six outcome variables on role stressors with the control variables in step 1 (when applicable), the three role stressors in step 2, each stressor appraisal variable in step 3 (e.g., score on challenge appraisal of role conflict), and then the interaction between the stressor and the appraisal in step 4 (e.g., role conflict*role conflict challenge

Table 8

Means, Standard Deviations, Correlations, and Alpha Reliabilities (On Diagonals) Among Main Variables

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Role Stressors¹																
1. RA	2.79	1.07	(.81)													
2. RC	3.90	1.30	.30**	(.77)												
3. RO	4.01	1.41	.39**	.53**	(.85)											
Appraisals²																
4. RA-C	3.71	1.51	.11	-.17*	-.14*	(.88)										
5. RC-C	3.71	1.17	.09	.39**	.22**	-.19**	(.74)									
6. RO-C	4.16	1.31	.04	.14*	.25**	.01	.44**	(.75)								
7. RA-H	5.39	1.25	-.57**	-.41**	-.36**	.01	-.16*	-.12	(.86)							
8. RC-H	4.25	1.26	.25**	.50**	.23**	-.17*	.32**	.14*	-.28**	(.75)						
9. RO-H	4.48	1.36	.20**	.22**	.36**	-.12	.28**	.06	-.21**	.54**	(.80)					
Psychological Strains²																
10. Anxiety	3.28	1.56	.38**	.48**	.47**	.02	.08	.00	-.53**	.29**	.26**	(.87)				
11. Tedium	2.73	1.26	.35**	.33**	.39**	.08	.03	.01	-.45**	.23**	.22**	.77**	(.95)			
12. GWB	5.34	1.14	-.50**	-.34**	-.40**	-.10	-.05	-.03	.52**	-.27**	-.23**	-.78**	-.79**	(.92)		
Organizational Outcomes²																
13. AOC	4.27	1.48	-.36**	-.20**	-.25**	-.07	.04	.11	.30**	-.22**	-.20**	-.45**	-.52**	.49**	(.92)	
14. TI	3.33	1.95	.35**	.26**	.33**	.00	.01	.03	-.38**	.17**	.20**	.55**	.60**	-.53**	-.75**	(.94)
15. JSat	4.95	1.75	-.40**	-.19**	-.30**	-.05	.07	.13*	.29**	-.21**	-.21**	-.48**	-.49**	.51**	.74**	-.75**

Note. ¹Listwise $n = 236$. ²Listwise $n = 237$. RO = Role Overload, RA = Role Ambiguity, RC = Role Conflict, C = Challenge, H = Hindrance, GWB = General Well-Being, AOC = Affective Organizational Commitment, TI = Turnover Intention, and JSat = Job Satisfaction.

** $p < .01$. * $p < .05$.

appraisal). In total, I performed 20 regression analyses and the results are presented in Tables 9 through 12. Of the 20 analyses, 10 yielded significant variances in the outcome variables.

Appraisal effects on psychological strains. Tables 9 and 10 present regression results on psychological strains.

Table 9

Hierarchical Regression of Psychological Strains on Role Stressors, Role Stressors Appraised as Hindrances, and their Interactions

Variables	Psychological Strains								
	Anxiety			Tedium			Well-being		
	R^2	ΔR^2	β	R^2	ΔR^2	β	R^2	ΔR^2	β
Step 1	.04	.04**					.04	.04**	
Control Variable									
Step 2	.34	.30***		.18	.18***		.22	.18***	
Role Conflict (RC)			.33***			.18**			-.20**
Role Overload (RO)			.29***			.30***			-.28***
Step 3	.33	.01		.18	.01		.23	.01	
RC-Hindrance (RC-H)			.01			.06			-.09
RO-Hindrance (RO-H)			.08			.06			-.04
Step 4	.36	.01 [†]		.22	.04**		.24	.01	
RCxRC-H			.53 [†]			.59 [†]			-.12 [†]
ROxRO-H			.08			.45 [†]			.03

Note. *** $p < .001$; ** $p < .01$; * $p < .05$; [†] $p < .10$.

Table 10

Hierarchical Regression of Psychological Strains on Role Stressors, Role Stressors Appraised as Challenges, and their Interactions

Variables	Psychological Strains								
	Anxiety			Tedium			Well-being		
	R^2	ΔR^2	β	R^2	ΔR^2	β	R^2	ΔR^2	β
Step 1	.04	.04***					.04	.04**	
Control Variable									
Step 2	.34	.30***		.18	.18***		.22	.18***	
Role Conflict (RC)			.33***			.18**			-.20**
Role Overload (RO)			.29***			.30***			-.28***
Step 3	.35	.02†		.19	.01		.23	.01	
RC-Challenge (RC-C)			-.09			-.09			.08
RO-Challenge (RO-C)			-.07			-.06			.03
Step 4	.36	.01		.19	.01		.24	.01	
RCxRC-C			-.32			-.33			.12†
ROxRO-C			-.01			.06			-.01

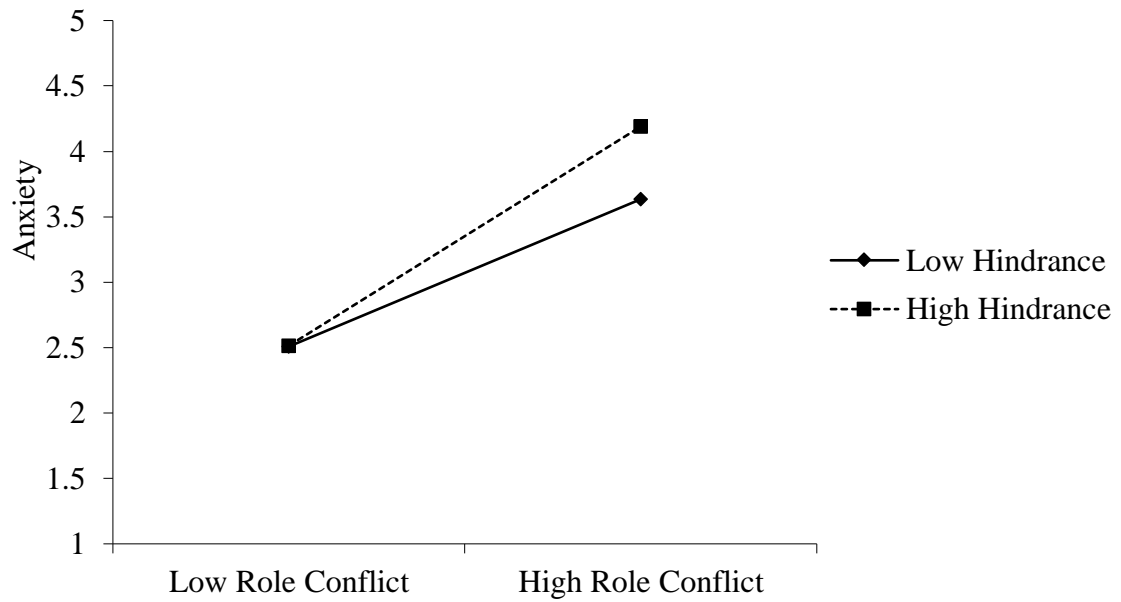
Note. *** $p < .00$; ** $p < .01$; * $p < .05$; † $p < .10$.

Anxiety. To test H_{2a}, anxiety was regressed on role conflict and role overload, the role stressors appraised as a hindrance, and the stressor-appraisal interactions. Overall, the regression was significant, $F(7, 228) = 18.15$, $p < .01$, $R^2 = .36$. Most of the variance in anxiety was accounted for by the role stressors ($R^2 = .34$, $p < .01$) and an additional 1% ($p < .05$) was accounted for by the interaction term of role conflict and hindrance appraisal ($\beta = .53$, $t(227) = 1.78$, $p = .08$; see Table 9). Upon further analyses, role conflict appraised as a hindrance ($\beta = .57$, $t(232) = 2.05$, $p < .05$) yielded significant variance in anxiety. Simple slopes for the association between role conflict and anxiety were tested for the appraisal of stressors as a low (-1 *SD* below the mean) and high (+1 *SD* above the mean) hindrance. Each of the simple slope analyses revealed both slopes

had a significant positive association between role conflict and anxiety, but role conflict was more strongly related with anxiety when role conflict was appraised as a high hindrance ($b = .64$, $SE_b = .09$, $\beta = .54$, $t(231) = 7.03$, $p < .001$) than when role conflict was appraised as a low hindrance ($b = .43$, $SE_b = .11$, $\beta = .36$, $t(231) = 4.04$, $p < .001$). A graphical representation of this two-way interaction can be seen in Figure 4.

To test H_{2b}, anxiety was regressed on role conflict and role overload, the role stressor appraised as a challenge, and the stressor-appraisal interactions. Stressors accounted for 30% of variance in anxiety and the challenge appraisal of stressors accounted for 2% of variance in anxiety. Although the regression was significant, $F(7, 228) = 18.26$, $p < .001$, $R^2 = .36$, role conflict appraised as a challenge ($\beta = -.32$, $t(228) = -1.22$, *ns*), and role overload appraised as a challenge ($\beta = -.01$, $t(228) = -.05$, *ns*) were not significant. Therefore, H_{2b} was supported because the stressor-anxiety relationship was expected not to differ on the basis of perceiving the stressor as a challenge or not as a challenge (see Table 10).

