# THE MODERATING EFFECTS OF HEALTHY VALUE CONGRUENCE ON THE ROLE STRESSOR- STRAIN RELATIONSHIP

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by

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# The Designated Thesis Committee Approves the Thesis Titled

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#### **ABSTRACT**

# THE MODERATING EFFECTS OF HEALTHY VALUE CONGRUENCE ON THE ROLE STRESSOR- STRAIN RELATIONSHIP

## by Krystal N. Roach

This study examines the moderating effects of healthy value congruence on the relationship between role stressors (i.e., role ambiguity, role conflict, and role overload) and outcome variables (i.e., burnout and turnover intention) in 98 nurses. Utilizing a growth and deficiency needs foundation, it was proposed that individuals who endorse healthy value types, would report lower levels of burnout and turnover intention than individuals who endorsed unhealthy value types. Furthermore, based in Person-Environment Fit theory, it was predicted that individuals who endorsed healthy values to a similar extent that they perceived their organization endorsed healthy values (i.e., value congruence) would report lower levels of burnout and turnover intention than individuals whose healthy values were incongruent from the perceived organizational values. Results indicated mixed findings. Although some value types received support (e.g., benevolence), others did not relate to burnout and turnover intention as proposed. Furthermore, although value congruence generally acted as a buffer of the stressor-strain relationship, in some cases, it was related to higher levels of poor outcomes. The findings of this study suggest that the stressor-strain relationship depends on the context of the (a) stressors, (b) strains, and (c) values studied.

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#### INTRODUCTION

The Person-Environment (P-E) fit theory stipulates that for a person to function well in his or her environment, there must be a sense of congruence between (1) characteristics or motivations of the person and (2) characteristics or needs of the environment (Dewe, O'Driscoll, & Cooper, 2012). This conceptual framework is frequently used to model stressor-strain relationships by assessing an individual's perception of fit between his or her own characteristics and the characteristics of the organization (i.e., Person-Organization fit). Supplementary P-E fit, the focus of this study, identifies fit based on characteristics (e.g., values) that individuals may have in common with their organization. In comparison, complementary fit explains a mutually beneficial relationship, where individual and organizational characteristics differ, but provide something the other is lacking (Kristof, 1996; Kristof-Brown, Zimmerman, & Johnson, 2005). Theoretically, when a person perceives a fit he or she should experience greater well-being and fewer strains (Cooper, Dewe, & O'Driscoll, 2001).

Despite the publication of multiple studies focusing on "fit" (e.g., Dendaas, 2011; Siegall & McDonald, 2004; Vandenberghe, 1999), several discrepancies in how researchers conceptualize and analyze P-E fit have been identified (Verquer, Beehr, & Wagner, 2003). For example, Verquer and colleagues (2003) note that some researchers examine P-E fit using measures of goal congruence (i.e., the intersection of individual and organizational goals), others by measures of personality-climate fit (i.e., the similitude between personality characteristics and organizational climate), and others using value congruence (i.e., the degree of fit between individual and organizational values) measures. Value congruence has emerged as the most empirically examined approach to supplementary P-E fit (Cable & Edwards, 2004; Hoffman, Bynum, Piccolo, & Sutton, 2011; Verquer et al., 2003).

Values refer to goal-directed beliefs about what is important in life; they are organized into a hierarchy of importance (some values are not endorsed at all and may oppose one's goals, whereas others may be of supreme importance), guide behavior, and transcend specific situations (Schwartz, 1992). As motivational-cognitive states, values

might shape a person's felt experiences in the organization and, as a result, frame a person's experiences of stressors and reactions to those stressors (Glazer, Simonovich, Roach, & Carmona, accepted; Sagiv & Schwartz, 2000). Thus, when a person's values are attained, subjective well-being, conceptualized in both cognitive and affective forms, will increase. The cognitive aspect of subjective well-being considers aspects, such as satisfaction, whereas the affective aspect is focused on an individual's feelings of happiness or sadness (Argyle & Martin, 1991, as cited in Sagiv & Schwartz, 2000). This research examines affective subjective well-being (henceforth referred to as subjective well-being). Sagiv and Schwartz (2000) examined Schwartz's (1992) 10 basic values (see Table 1) and asserted that some values are "healthy," and other values are "unhealthy." Healthy values are expected to increase an individual's personal happiness, whereas unhealthy values are expected to reduce subjective well-being.