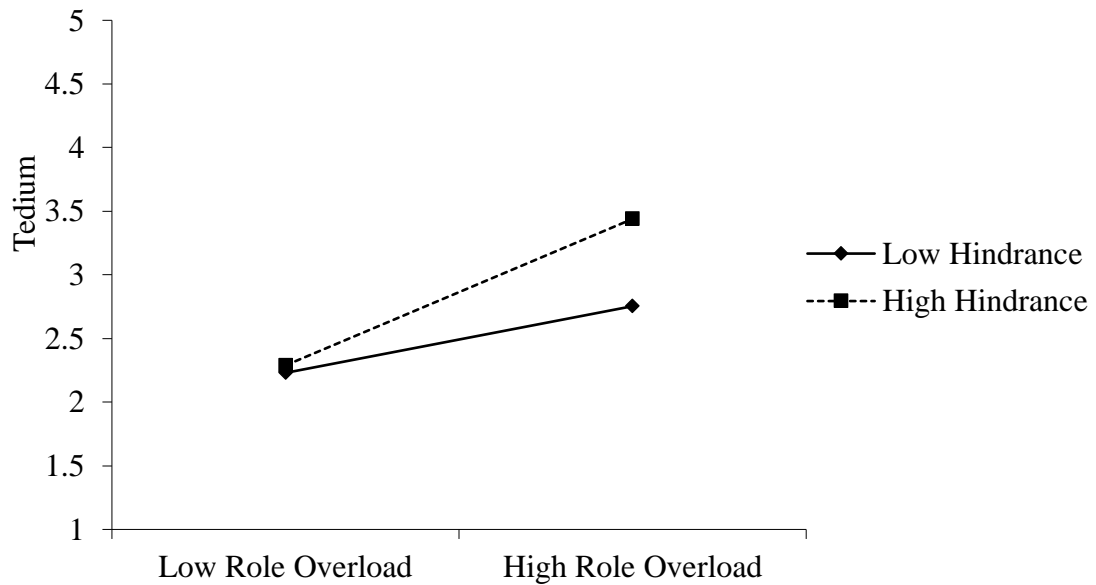
Tedium. Next, testing for H_{2c}, the interaction term between role conflict and hindrance appraisal and role overload and hindrance appraisal accounted for 4% of variance in tedium above and beyond the 18% accounted for by stressors and 1% accounted for by the hindrance appraisal of stressors. The regression was significant $F(6, 229) = 10.88$, $p < .001$, $R^2 = .22$. Closer examination of analyses showed that role conflict appraised as a hindrance ($\beta = .59$, $t(229) = 1.78$, $p = .07$) and role overload appraised as a hindrance ($\beta = .45$, $t(229) = 1.59$, $p = .11$) were close to significant so further analyses were performed (see Table 9).



Low Hindrance: $b = .43, p < .001$ High Hindrance: $b = .64, p < .001$

Figure 5. The effects of role conflict appraised as a hindrance on anxiety. Low hindrance is -1 *SD* below the mean and high hindrance is +1 *SD* above the mean.

The regression of tedium on role conflict, role conflict appraised as a hindrance, and the stressor-appraisal interaction was significant, $F(3, 232) = 12.55, p < .001, R^2 = .14$. Simple slopes for the association between role conflict and tedium were tested for the appraisal of stressors as low (-1 *SD* below the mean) and high (+1 *SD* above the mean) hindrance. The simple slope analyses revealed a significant positive association between role conflict and tedium when role conflict was appraised as high hindrance ($\beta = .40, t(232) = 4.89, p < .001$), but not when role conflict was appraised as low hindrance ($\beta = .12, t(232) = 1.33, ns$). A graphical representation of this two-way interaction can be seen in Figure 5.



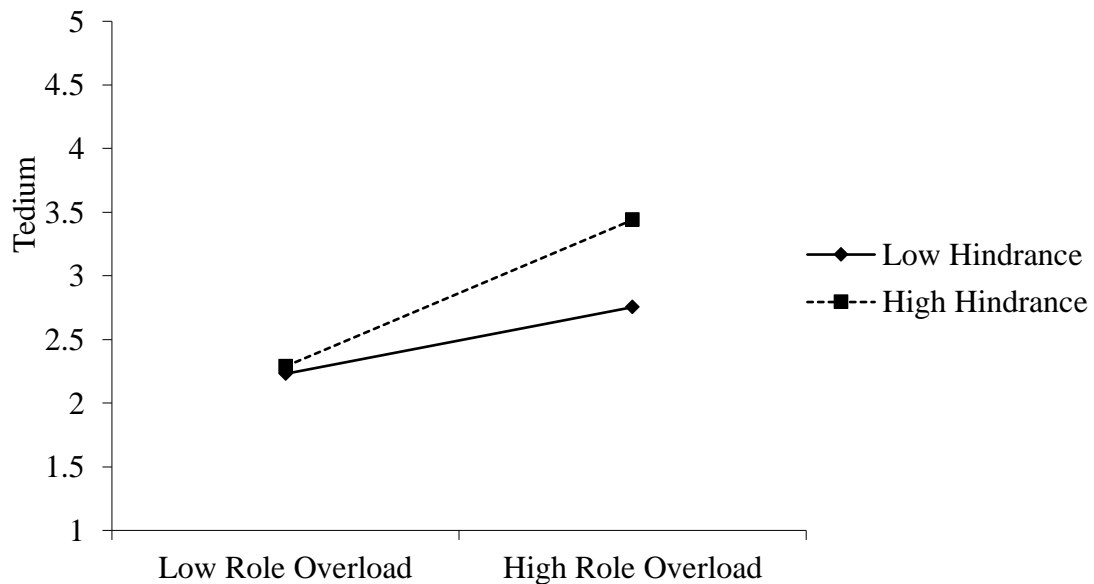
Low Hindrance: $b = .13, ns$ High Hindrance: $b = .41, p < .001$

Figure 6. The effects of role conflict appraised as a hindrance on tedium. Low hindrance is $-1 SD$ below the mean and high hindrance is $+1 SD$ above the mean.

Additionally, tedium regressed on role overload, role overload appraised as a hindrance, and the stressor-appraisal interaction was significant, $F(3, 232) = 17.26, p < .01, R^2 = .18$. Simple slopes for the association between role overload and tedium were tested for the appraisal of stressors as low ($-1 SD$ below the mean) and high ($+1 SD$ above the mean) hindrance. Each of the simple slopes (see Figure 6) revealed a significant positive association between role overload and tedium, but role overload more strongly related with tedium when role overload was appraised as high hindrance ($\beta = .41, t(232) = 6.11, p < .001$) rather than low hindrance ($\beta = .19, t(232) = 2.39, p < .05$).

To test H_{2d} , tedium was regressed on role conflict and role overload, the role stressor appraised as a challenge, and the stressor-appraisal interaction. The interaction terms, between role conflict and challenge appraisal and role overload and challenge appraisal, accounted for a nonsignificant 1% of variance in tedium, while 18% was

accounted for by stressors and 1% accounted for by the challenge appraisal of stressors. The regression was significant, $F(6, 229) = 9.20, p < .001, R^2 = .19$. However, role conflict appraised as a challenge ($\beta = -.33, t(229) = -1.14, ns$) and role overload appraised as a challenge ($\beta = .06, t(229) = .22, ns$) were not significant predictors of tedium. Therefore, H_{2d} was not supported (see Table 10).



Low Hindrance: $b = .21, p < .05$ High Hindrance: $b = .46, p < .001$

Figure 7. The effects of role overload appraised as a hindrance on tedium. Low hindrance is -1 *SD* below the mean and high hindrance is +1 *SD* above the mean.

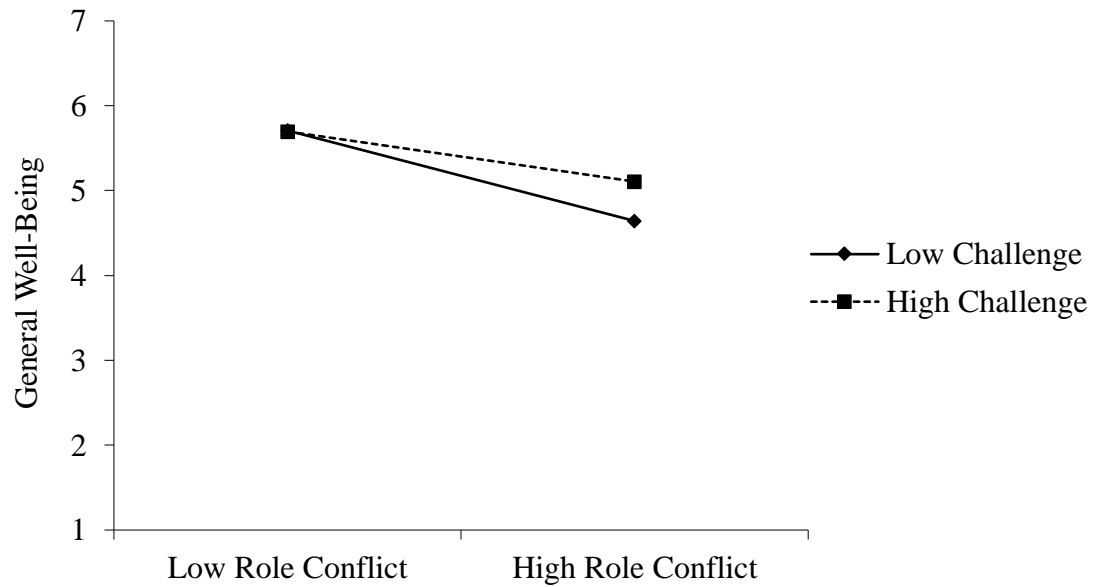
General well-being. To test H_{2e}, general well-being was regressed on role conflict and role overload, the role stressors appraised as a hindrance, and the stressor-appraisal interaction. Overall, the regression was significant, $F(7, 228) = 10.13, p < .001, R^2 = .24$; see Table 9). Role conflict appraised as a hindrance ($\beta = -.12, t(228) = -1.60, p \leq .10$) approached significance. Additional analyses were conducted regressing general well-being on role conflict, role conflict appraised as a hindrance, and the role conflict-appraisal interaction. Even though the overall regression was significant ($F(4, 231) =$

11.69, $p < .001$, $R^2 = .17$), role conflict appraised as a hindrance ($\beta = -.03$, $t(231) = -.47$, ns) was not significant. Therefore, H_{2e} was not supported.

To test H_{2f} , general well-being was regressed on role conflict and role overload, the role stressor appraised as a challenge, and the stressor-appraisal interaction. The interaction term, between role conflict and challenge appraisal and role overload and challenge appraisal, accounted for only 1% of variance in general well-being, while 18% was accounted for by stressors, 1% accounted for by the challenge appraisal of stressors, and 4% account for by the control variable (i.e., marital status). The regression was significant, $F(7, 228) = 10.13$, $p < .001$, $R^2 = .24$. Further examination showed role conflict (but not role overload) appraised as a challenge ($\beta = .12$, $t(228) = 1.71$, $p < .10$) approached significance resulting in further analysis (see Table 10).

General well-being was regressed on role conflict, role conflict appraised as a challenge, and the role conflict-appraisal interaction. The regression was significant, $F(4, 231) = 12.76$, $p < .00$, $R^2 = .18$. Role conflict appraised as a challenge ($\beta = .12$, $t(231) = 2.01$, $p < .05$) was significant. Simple slopes for the association between role conflict and general well-being were tested for the appraisal of stressors as low ($-1 SD$ below the mean) and high ($+1 SD$ above the mean) challenge. Each of the simple slopes analyses revealed a significant negative association between role conflict and general well-being, but role conflict was more strongly related with general well-being when role conflict was appraised as low challenge ($b = -.41$, $SE_b = .07$, $\beta = -.47$, $t(231) = -6.17$, $p < .001$) than when role conflict was appraised as high challenge ($b = -.23$, $SE_b = .08$, $\beta = -.26$, $t(231) = -2.83$, $p < .01$). A graphical representation of this two-way interaction can be seen

in Figure 7. Therefore, H_{2f} was partially supported.



Low Challenge: $b = -.41, p < .001$ High Challenge: $b = -.23, p < .01$

Figure 8. The effects of role conflict appraised as a challenge on general well-being. Low challenge is -1 *SD* below the mean and high challenge is +1 *SD* above the mean.

Appraisal effects on organizational outcomes. Tables 11 and 12 present regression results on organizational outcomes.

Affective organizational commitment. First, H_{2g} was partially supported. The interaction terms, between role conflict and hindrance appraisal and role overload and hindrance appraisal, accounted for 3% of variance in affective organizational commitment above and beyond the 7% accounted for by stressors, 2% accounted for by the hindrance appraisal of stressors, and 6% accounted for by organizational tenure and marital status. The regression was significant, $F(7, 228) = 6.04, p < .01, R^2 = .18$. Closer examination of the analyses showed that role overload (but not role conflict) appraised as a hindrance ($\beta = -.77, t(228) = -2.58, p < .01$) was significant (see Table 11). Simple

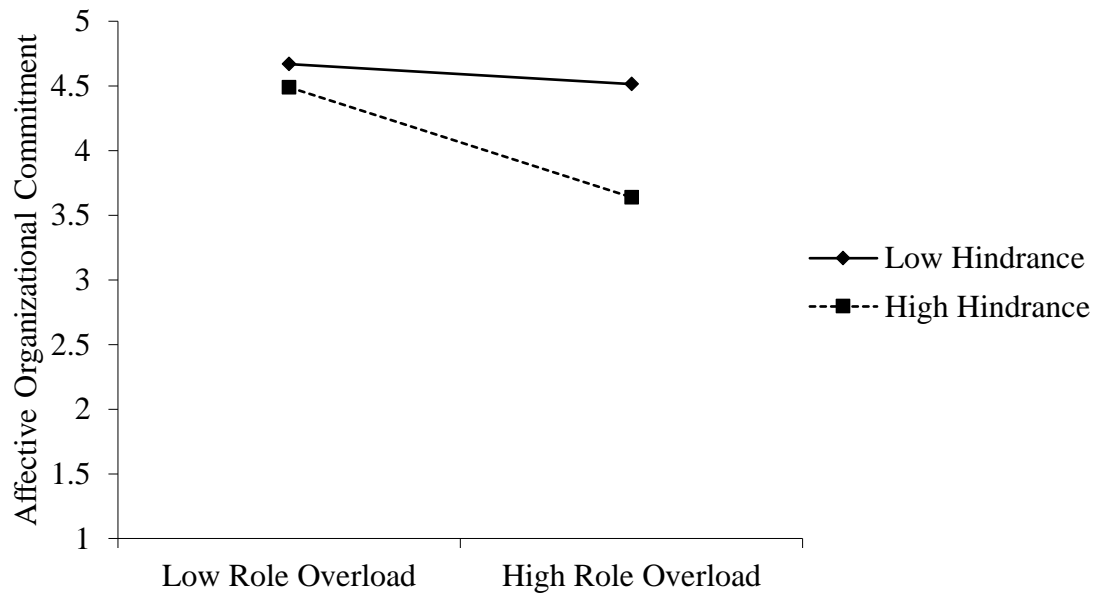
Table 11

Hierarchical Regression of Organizational Outcomes on Role Stressors, Role Stressors Appraised as Hindrances, and their Interactions

Variables	Organizational Outcomes								
	Affective			Turnover Intention			Job Satisfaction		
	Organizational								
	Commitment								
	R^2	ΔR^2	β	R^2	ΔR^2	β	R^2	ΔR^2	β
Step 1	.06	.06**		.07	.07***		.03	.03**	
Control Variable									
Step 2	.13	.07***		.19	.12***		.12	.09***	
Role Conflict (RC)			-.12			.15*			-.05
Role Overload (RO)			-.17**			.25***			-.26***
Step 3	.15	.02		.19	.01		.14	.02†	
RC-Hindrance (RC-H)			-.11			.00			-.13
RO-Hindrance (RO-H)			-.07			.08			-.05
Step 4	.18	.03*		.20	.01		.15	.01	
RCxRC-H			.20			-.03			-.05
ROxRO-H			-.78**			.09			-.07

Note. *** $p < .001$; ** $p < .01$; * $p < .05$; † $p < .10$.

slopes for the association between role overload and affective organizational commitment were tested for the appraisal of stressors as a low (-1 *SD* below the mean) and a high (+1 *SD* above the mean) hindrance. The simple slopes analyses revealed a significant negative association between role overload and affective organizational commitment when role overload was appraised as a high hindrance ($b = -.30$, $SE_b = .08$, $\beta = -.29$, $t(230) = -3.73$, $p < .001$), whereas when role overload was appraised as a low hindrance ($b = -.06$, $SE_b = .09$, $\beta = -.05$, $t(230) = -.60$, *ns*) was non-significant. Figure 8 pictorially depicts the role overload-hindrance appraisal two-way interaction.



Low Hindrance: $b = -.06$, ns High Hindrance: $b = -.30$, $p < .001$

Figure 9. The effect of role overload appraised as a hindrance on affective organizational commitment. Low hindrance is -1 *SD* below the mean and high hindrance is +1 *SD* above the mean.