Furthermore, when a person's values are congruent with the organization's values, the person is more likely to feel committed, engaged, and satisfied, and to report stronger positive emotional well-being, and weaker intention to leave (Edwards & Cable, 2009; O'Reilly, Chatman, & Caldwell, 1991; Verquer et al., 2003). In comparison, when a person's values are incompatible with the organization's values, strains, such as anxiety, lower satisfaction, and intention to leave the organization, develop for the person (Boamah & Laschinger, 2016; Bocchino, Hartman, & Foley, 2003; Edwards & Cable, 2009; Leiter & Maslach, 2009; Vandenberghe, 1999; Yang, Che, & Spector, 2008). Thus, it is reasonable to suggest that if healthy (vs. unhealthy) values and value congruence positively relate with subjective well-being (Sagiv & Schwartz, 2000), then lack of congruence (i.e., value incongruence) of healthy values (as defined by Sagiv & Schwartz, 2000) would moderate the stressor-strain relationship, such that the positive relationship between stressors and both burnout and turnover intention would be stronger when values are incongruent. Few studies have looked at healthy values (exceptions include Buchanan, 2004; Sagiv & Schwartz, 2000) or value incongruence (an exception is McCoy, 1986) as moderators of the relationship between stressors and strains, and none

have specifically examined congruence of healthy values. This study's novel contribution, therefore, is the examination of healthy value congruence.

This study's focus on value (in)congruence and its implications on the stressor-strain relationship is particularly pertinent to the nursing profession, as research reports significant differences between the personal and professional values of nurses (Rassin, 2008). Nurses often enter the profession with the intent to enact values, such as altruism (Rassin, 2008), only to learn that in reality they enter organizations, particularly hospitals, that strive toward capital growth (Vandenberghe, 1999). However, in a study of 323 Israeli nurses, Rassin (2008) found that the importance ratings of some professional values have shifted; nurses no longer viewed altruism and confidentiality as being highly endorsed in the profession, likely due to organizational demands. When healthy values are incongruent, the stressor-strain relationship may intensify.

Because nursing is a high touch, high stakes job, any negative implications of work-related stressors can have dire consequences not only to the profession, but also to the patients and the organization (Bao, Vedina, Moodie, & Dolan, 2013). Therefore, investigating healthy value congruence in this population may reveal if value incongruence intensifies the stressor-strain relationship. A secondary outcome from this research may be information as to whether nurses' healthy values are unaligned with their perceptions of the organization's values. Results from the study may support education and training initiatives aimed at mitigating nurses' strains, such as emphasizing realistic job previews (Earnest, Allen, & Landis, 2011; Meglino & DeNisi, 1987). Indeed, realistic job previews increase role clarity, thus reducing the ambiguity employees perceive regarding their role (Earnest et al., 2011).

Understanding the role of healthy value congruence on the stressor-strain relationship has practical implications for companies too, as companies aim to attract and select promising candidates, and retain employees that perform well (Schneider, 1987). The costs associated with the selection process and attrition (i.e., turnover) are quite high (Glebbeek & Bax, 2004; Tracey & Hinklin, 2010), especially among healthcare professions (Jones, 2005; Jones, 2008; Waldman, Kelly, Arora, & Smith, 2004). Prior

studies have shown that value incongruence in the nursing field yields burnout and turnover intention (Leiter, Jackson, & Shaughnessy, 2009; Leiter, & Maslach, 2009). In order to minimize burnout and turnover, organizations provide opportunities to socialize new employees through training programs, performance feedback meetings, and modeling of others' behaviors. Through these socialization strategies, organizational values are reinforced. And, when employees' values align with organizational values they are retained. When values do not align, employees often leave (on their own or with the help of the company). However, it is not only the company that identifies alignment. The employee does as well, such as when he or she decides to accept an offer, make efforts to socialize into the company culture, and remain with or leave the company. It is the latter point, retention, that I am examining. Specifically, I focus on whether a person's perceived healthy value congruence mitigates the extent to which stressors lead to burnout and turnover intention (see Figure 1).