To test H_{2h} , affective organizational commitment was regressed on role conflict and role overload, the role stressor appraised as a challenge, and the stressor-appraisal interaction. The interaction term, between role conflict and challenge appraisal and role overload and challenge appraisal, accounted for a nonsignificant 1% of variance in affective organizational commitment, while 7% was accounted for by stressors, 3% accounted for by the challenge appraisal of stressors, and 6% was accounted for by organizational tenure and marital status. The regression was significant, $F(8, 227) = 5.76$, $p < .001$, $R^2 = .17$. However, role conflict appraised as a challenge ($\beta = .47$, $t(227) = 1.60$, ns) and role overload appraised as a challenge ($\beta = .00$, $t(228) = .01$, ns) was not significant. Therefore, H_{2h} was not supported (see Table 12).

Table 12

Hierarchical Regression of Organizational Outcomes on Role Stressors, Role Stressors Appraised as Challenges, and their Interactions

Variables	Organizational Outcomes								
	Affective			Turnover Intention			Job Satisfaction		
	Organizational Commitment								
	R^2	ΔR^2	β	R^2	ΔR^2	β	R^2	ΔR^2	β
Step 1	.06	.06**		.07	.07***		.03	.03**	
Control Variable									
Step 2	.13	.07***		.19	.12***		.12	.09***	
Role Conflict (RC)			-.12			.15*			-.05
Role Overload (RO)			-.17**			.25***			-.27***
Step 3	.16	.03**		.19	.01		.17	.05***	
RC-Challenge (RC-C)			.04			-.08			.07
RO-Challenge (RC-C)			.15*			.00			.18**
Step 4	.17	.01		.20	.01		.19	.03*	
RCxRC-C			.47			-.09			.16*
ROxRO-C			.00			-.01			.03

Note. *** $p < .001$; ** $p < .01$; * $p < .05$; † $p < .10$.

Turnover intention. To test H_{2i}, turnover intention was regressed on role conflict and role overload, the role stressors appraised as a hindrance, and the stressor-appraisal interaction. The regression was overall significant, $F(8, 227) = 6.88, p < .001, R^2 = .20$. The interaction terms, between role conflict and hindrance appraisal and role overload and hindrance appraisal, accounted for a nonsignificant 1% of variance in turnover intentions more than the 12% accounted for by stressors, 1% accounted for by the hindrance appraisal of stressors, and 7% by the control variables (i.e., marital status and organizational tenure; see Table 11). Therefore, H_{2i} was not supported.

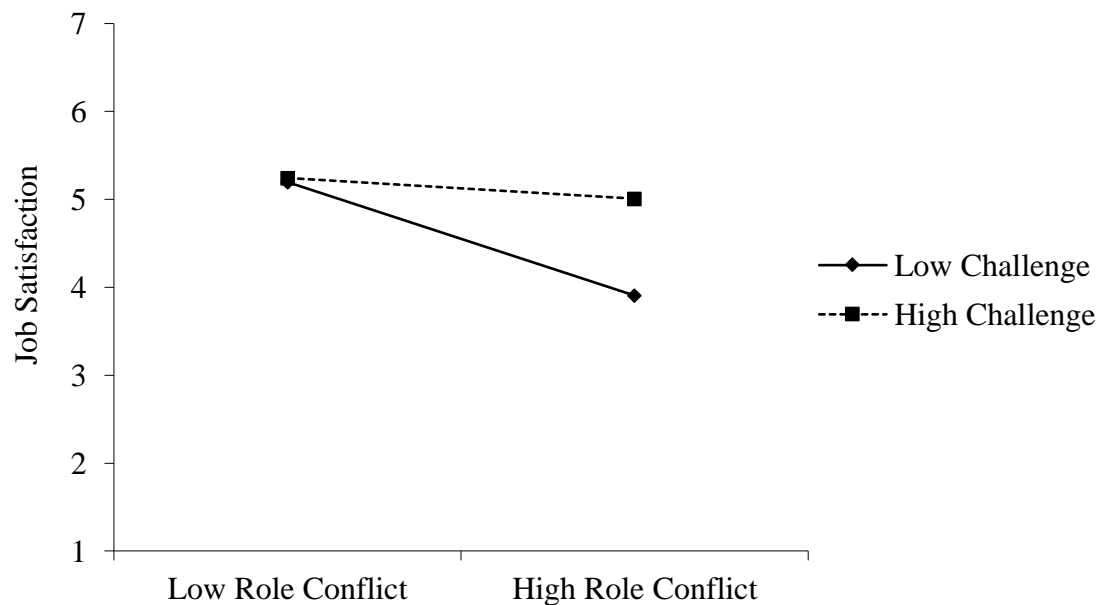
To test H_{2j}, turnover intention was regressed on role conflict and role overload, the role stressor appraised as a challenge, and the stressor-appraisal interactions. The

interaction term, between role conflict and challenge appraisal and role overload and challenge appraisal, accounted for a nonsignificant 1% of variance in turnover intentions, while 12% was accounted for by stressors, 1% accounted for by the challenge appraisal of stressors, and 7% by the control variables (i.e., marital status and organizational tenure). The regression was significant, $F(8, 227) = 7.05, p < .001, R^2 = .20$. However, role conflict appraised as a challenge ($\beta = -.09, t(227) = -1.36, ns$) and role overload appraised as a challenge ($\beta = -.01, t(227) = -.08, ns$) was not significant. Therefore, H_{2j} was not supported (see Table 12).

Job satisfaction. To test H_{2k} , job satisfaction was regressed on role conflict and role overload, the role stressor appraised as a hindrance, and the stressor-appraisal interaction. Overall, the regression was significant, $F(7, 228) = 5.73, p < .001, R^2 = .15$. However, role conflict appraised as a hindrance ($\beta = -.05, t(228) = -.59, ns$) and role overload appraised as a hindrance ($\beta = -.07, t(228) = -.92, ns$) was not significant. Thus, H_{2k} was not supported (see Table 11).

To test H_{2l} , job satisfaction was regressed on role conflict and role overload, the role stressor appraised as a challenge, and the stressor-appraisal interaction. The interaction term, between role conflict and challenge appraisal and role overload and challenge appraisal, accounted for 3% of variance in tedium, while 9% was accounted for by stressors, 5% accounted for by the challenge appraisal of stressors, and 3% was accounted for by the control variable (i.e., organizational tenure). The regression was significant, $F(7, 228) = 7.77, p < .001, R^2 = .19$. Closer examination revealed role conflict appraised as a challenge ($\beta = .16, t(228) = 2.26, p < .05$) was significant (see Table 12).

Job satisfaction was then regressed on role conflict, role conflict appraised as a challenge, and the role conflict-appraisal interaction. Overall, the regression was significant ($F(4, 231) = 7.70, p < .00, R^2 = .12$) and role conflict appraised as a challenge ($\beta = .18, t(231) = 2.80, p < .01$) was significant. Simple slopes for the association between role conflict and job satisfaction were tested for the appraisal of stressors as low (-1 *SD* below the mean) and high ($+1$ *SD* above the mean) challenge. The simple slopes analyses revealed a significant negative association between role conflict and job satisfaction when role conflict was appraised as low challenge ($b = -.49, SE_b = .11, \beta = -.37, t(231) = -4.69, p < .001$), whereas when role conflict was appraised as high challenge ($b = -.09, SE_b = .13, \beta = -.08, t(231) = -.71, ns$) was not significant. A graphical representation of this two-way interaction can be seen in Figure 9. Therefore, H_{21} was partially supported.



Low Challenge: $b = -.49, p < .001$ High Challenge: $b = -.09, ns$

Figure 10. The effects of role conflict appraised as a challenge on job satisfaction. Low challenge is -1 *SD* below the mean and high challenge is $+1$ *SD* above the mean.

Three-way Moderating Effects of Hindrance and Challenge Appraisal

Hypothesis 3 proposed there would be a three-way interaction of role stressors appraised as a challenge, a hindrance, both, or neither in predicting outcomes, such that high hindrance and low challenge had stronger deleterious effects than if there was low hindrance and high challenge. A moderated multiple regression analysis was employed to test H₃. A preliminary moderated hierarchical (sequential) multiple regression analysis was regressing each of the six outcome variables on the control variables (when applicable) in step 1, on role stressors in step 2, each stressor appraisal variable in step 3 (e.g., score on challenge appraisal of role conflict), then the interaction between the stressor and the appraisal in step 5 (e.g., role conflict*role conflict challenge appraisal), and the three-way interaction between the stressor, the appraisal as a challenge, and the appraisal as a hindrance in step 5.

Three-way appraisal on psychological strains. Table 13 depicts the results of the moderated regressions of the psychological strains on the two role stressors, the stressor appraisal variables, and the interaction of the stressor appraisal variables. Results showed only one relationship to approach significance between all the predictors and the outcomes, tedium. Tedium regressed on the three-way interaction term between role conflict, appraisal as a challenge, and appraisal as a hindrance (RCxRC-CxRC-H) showed to approach a statistically significant unique contribution of variance ($R^2 = .01, \beta = .21, p < .10$).

The three-way interaction was further tested to understand the nature and direction of the relationship. Tedium was regressed on role conflict, role conflict appraised as a challenge (RCxRC-C), role conflict appraised as a hindrance (RCxRC-H),

the two-way role conflict appraisal interaction term (RC-CxRC-H), and the three-way role conflict appraisal interaction term (RCxRC-CxRC-H). The regression was significant ($F(7, 228) = 6.92, p < .00, R^2 = .18$) and the three-way interaction term again approach significance ($\beta = .17, t(228) = 1.52$; see Table 14). Simple slopes analysis for the association between role conflict and tedium were tested for the appraisal of stressors as a low ($-1 SD$ below the mean) and a high ($+1 SD$ above the mean) challenge when also appraised as a low hindrance. The simple slope analyses revealed a significant positive association between role conflict appraised as low hindrance and tedium when role conflict was appraised as low challenge ($b = .33, SE_b = .13, \beta = .35, t(228) = 2.50, p < .01$), whereas when role conflict was appraised as high challenge ($b = -.18, SE_b = .18, \beta = -.18, t(228) = -.99, ns$) was not significant. Additionally, simple slopes analysis for the association between role conflict and tedium were tested for the appraisal of stressors as low ($-1 SD$ below the mean) and high ($+1 SD$ above the mean) challenge when also appraised as a high hindrance. Each of the simple slopes analyses revealed a significant positive association between role conflict appraised as high hindrance and tedium, but role conflict was more strongly related with tedium when role conflict was appraised as low challenge ($b = .56, SE_b = .11, \beta = .58, t(228) = 5.25, p < .001$) than when role conflict was appraised as high challenge ($b = .34, SE_b = .13, \beta = .35, t(228) = 2.66, p < .01$). See Figure 10 for a graphical representation of both simple slopes.

Three-way appraisal on organizational outcomes. Table 15 depicts the results of the moderated regressions of the organizational outcomes on the two role stressors, the stressor appraisal variables, and the interaction of the stressor appraisal variables. None of the relationships were significant.

Table 13

Hierarchical Regression of Psychological Strains on Role Stressors, Role Stressors Appraised as Challenges and as Hindrances, their Interactions, and their Three-way Interactions

Variables	Psychological Strains								
	Anxiety			Tedium			Well-being		
	R^2	ΔR^2	β	R^2	ΔR^2	β	R^2	ΔR^2	β
Step 1	.04	.04**					.04	.04**	
Control Variable									
Step 2	.34	.30***		.18	.18***		.22	.18***	
Role Conflict (RC)			.33***			.18**			-.20**
Role Overload (RO)			.29***			.30***			-.28***
Step 3	.36	.03*		.20	.03†		.24	.02	
RC-Challenge (RC-C)			-.12†			-.12†			.11
RC-Hindrance (RC-H)			.03			.07			-.11
RO-Challenge (RO-C)			-.06			-.05			.03
RO-Hindrance (RO-H)			.09			.07			-.06
Step 4	.38	.02		.25	.05*		.26	.02	
RCxRC-C			-.09			-.17*			.17*
RCxRC-H			.18*			.13			-.11
RC-CxRC-H			-.08			.06			-.08
ROxRO-C			.01			-.03			-.03
ROxRO-H			-.01			.12			.01
RO-CxRO-H			.03			.06			.04
Step 5	.39	.00		.26	.01		.26	.00	
RCxRC-CxRC-H			.10			.21†			-.03
ROxRO-CxRO-H			-.08			.02			-.07

Note. *** $p < .001$; ** $p < .01$; * $p < .05$; † $p < .10$.

Table 14

Hierarchical Regression of Tedium on Role Conflict, Role Conflict Appraised as Challenges and as Hindrances, their Interactions, and their Three-way Interaction

Variables	Tedium		
	R^2	ΔR^2	β
Step 1	.11***	.11***	
Role Conflict (RC)			.33
Step 2	.13	.02 [†]	
RC-Challenge (RC-C)			-.13 [†]
RC-Hindrance (RC-H)			.10
Step 3	.17	.04*	
RCxRC-C			-.20*
RCxRC-H			.15 [†]
RC-CxRC-H			.13
Step 4	.18	.01 [†]	
RCxRC-CxRC-H			.17 [†]

Note. *** $p < .001$; ** $p < .01$; * $p < .05$; [†] $p < .10$.

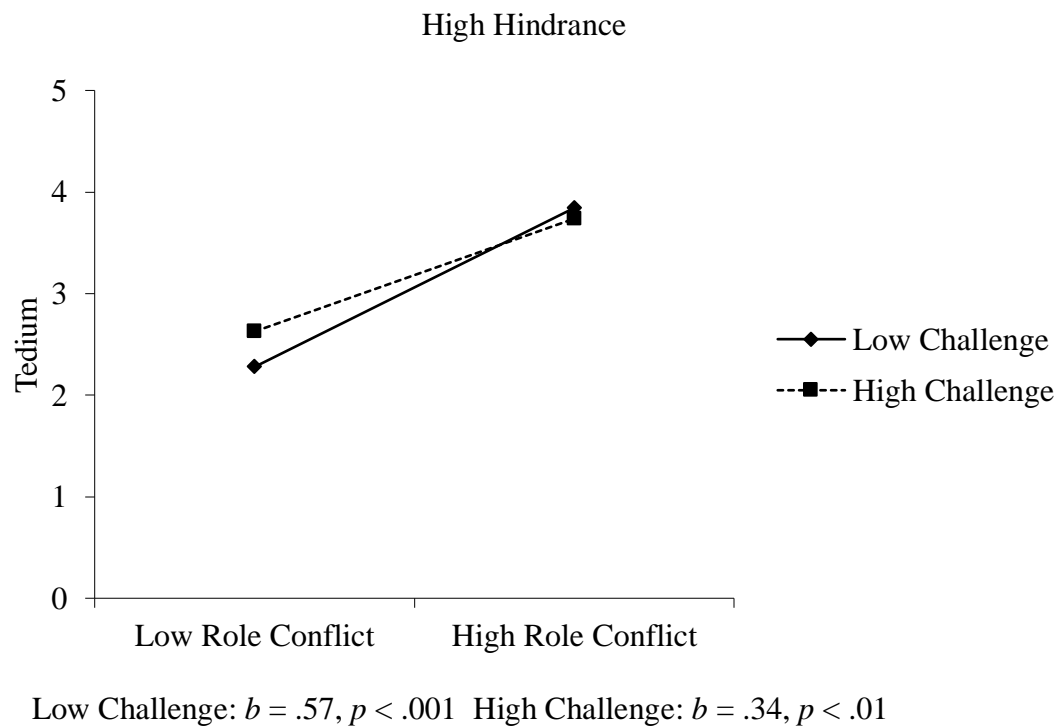
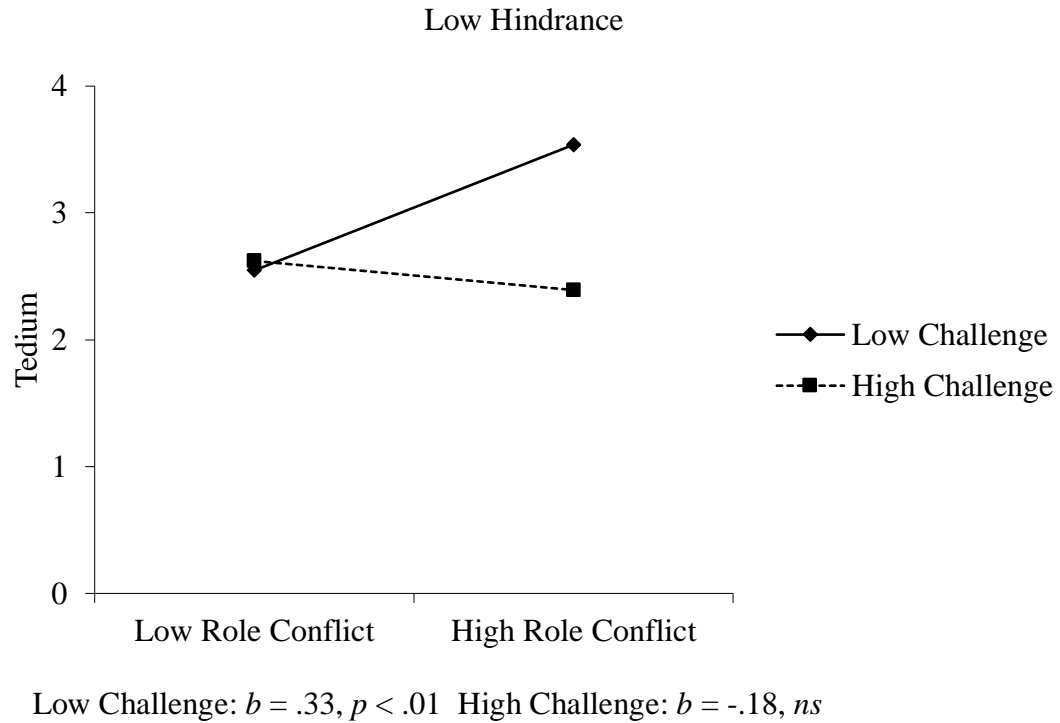


Figure 11. The three-way interaction effect of role conflict appraised as a challenge and a hindrance on tedium. Low hindrance is -1 *SD* below the mean and high hindrance is $+1$ *SD* above the mean. Low challenge is -1 *SD* below the mean and high challenge is $+1$ *SD* above the mean.