Figure 1 shows three types of relationships: direct effects, two-way interaction (moderating) effects, and three-way interaction effects on the focal outcome variables. I propose four direct effects models. First, stressors (identified at Time 1 or T1) will directly relate to strains (identified at T1 and Time 2 or T2). Second, personal healthy values (T1) will directly influence burnout and turnover intention (T2). Third, because values shape perceptions of stimuli too (Schwartz, 1992), I also propose that healthy values (T1) will directly relate to stressors (T1). Fourth, healthy values (T1) will directly relate to general well-being and job-related anxiety (T2). The two-way moderating effects model stipulates that personal healthy values (T1) explain when stressors (T1) relate to strains (T2); endorsement of healthy values may protect nurses from negative consequences of stressors. Finally, a three-way interaction model proposes that congruence between (self-reported and perceived organizational) healthy values (T1) moderates when stressors (T1) relate to strains (T2).

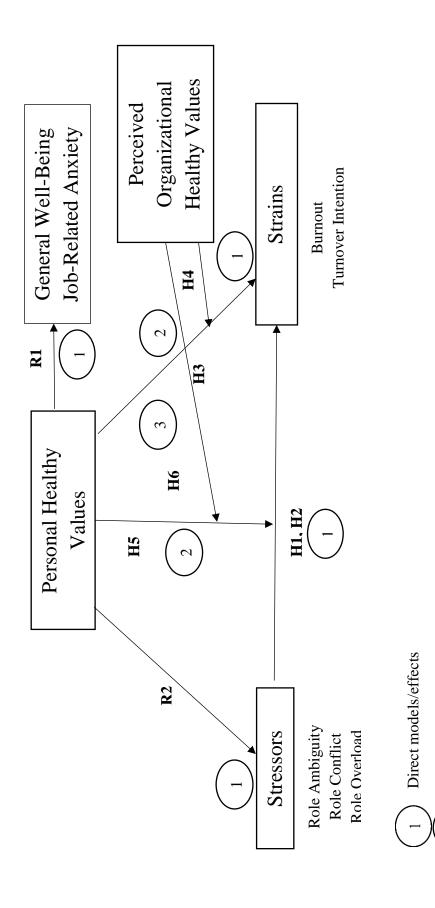


Figure 1. Models of stressor-strain relationships tested in the current study.

Three-way interaction models/effects

Moderator models/effects

In addition to the main goal of testing the moderating effects of healthy values congruence on the stressor-strain relationships, this study has several additional novel contributions. First, this study examines stressors and values assessed at T1, and stressors and strains assessed at T2. By utilizing a longitudinal survey design and thus temporally controlling for stressors at T2, it will be possible to test the role of time in affecting stressors' (T1) impact on strains (T2), thus allowing for a more comprehensive understanding of stressor-strain relationships (Zapf, Dormann, & Frese,1996). Second, this study focuses on healthy values purported to promote well-being (Sagiv & Schwartz, 2000). Third, this study proposes a critical distinction in the current understanding of the role of value congruence on stressor-strain relationships, such that this study proposes (in)congruence of healthy values will moderate stressor-strain relationships.

In the remaining sections of this thesis, I present a literature review defining the main concepts and variables of this study (i.e., stressors, strains, and healthy values and value congruence as moderators) along with the theoretical framework that governed this thesis. I also present other influential models of occupational stress research and the study hypotheses. The study method and results follow the literature review, and then I discuss findings in light of P-E fit and healthy values, as well as the implications for research and practice.

#### LITERATURE REVIEW

Numerous studies have found support that role stressors (e.g., role ambiguity, role conflict, and role overload) positively relate to burnout (e.g. Han, Han, An, & Lim, 2015; Kim & Lee, 2009; Kim & Stoner, 2008) and turnover intention (e.g., Glazer & Beehr, 2005; Han et al., 2015; Hang-yue, Foley, & Loi, 2005). However, there has yet to be a study to examine P-E congruence of healthy values as a buffer of the relationships between role stressors and strains (i.e., burnout and turnover intention).