Table 15

Hierarchical Regression of Organizational Outcomes on Role Stressors, Role Stressors Appraised as Challenges and as Hindrances, their Interactions, and their Three-way Interactions

Variables	Organizational Outcomes								
	Affective Organizational Commitment			Turnover Intention			Job Satisfaction		
	R^2	ΔR^2	β	R^2	ΔR^2	β	R^2	ΔR^2	β
Step 1	.06	.06***		.07	.07***		.03	.03**	
Control Variable									
Step 2	.13	.07***		.19	.12***		.12	.09***	
Role Conflict (RC)			-.12 [†]			.15*			-.05
Role Overload (RO)			-.17*			.25***			-.27***
Step 3	.18	.05**		.20	.01		.20	.08***	
RC-Challenge (RC-C)			.08			-.11			.13
RC-Hindrance (RC-H)			-.14 [†]			.00			-.17*
RO-Challenge (RO-C)			.14*			.01			.18**
RO-Hindrance (RO-H)			-.06			.10			-.05
Step 4	.22	.04 [†]		.23	.03		.23	.04	
RCxRC-C			.06			-.05			.10
RCxRC-H			-.03			.04			-.17 [†]
RC-CxRC-H			.12			-.15			.16
ROxRO-C			.07			-.04			.06
ROxRO-H			-.12 [†]			.07			.02
RO-CxRO-H			-.17*			.15 [†]			-.12
Step 5	.22	.00		.23	.00		.23	.00	
RCxRC-CxRC-H			-.02			.04			.05
ROxRO-CxRO-H			-.04			-.01			.05

Note. *** $p < .001$; ** $p < .01$; * $p < .05$; [†] $p < .10$.

DISCUSSION

The purpose of this study was to examine the moderating role of stressors appraised as challenges and hindrances on the stressor-strain relationship. Specifically, this study examined the effects of role stressors when appraised as a challenge, a hindrance, neither, or both on both psychological strains (i.e., anxiety, general well-being, job satisfaction, and tedium) and organizational strains (i.e., affective organizational commitment and turnover intentions). Corresponding to the transactional model of stress, the results support one of the core tenants that stressors can be appraised as both a challenge and a hindrance.

Previously, most researchers (e.g., Cavanaugh et al., 2000; LePine et al., 2005; Rodell & Judge, 2005) imposed *a priori* classifications of stressors as either challenges or hindrances. To my knowledge, only one study (by Webster et al., 2011) allowed respondents to self-appraise stressors as a challenge, a hindrance, neither, or both as in the current study. Webster et al.'s (2011) study examined nonteaching employees' at a Midwestern university in the U.S., appraisal of role stressors as a challenge and as a hindrance by having participants respond to a challenge appraisal item and a hindrance appraisal item for each stressor measure. The current study utilizes Webster et al.'s methodology to further refine the relationships found between role stressors and outcomes extending their research to a more occupationally diverse sample. Additionally, most of the research did not address a three-way moderation effect of stressors appraised as a challenge and a hindrance on potential outcomes (see Hollebeek & Haar, 2012, as an exception). Even though Hollebeek and Haar's (2012) study of two distinct samples of New Zealand employees (i.e., Study 1 was of employee of a single organization in a large

metropolitan city involved in a variety of industries and Study 2 was of indigenous Maori employees) examined a three-way interaction effect, they imposed challenge and hindrance labels rather than measuring the participants' perceptions of the stressor. For this reason, their results are unclear if the same stressor can be perceived as both a challenge and a hindrance. The current study addresses this confusion by examining the three-way moderating effect after the participants have been allowed to make their own appraisals of the stressor measures. Therefore, the present study combines both of these missing aspects from the challenge and hindrance literature by (1) allowing respondents to rate each role stressor items on scales assessing challenge and hindrance, and (2) investigating a three-way interaction between stressor, stressor as challenge, and stressor as hindrance.

Before testing the three-way interaction effects on outcomes, direct effects (H_1) and two-way interaction effects (H_2) were tested. H_1 purported that role stressors (each of role ambiguity, role overload, and role conflict) relate with lower levels of desirable outcomes (organizational outcomes: affective organizational commitment and satisfaction, and psychological strain: general well-being) and with higher levels of undesirable outcomes (organizational outcome: turnover intention and psychological strains: anxiety and tedium). As with several studies (e.g., Addae et al., 2008; Boswell et al., 2004; Fogarty et al., 2000; Lambert et al., 2005; Panaccio & Vandenberghe, 2009; Rizzo et al., 1970), the hypothesis was supported.

Stressor-Appraisal Interactions

To test H_{2a-f} , an interaction between role stressors and role stressors appraised as a challenge and a hindrance was tested in relation to psychological strains. Additionally,

H_{2g-1} examined perceived challenge as a moderator of the relationship between role stressors and organizational outcomes. It was expected that stressors positively relate with strains more strongly when the stressors were perceived as hindrances than when the stressors were not perceived as hindrances. Furthermore, it was expected that stressors would be less harmful when perceived as a challenge than when the stressor was not perceived as a challenge, except for anxiety where it was expected that there would be no change. This set of hypotheses was partially supported.

Psychological strains.

Anxiety. Role conflict perceived as a high hindrance intensified the extent to which role conflict positively related to anxiety, thus partially supporting H_{2a}. These findings are similar to previous research (e.g., Boswell et al., 2004; Rodell & Judge, 2009) that classified role conflict as a hindrance stressor and found it to positively relate to anxiety. Moreover, H_{2b} asserted that stressors perceived as a challenge would not affect the stressor-anxiety relationship above and beyond when a stressor was not perceived as a challenge was partially supported. Appraising a stressor as a challenge does not mitigate the positive relationship between either role conflict or role overload with anxiety. Therefore, similar to Boswell et al. (2004) who found both hindrance and challenge stressors to significantly and positively relate to anxiety without significantly varying magnitudes in the correlations, the present results suggest that experiencing a stressor, no matter how it is appraised, may yield anxiety.

Tedium. The assertion that stressors perceived as a hindrance would relate to increased tedium was partially supported (H_{2c}). Perceiving role overload or role conflict as hindrances appears to increase tedium. Moreover, the assertion that perceiving

stressors as a challenge would mitigate tedium (H_{2d}) was not supported. This finding contradicts Rodríguez et al. (2013) findings that eustress (i.e., challenge stressors) negatively correlates with tedium, while supporting their finding that distress (i.e., hindrance stressors) positively correlates with tedium. Maslach and Jackson (1981) describe tedium as containing two main constructs, emotional exhaustion and cynicism; they state that individuals can no longer give themselves psychologically to fulfilling their work roles. Leiter and Maslach (2003) further found that tedium negatively correlates with growth satisfaction and belief in personal accomplishment. Leiter (1993) additionally suggested that inefficacy develops in parallel with tedium. Considering that hindrance stressors are associated with circumstances that constrain or interfere with individual's work achievement (Cavanaugh et al., 2000), one might conclude that the appraisal of a stressor as a hindrance would positively relate with tedium, as found here.

General well-being. Partially supporting H_{2f}, when role conflict was appraised as a low challenge the extent to which role conflict negatively related with general well-being intensified. Furthermore, when role conflict was appraised as a high challenge, role conflict still negatively related with general well-being; however, the negative effect of role conflict on general well-being was slightly mitigated when appraised as a challenge. Webster et al. (2011) concluded that even though an individual appraises working conditions as a challenge, they can still be harmful.

Organizational outcomes.

Affective organizational commitment. The assertion in H_{2g} that stressor perceives as a hindrance would relate to lower affective organizational commitment was partially supported. Role overload perceived as a high hindrance intensified the extent to which

role overload negatively related to affective organizational commitment. In contrast, when role overload was perceived as a low hindrance the extent to which role overload negatively related to affective organizational commitment did not change. Also, that stressors perceived as a challenge would relate to high affective organizational commitment (H_{2h}) was not supported. Prior studies (Hollebeek & Hall, 2012; Podsakoff et al., 2007) categorized role overload as a challenge stressor that would positively relate with affective organizational commitment. However, the present study clearly shows that (1) role overload negatively correlates with affective organizational commitment and (2) even when perceived as a challenge, the correlation with affective organizational commitment does not change, but when perceiving the stressor as a hindrance, affective organizational commitment decreases.

Turnover intention. Contrary to previous literature (e.g., Bowsell et al., 2004; Cavanaugh et al., 2000; Podsakoff et al., 2007) finding a positive relationship between hindrance stressors with turnover intention and a significant negative relationship between challenge stressors with turnover intention, results of the present study do not show any moderating effect of appraisal on turnover intention (i.e., H_{2i} and H_{2j} were not supported). Similarly, Webster et al. (2011) also found a non-significant relationship between stressors appraised as challenge and turnover intention. However, contrary to the present findings, Webster et al. found that role conflict and workload appraised as hindrance stressors positively related to turnover intentions. This might be due to the placement of turnover intention in the nomological net. Turnover intention is not always modeled as a direct consequence of role stressors, but instead an indirect consequence through psychological strains, such as anxiety and organizational outcomes, such as

affective organizational commitment (e.g., Glazer & Beehr, 2005; Netemeyer et al., 1990; Rodell & Judge, 2009).

Job satisfaction. As role conflict, appraised as a low challenge, increased, job satisfaction decreased. Therefore, H₂₁ was partially supported. However, when role conflict was appraised as a high challenge, the negative relationship between role conflict and job satisfaction remained relatively constant. This finding suggests that appraising a stressor as a challenge can mitigate the deleterious effects of said stressor on otherwise positive outcomes (Lazarus & Folkman, 1984). Even though a high challenge appraisal of role conflict did not positively relate with job satisfaction, as others (e.g., Cavanaugh et al., 2000; Hollebeek & Hall, 2012; Podsakoff et al., 2007; Webster et al., 2010) have found, it did appear to buffer against further decline in job satisfaction.

Summary of hypothesis 2.

Based on the results, researchers should not assume certain role stressors are challenges and others hindrances. Indeed, the present study disconfirms prior studies (e.g., Cavanaugh et al., 2000; LePine et al., 2005) that have imposed such a label. Instead, the present findings show that respondents are in a better position for evaluating a stressor as a challenge or a hindrance and these appraisals are not consistent with those imposed by researchers (e.g., Podsakoff et al., 2007; Webster et al., 2010). The appraisal of a stressor as a hindrance denotes stronger deleterious effect on psychological strains, specifically on anxiety and tedium, whereas appraising stressors, particularly role conflict, as a challenge, appears to have a modest buffering effect on general well-being (a psychological outcome) and job satisfaction (an organizational outcome that has in other studies been labeled as a psychological outcome focused on the job; Beehr &

Glazer, 2005).¹ These results suggest it is good for individuals to perceive a level of challenge in their work, which could have implications on companies to ensure that employee perceive some level of challenge in their work. Even though perceiving a stressor as a challenge may not fully or drastically mitigate the deleterious effects of a stressor it does help to not make it worse. Finally, role overload appraised as a hindrance reduces affective organizational commitment, but when it's not a hindrance, affective organizational commitment does not change.

In short, the present study's results counter prior studies' categorization of role conflict as a hindrance and role overload as a challenge stressor. Furthermore, this study shows that role conflict and role overload can be appraised as both a challenge and a hindrance. The findings from the current study are analogous to Webster et al.'s (2011), further supporting the need for self-appraisal of stressor measures in future studies.

Three-Way Interactions

A novel contribution of this study is the recognition that stressors can be simultaneously appraised as (1) a hindrance, but not a challenge, (2) a challenge, but not a hindrance, (3) a challenge and a hindrance, and (4) neither a hindrance nor a challenge (H₃). H_{3a-f} postulated role stressors appraised as a high hindrance and a low challenge will moderate the relationship between role stressors with potential outcomes, such that the positive relationship between stressors and undesirable outcomes (psychological strains: anxiety and tedium and organizational outcome: turnover intention) and the negative relationship between stressors and desirable outcomes (psychological strain: general

¹ Diener et al. (1999) have also referred to job satisfaction as a measure of subjective general well-being.

well-being and organizational outcomes: affective organizational commitment and job satisfaction), will be stronger. H_{3g-l} postulated stressors appraised as a low hindrance and a high challenge will moderate the relationship between role stressors with potential outcomes, such that appraisal of the stressor as a high challenge will mitigate the deleterious effects of a hindrance appraisal. H_{3m-r} postulated stressors appraised as a high hindrance and a high challenge will moderate the relationship between role stressors with potential outcomes, such that the appraisal of a stressor as a high challenge will not effectively mitigate the deleterious effects of a high hindrance appraisal. H_{3s-x} postulated that stressors appraised as a low hindrance and a low challenge will moderate the relationship between role stressors with potential outcomes, such that the positive relationship between stressors and undesirable outcomes and the negative relationship between stressors and desirable outcomes will be weaker. Of all the three-way interactions, only one yielded a significant three-way interaction effect.

Only when role conflict was appraised as a low hindrance did viewing role conflict also as a high challenge mitigate the deleterious effects of hindrance appraisal on tedium. In contrast, when role conflict was appraised as a high hindrance, but as a low challenge the extent to which role conflict positively related to tedium intensified. However, when role conflict was appraised as a high hindrance, also appraising the stressor as a high challenge, added little to no protection from the deleterious effects of role conflict on tedium; the stressor-teidium relationship continued to be positive. Even though prior studies (e.g., Boswell et al., 2004; Webster et al., 2010) classified role conflict as a hindrance, the current study's results are similar to those prior studies in that role conflict (which they labeled as a hindrance stressor) positively related with tedium.

Specifically, Boswell et al. (2004) found that amongst workers at a western university, both challenge and hindrance stressors positively correlate with emotional exhaustion and the magnitudes of the correlations did not differ. Furthermore, they found that perceiving job challenge had no impact on the relationship between hindrance stressors and outcomes. Their results suggest the deleterious effects of perceiving stressors as a hindrance cannot always be overcome by perceiving them also as a challenge. In other words, persevering through adversity does not go unpunished. It's only when a stressor is not noxious that perceiving it as a challenge minimizes tedium. Caution must be exercised when interpreting this sole significant three-way interaction effect; it was only one such finding among 16 analyses.

Limitations and Future Directions

The current study is not without several limitations that can lead to further improvement in future studies. First, in order to appraise role ambiguity, it is important to clearly specify what the stressor is. This specification might best be done by rewriting the role ambiguity items to reflect ambiguity, rather than role clarity.

Second, this study is limited to a single measurement of an individual's perceptions of stressors (i.e., a cross-sectional design), even though stressors are not always short-term and may cause secondary outcomes (Parker & Decotiis, 1983). Avey, Luthans, and Mhatre (2008) argue that the appraisal of challenge stressors runs on a continuum that can be affected by one's psychological capital, which can develop as one gains resources (e.g., knowledge or social support). The Transactional model also suggests the stressor-strain process is a continuous, ongoing process, with a continual interplay between the person and the environment making it difficult to pinpoint where

the process begins and ends (Lazarus, 1990). For this reason, future research should utilize a longitudinal research model to examine how the appraisal of stressors may change over time. Furthermore, Ployhart and Vandenberg (2010) contend that utilizing a longitudinal design results in an increased reliability of causal inferences of stressors on strains. A longitudinal design would allow for a baseline of dispositional measures to be established in order to avoid a threat to internal validity (Spector, Chen, & O'Connell, 2000). In the current study, we can only speculate what a respondent's disposition is to stressors.

Despite these limitations, the present study presents several advantages over prior studies. First, through MTurk, it was possible to control for various organizational aspects that have not necessarily been controlled for in prior studies, such as capturing only full-time working adults who report to a supervisor. A related drawback, however, is that the respondents were not from the same company or industry, therefore, the kinds of stressors people experience are not reflective of a given population. In Webster et al.'s (2011) study, surveys were administered to all nonteaching staff at a university and in Cavanaugh et al. (2000) the survey respondents were high level managers listed in a database of a large executive search firm; neither study specified if the respondents were full-time or part-time. These two populations may be motivated by opportunities to be resourceful in finding work-arounds when stressors arise. Thus, the present study is solely a study of variable relationships and in future studies researchers ought to consider the context of their study when examining why some stressors may have positive impacts on people.

The current study's results provide support for the Transactional model of stress (Lazarus & Folkman, 1984), such that stressors can be appraised as both a challenge or a hindrance simultaneously. Furthermore, the present study shows that how a stressor is appraised can have an effect on outcomes. To enhance the generalizability of these findings, future research should continue to explore the moderating effects of stressor appraisal on stressor-outcome relationships.

Finally, the results from the present study of primary appraisal suggest that individuals appraising a stressor as a challenge is beneficial; it mitigates the potential deleterious effects the stressor has on well-being (including general well-being and job satisfaction). According to Rodríguez et al. (2013), eustress (i.e., challenge stressors) has positive effects on work engagement and negative effects on tedium, however excessive positive appraisal of stressors may negatively impact effective coping with later stressors. Appraising a stressor as a challenge may cause an individual to suppress his or her awareness of the possible negative effects of a stressor (Rodríguez et al., 2013), therefore hindering his or her implementation of effective coping. Gross and John (2003) found undergraduates who suppressed experiences to have delayed reactions to events causing greater negative outcomes, such as negative emotions. Conversely, individuals who reappraised experiences, an antecedent-focused strategy to change the emotional impact (Lazarus & Alfert, 1964), had greater positive emotions and greater well-being (Gross & John, 2003). In an earlier experimental study of a sample of Stanford University women, Butler, Egloff, Wilhelm, Smith, Erickson, and Gross (2003) found that suppression reduced responsiveness to salient problems and increased anxiety, which was not found in those exhibiting cognitive reappraisal as a form of emotion regulation. Consequently,

future research should assess if primary appraisal of a stressor as a challenge influences secondary appraisal and if the effects of the primary appraisal might be deleterious on the secondary appraisal.