Studying the role of healthy values congruence on the stressor-strain relationship could help companies better understand why healthcare costs are between \$125 billion to \$190 billion per year and deaths per year from work-related stress are as high as 120,000 (Goh, Pfeffer, & Zenios, 2015). Although 80% of workers feel 'stressed' at work and 25% of individuals viewed their jobs as the most stressful thing in their lives (The American Institute of Stress, n.d.), it is still not clear if some of the implications of stressors could be mitigated by aligning employees' values with the organization's values (i.e., value congruence).

The Person-Environment Fit theory forms the basis of the present study's conceptualization of value congruence as a moderator of the stressor-strain relationship. The premise of P-E fit theory is that the effects of stressors on strains is a function of the relationship between factors of the person and factors of the environment (Beehr & Newman, 1978). Thus, the interaction between the person and the environment should moderate the stressor-strain relationship, although this piece of the theoretical model has been mostly ignored. In this thesis, I specifically examine if aspects of the person (self-reported values), aspects of the environment, specifically the organization (person perceived organizational values), and the congruence between the person and environment influence when stressors relate to strains. I expect that when a person's endorsement of healthy values is congruent with their perceptions of the organization's endorsement of healthy values, the positive relationship between stressors and strains will be weaker than when the values are incongruent. When a person endorses healthy values, but perceives that the organization does not endorse healthy values, the positive

relationship between stressors and strains will be stronger. However, when a person does not endorse healthy values and the person perceives that the organization also does not endorse those values, despite congruence, the positive stressor-strain relationship will not significantly change and it will also not significantly change when the person does not endorse the healthy values, but the organization is perceived to do so. Thus, I assert that the impact of stressors on strains intensifies when a person perceives that the organization does not endorse the same healthy values. Given that the goals of this study were to determine the influence of healthy value congruence on the stressor-strain relationship, it is necessary to conceptualize occupational stress, and explain the importance of values research in the nursing population.

## **Understanding Occupational Stress**

Occupational stress is an umbrella term to describe the relationship between stressors and strains in the workplace (Beehr & Glazer, 2005). Some researchers erroneously use the term *stress*, when they mean either *stressors* or *strains* (Glazer & Gyurak, 2008). For example, when reading results of the International Labour Organisation (ILO), that 40% of job absenteeism could be attributed to stress (Hoel, Sparks, & Cooper, 2001), it is difficult to determine whether *stress* refers to stressors, strains, or both. These distinctions are vital because they allow researchers to make connections across studies and contribute to further understanding in the field. For the purpose of this study, *stressors* refer to aspects of work and the work environment that demand, constrain, or challenge a person (Lazarus & Folkman, 1987). *Strains* refer to stressor responses that negatively impact an individual's physical and psychological health (Beehr & Glazer, 2005; Glazer & Gyurak, 2008).

**Nurses and Stress.** Nurses are the focus of the present study, because the nature of the job and their variety of experiences with various workplace stressors (McVicar, 2003; Wisdom, 1984), make them an ideal population to examine the study variables. For example, in a confirmatory factor analysis of the *Expanded Nursing Stress Scale*, French, Lenton, Walters, and Eyles (2000) identified nine distinct work-related stressors nurses experience: (1) Death and dying, (2) Conflict with physicians, (3) Inadequate preparation,

(4) Problem with peers, (5) Problems with supervisors, (6) Workload, (7) Uncertainty concerning treatment, (8) Patients and their families, and (9) Discrimination. Although the present study does not examine stressors specific to nurses only (i.e., job-specific role stressors; Beehr, Jex, Stacy, & Murray, 2000), but instead addresses stressors that are generic across occupations, it does somewhat capture two of the nine job-specific stressors salient to nurses: conflict and workload. Generic role stressors may be identified in any job that is structured around roles (Glazer, 2005). Moreover, because this study's main focus is on variable relationships and not on the effects of profession-specific stressors on strains, delving into professional stressors, while asking about organizational (and not professional) values would lead to difficulty interpreting results. Generic role stressors generalize beyond the occupation (Glazer, 2005), where workers in any occupation can understand and rate their feelings of having 'too much work for a single person to accomplish.' Generic stressors do not ignore occupation, as individuals rate their perception of their unique job.

As this study uses a measure of generic role stressors, and controls for occupational differences by only using hospital nurses, it would likely yield generalizable results of variable relationships to other high stakes professions (Glazer, 2005). Examining the stressor-strain relationship and its implications on nurses' well-being are important, as nurses' experience with workplace stressors may affect their ability to care for patients (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Bao et al., 2013) and the hospital's overall effectiveness. Role stressors are a commonly studied and reported job stressor within nursing literature (e.g., Chang & Hancock, 2003; Glazer & Beehr, 2005; Glazer & Gyurak, 2008; Vredenburgh & Trinkaus, 1983), likely due to the characteristics and expectations of the job. Although many professionals experience role stressors, Glazer (2005) theorized several reasons that hospital nurses are "particularly vulnerable to role related stressors (e.g., role conflict, role overload, and role ambiguity) and subsequent strains" (p. 143). One such reason is the nature of nursing in hospitals, which requires round-the-clock staffing (i.e., shiftwork). In a study of 397 Israeli nurses, Glazer (2005) reasoned that nurses who worked fixed day shifts had higher role conflict and role

overload than partially rotating nurses because of the day shift-workers' task conflict and task overload built into the day shift in the form of more administrative work (e.g., medication ordering from the pharmacy and paperwork to complete for discharge) and more interactions with others (e.g., staff, patients, and visitors; Glazer, 2005). Moreover, several studies have found that shiftwork has a negative impact on well-being (Jamal & Baba, 1997; Takahashi et al., 2005).

Nursing literature frequently examines burnout (Boamah & Laschinger, 2016; Han et al. 2015; Leiter, Gascon & Martinez-Jarreta, 2009) and turnover intention (Kim & Stoner, 2008; Siegall & McDonald, 2004). However, prior to the current study, little research has recognized the implications of values on these specific strains (an exception is Bao et al., 2013), and none have investigated the role that healthy value congruence may have on the stressor-strain relationship. Bao et al. (2013) found that value incongruence positively relates with turnover among nurses, which may be due to a mismatch between individual values in the profession and organizational (hospital) values. It is not simply the incongruence of values that influences strains, though; as this study proposes, the healthiness of the values an individual endorses (Sagiv & Schwartz, 2000) pairs with value congruence to influence the stressor-strain relationship. Nurses are likely to value helping behaviors (Glazer & Beehr, 2002), whereas the ultimate goal of hospitals, though initially to serve the well-being of patients, has transformed into a money-making industry (Vandenberghe, 1999). This proposed misalignment makes the nursing profession a unique population to study the role value congruence plays on the stressor-strain relationship. The role of value congruence on the stressor-strain relationship has implications for individuals and organizations (Schneider, 1987). It is reasonable to suggest that if value congruence influences employee hiring, job satisfaction, and attrition (Schneider, Goldstein, & Smith, 1995) then it may also play a role in influencing the other outcomes frequently related to variables such as attrition, namely burnout (e.g., Goodman & Boss, 2002) and turnover intention (e.g., Beecroft, Dorey, & Wenten, 2008).

#### **Stressors and Strains**

The present study examines role stressors (i.e., role ambiguity, role conflict, and role overload) in relation to strains (i.e., burnout and turnover intention) as moderated by value congruence. The purpose of this section is to define and describe these stressors and strains.

Stressors. Stressors are stimuli that can, but do not necessarily, cause strain responses in an individual (McGowan, Gardner, & Fletcher, 2006). One of the most common categories of job stressors is work-related role stressors (Jex, 2002). Role stressors are psychosocial demands, constraints, or opportunities that individuals perceive in their work roles (Beehr & Glazer, 2005). When a person perceives his or her role in the organization as confusing, conflicting, or overtaxing, the individual may develop strains (or negative responses due to the stressors). As such, when individuals' personal values align with the organization's values, people experience fewer role stressors in comparison to those for whom person and organization values are less congruent (Verquer et al., 2003). The present study examines three types of role stressors: role ambiguity, role conflict, and role overload.