Implications and Conclusion

The current study demonstrates the importance for considering individuals' appraisals of stressors, rather than imposing their own interpretations of the stressor, much like Jex and colleagues (1992) noted in their study that revealed stress means something different to researchers and laypersons. Researchers of stressors as challenges and hindrances often impose their own appraisal of those stressors (e.g., Cavanaugh et al., 2008; Podsakoff et al., 2007; Webster et al., 2010). Jex et al. warned scholars that imposing functional definitions to the word "stress" perpetuates erroneous conclusions of job stress research findings. Thus, heeding to their guidance to minimize research imposition of interpreting the intended appraisal of a stressor, this study set out to obtain respondents' self-appraisals of the stressors. As a result, it became clear that although role stressors can be evaluated as hindrances and as challenges, similar to Webster et al. (2011), even when a stressor is appraised as a challenge, it is unlikely to yield beneficial outcomes, whereas appraising a stressor as a hindrance is more likely to yield deleterious results. Only in one correlation was role overload, perceived as a challenge, positively related to an outcome – job satisfaction. For all other challenge appraised stressors and outcome relationships, the correlations were not significant. Moreover, only in the role conflict – job satisfaction and role conflict—general well-being relationships did a challenge appraisal buffer the negative relationship. In contrast, amongst all hindrance appraised stressors were the correlations significant in the expected directions. Thus,

although a stressor appraised as a challenge can mitigate the undesirable effects of stressors on outcomes and strains, such an appraisal does not mean positive outcomes will ensue. Much more research needs to be conducted on how self-appraisal of stressors as a challenge and a hindrance effects outcomes in the workplace.

The findings from the current study suggest that organizations looking to reduce the negative outcomes of stressors should take on the onus of mitigating those stressors that are controllable by the organization, rather than encouraging its employees to look at the stressors differently. The current study suggests that a challenge appraisal will not yield positive effects, it only helps to mitigate negative outcomes.

Furthermore, the results advocate for organizations and practitioners to tailor stress intervention programs to the individual based on how they perceive stressors. Theory of preventive stress management's (TPSM) central tenant is that stimuli themselves do not cause individual outcomes rather the resulting outcomes are mediated by the response of the individual to those stressors/stimuli which can be both positive or negative (Hargrove et al., 2011). Psychosomatic stress responses not only lead to negative outcomes, but also positive outcomes in that the mind-body reaction allows for individuals to improve their ability to cope with a stressor (e.g., Dhabar, 2011). Quick, Joplin, Nelson, Mangelsdorf, and Fiedler (1996) found in a military sample that that self-reliance and interdependent attachment was an indicator of a eustress response resulting in lower levels of burnout and higher levels of health. Simmons, Nelson, and Quick (2003) found similar finding when studying home health nurses. It is argued that certain indicators, such as hope and manageability, can be indicators of positive outcomes resulting from a positive appraisal (i.e., challenge appraisal) of a stressor (Hargrove et al.,

2011; Simmons & Nelson, 2007). Furthermore, Hargrove et al. (2011) argue distress can occur when an individual perceives both low and high levels of stressors. Under-arousal can have negative consequences due to an individual not having the knowledge or resource to cope when a stressor does arise. They argue that a level of anxiety can be desirable to increase performance to reach a deadline. Many organizations focus on primary interventions trying to manage the intensity, frequency, and duration of a stressor (Hargrove et al., 2011). However, the current study's results advocate for increase in secondary intervention, ones that are designed to improve how an individual responds and copes to a stressor (Adkins, 1999).

Additionally, individual and organizational outcomes related to a stressor are contended not to be independent (Hargrove et al., 2011). Rather organizational stressors can result in an individual's strain and an individual's experience of a stressor and the potential outcomes can result in dysfunction for the organization (Hargrove et al., 2011). Researchers (e.g., Lamontagne et al., 2007; Macik-Frey, Quick, & Nelson, 2007; McVicar, Munn-Giddings, & Seebohm, 2013) advocate for the necessity to have interventions both at the individual level and organization level in order to create a healthy organization as a whole. Interventions at the individual level may promote challenge stressors due to the findings of beneficial effects on psychological strains when some level of challenge is perceived. Whereas, organizational level interventions may aspire to eliminate any noxious stimuli that could cause deleterious outcomes. Therefore, practitioners and organizations should look to provide individuals and the entire organization the necessary tools to balance challenge stressors against hindrance stressors.

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Appendix A

Demographic Items Assessed in Surveys

Survey 1

1. Eligibility to work in the USA

Yes

No

2. Marital Status

Divorced

Living with partner(s)

Married/Re-married

Separated

Single

Widowed/Widower

Other (please specify)

3. Number of years spent at current profession

Please indicate the number of years that you have spent in your current profession (i.e., not your current job role, but your general profession)?

4. Number of years working at current company

How long have you been **working** for **your** company in years and months (e.g., 3 years and 4 months would be indicated as 3 in the first write-in space and 4 in the second write-in space)?

Year (s)

Month(s)

5. Occupation

Management, professional, and related

Service

Sales and office

Farming, fishing, and forestry

Construction, extraction, and maintenance

Production, transportation, and material moving

Government

Retired

Education

Other (please specify)

6. Job title (open-ended response)

7. Number of employees (if any) the respondent supervised

Yes (please indicate how many)

No

8. Number of dependents

Under 18 years of age
18-26 years of age
27 or above years of age

Survey 2**1. Academic degree**

High school degree
Bachelor's degree
Master's degree
Doctorate
Other (please specify)

2. Dominant ethnicity

American Indian or Alaska Native
Asian
Black or African American
Hispanic, Latino, or Spanish Origin
Middle Eastern or North Africans
Native Hawaiian or Pacific Islander
White or Euro-American
Other (please specify)

3. Sex

Female
Male

Appendix B

Survey Items in Current Study

A self-report survey was administered through MTurk via TurkPrime. All items were rated on a 7-point Likert scale ranging from 1, “strongly disagree” to 7, “strongly agree.”

Role Stressors

Role Conflict

1. I have to do things that I think should be done differently.
2. I work with two or more groups that operate quite differently.
3. I receive incompatible requests from two or more people.
4. I do things that are apt to be accepted by one person and not accepted by another.
5. I work on unnecessary things.

Role Ambiguity (All role ambiguity items were reverse coded to connote ambiguity vs. clarity).

1. I feel certain about how much authority I have.
2. I have clear, planned goals and objectives for my job.
3. I know I have divided my time properly.
4. I know exactly what is expected of me.
5. Explanation is clear of what has to be done.

Work Overload

1. I receive an assignment without the manpower to complete it.
2. I am given enough time to do what is expected of me on my job. (R)
3. It seems like I have too much work for one person to do.
4. On my present job, the amount of work seems to interfere with how well I can do the job.
5. I often notice a marked increase in my work load.

Challenge and Hindrance

Respondents rated his or her perception of each role stressor as a challenge and a hindrance. Both items were rated on a 7-point Likert scale ranging from strongly disagree to strongly agree.

1. I find this a challenge to my work.
2. I find this a hindrance to my work.

Outcomes/Strains

Organizational Commitment

1. I do not feel like “part of the family” at my organization. (R)
2. I would be very happy to spend the rest of my career with this organization.
3. This organization has a great deal of personal meaning for me.
4. I do not feel a strong sense of belonging to my organization. (R)
5. I enjoy discussing my organization with people outside of it.
6. I really feel as if this organization’s problems are my own.
7. Overall, I am satisfied working at this organization.

8. I do not feel “emotionally attached” to this organization. (R)
9. I think that I could easily become as attached to another organization as I am to this one. (R)

Turnover Intention

1. I will actively look for a new job in the next year.
2. I often think about quitting.
3. I will probably look for a new job in the next year.

Job Related Anxiety

1. I have felt fidgety or nervous as a result of my job.
2. My job gets to me more than it should.
3. There are lots of times when my job drives me right up the wall.
4. Sometimes when I think about my job I get a tight feeling in my chest.

Tedium

When you think about your work overall, how often do you feel the following?

1. Hopeless
2. Depressed
3. Helpless
4. “I’ve had it”
5. Worthless/like a failure
6. Tired
7. Disappointed with people
8. Physically weak/sickly
9. Difficulties sleeping

General Well-being

1. I have been feeling reasonably happy, all things considered.
2. I have been feeling unhappy or depressed. (R)
3. I have been losing confidence in myself. (R)
4. I have been thinking of myself as a worthless person. (R)
5. I have been able to enjoy my normal day-to-day activities.
6. I have been able to face up to my problems.
7. I have felt capable of making decisions about things.
8. I have felt that I can’t overcome my difficulties. (R)
9. I have lost much sleep over worry. (R)
10. I have been able to concentrate on what I am doing.
11. I have felt that I am playing a useful part in things.

Job Satisfaction

1. Overall, I am satisfied working at this organization.