Role Ambiguity. Rizzo, House, and Lirtzman (1970) defined role ambiguity as lack of clarity in role expectations, resulting in employee confusion. Nurses may encounter role ambiguity in a variety of situations as they are consistently exposed to situations without complete information or instruction due to the fast-paced nature of the job. A study of recent nursing graduates found that nurses experience high levels of role ambiguity when initially taking on their new role, but that role ambiguity tapered off when measured 10 months later, replaced by role overload as the most evident role stressor experienced by new nurses (Chang & Hancock, 2003). Additionally, a study on nurses in relatively large hospitals in South Korea found that role ambiguity influenced burnout in nurses (Han et al., 2015), suggesting a need to study the relationship between role stressors and strains further; after all, burnout can lead to increased accidents, poor patient-care, and increased turnover intention (Bao et al., 2013), which all lead to monetary losses for the organization in legal fees and human capital costs.

Role Conflict. Role conflict refers to incongruence between a person's understanding of his or her role and others' expectations of the role (Rizzo et al., 1970). An individual could have multiple, yet conflicting, roles at an organization, such as serving as a patient care provider and a nurse supervisor, resulting in inter-role conflict (Beehr & Glazer, 2005). Research suggests that investment into conflicting roles can lead an individual to overuse his or her supply of limited personal resources (e.g., cognitive processing), leading to psychological strain, including burnout (Jawahar, Stone, & Kisamore, 2007; Kim & Stoner, 2008). In addition, research has linked role conflict to turnover intention (O'Driscoll & Beehr, 1994). This study seeks to reaffirm previous findings that have shown a positive relationship between role conflict and both burnout and turnover intention.

**Role Overload.** Role overload is an individual's perception or actual experience of having too many demands imposed on him or her (Jex, 2002), and it has been found to be a predictor of psychological strain and turnover intention (O'Driscoll & Beehr, 1994). Nurses may encounter role overload when unexpected tasks appear without warning (e.g., an unexpectedly large volume of patients in a unit without sufficient staffing to provide patient care support). Jex (2002) explains that role overload not only refers to the actual number of tasks (i.e., quantitative role overload), but also to task difficulty (i.e., qualitative role overload). This distinction is important because it clarifies why some tasks may be perceived as manageable, when others are not and can become overwhelming. Having an excessively high workload is not the same as not having the knowledge to perform some work tasks; the resulting strains differ. For example, a nursing student, who must assist in an emergency situation he or she has not been trained for, may experience anxiety, or fear. The nurse who has this skillset, but has a full load of additional patients for whom to care may feel drained, or inconvenienced. Although these can both be examples of role overload, the focus of the current study is on quantitative role overload.

**Strains.** Recent literature has begun to refer to stressor-induced effects as *outcome* variables, instead of *strains* because not all stressors result in negative outcomes

for the individual or the organization (McGowan et al., 2006). For example, some stressors can be viewed as challenges that motivate people to perform and not as hindrances that constrain people from achieving their goals (Bakker & Demerouti, 2007). However, strains will be used throughout this study to connote negative outcomes resulting from stressors, and both burnout and turnover intention are undesirable consequences. When faced with stressors, individuals will determine if the stressors are threats and if they have the resources to cope with them (Lazarus & Folkman, 1987). If stressors are threats and a person does not have the resources to cope with them, various responses occur, typically in the form of strains that directly influence the well-being of the individual (Beehr & Glazer, 2005). Strains refer to negative responses to unmanaged stressors. There are three categories of strains: psychological, physiological, and behavioral (Beehr & Glazer, 2005). Examples of psychological strains include dysphoria, anxiety, depression, and burnout. Physiological strains involve fluctuations in an individual's well-being and can include headaches, heart attack, or insomnia. Finally, behavioral strains involve an individual's actual behavior and include substance abuse. absenteeism, and actual employee turnover. The current study examines the relationship between the psychological strains of burnout and turnover intention.

Burnout. According to Maslach (1993), burnout is defined as a complex construct that incorporates feelings of exhaustion, depersonalization (cynicism), and reduced accomplishment (professional efficacy). Although researchers generally agree with the emotional exhaustion component of the three-dimensional burnout model proposed by Maslach (1982; and her colleagues, Maslach & Jackson, 1981), there is considerable controversy over the inclusion of the depersonalization (cynicism) and reduced accomplishment (professional efficacy) facets, as confirmatory analyses have yet to consistently generate three coherent factors (Cooper et al., 2001). Despite the inconclusive validity of the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981), it is the most prominently used measure of burnout in the literature (Cooper et al., 2001).

Furthermore, emotional exhaustion has been the most widely studied dimension of the model (Maslach, 1993). Indeed, though much of the occupational stress research regarding burnout utilizes the MBI or a later edition (i.e., MBI-General Scale; e.g., Boamah & Laschinger, 2016; Demerouti, Bakker, de Jonge, Janssen, & Schaufeli, 2001; Leiter & Maslach, 2009). Some studies targeting burnout in nurses have used the MBI, but only focused on the emotional exhaustion component of the measure (e.g., Aiken et al., 2002; Aiken & Sloane, 1997; Gunusen, Ustun, & Erdem, 2014). Others' research on burnout in nurses (a) did not use the MBI or a later edition and (b) targeted only emotional exhaustion (e.g., Sheward, Hunt, Hagen, & Macleod, 2004; Stordeur, D'hoore, & Vandenberghe, 2001), highlighting the importance of this particular facet in burnout. These findings suggest that emotional exhaustion is a crucial component of burnout; they also highlight the need for a more comprehensive conceptualization of the term than what Maslach's (1993) model provides.

Past research initially made no definitional distinction between burnout and tedium, only stating that burnout applied to human service workers and tedium applied to nonservice workers (Shirom, 1989, as cited in Cooper et al., 2001). However, this small distinction does not offer a full view of either concept. Rather, tedium is defined as an occurrence of physical, emotional, and attitudinal fatigue (Pines & Kafry, 1978). Although Maslach's (1993) conceptualization of burnout captures the experience of emotional exhaustion, it fails to capture the physical or attitudinal facets distinguishing tedium. Thus, it is reasonable to suggest burnout (as Maslach, 1993, models) represents one aspect of tedium.

Further, literature frequently mentions excessive workload as a severe stressor for nursing populations, but does not clarify whether this workload is physical, emotional, (e.g., Ugurlu et al., 2015), attitudinal (Potter et al., 2010), or a combination of all three of these particular facets. Although nursing literature mentions burnout frequently, there is an overwhelming focus on emotional exhaustion (e.g., Maslach, 1993). The focus on the emotional component of exhaustion is not unfounded, as nurses frequently, compassionately communicate with multiple patients in one shift, juggling life stories,

histories and current laments. Whereas a physician may speak briefly to a patient during his or her shift, the nurse is expected to regularly check the patient's vital signs, and general well-being during a patient's hospitalization. However, although emotional exhaustion is relevant, the nursing field additionally requires long periods of physical dexterity and cognitive processing, such as moving quickly from one patient to another to administer multiple medications or perform procedures. Indeed, other forms of exhaustion also characterize nurses' experiences (e.g., Aiken et al., 2002; Aiken & Sloane, 1997; Gunusen et al., 2014), namely mental and physical exhaustion. Therefore, I employ a measure of tedium to address the emotional, mental, and physical exhaustion components of burnout. The three-component measure of exhaustion positively relates with burnout (Pines & Aronson, 1988) and with role stressors (Stout & Posner, 1984). Thus, for the purpose of this study, I adopted Pines and Aronson's (1988) conceptualization of burnout as: "a state of physical, emotional, and mental exhaustion caused by long-term involvement in situations that are emotionally demanding" (p. 9). This definition may be disputed due to its focus on exhaustion (Cooper et al., 2001), but such a focus is consistent with nurses' experiences and prior studies' attention.

Turnover Intention. Tett and Meyer (1993) defined turnover intention (sometimes referred to as intention to leave) as an employees' expectation to leave an organization and/or their position. Although turnover intention is not the same as actual turnover, Beecroft et al. (2008) found that turnover intention predicted actual turnover in graduate nurses (see also Steel & Ovalle, 1984, for a meta-analysis on turnover intention and actual turnover), making it an essential measure. Employee turnover is particularly high in the nursing field (Beecroft, Santner, Lacy, Kunzman, & Dorsey, 2006; Kovner, Brewer, Fatehi & Jun, 2014; Winfield, Melo, & Myrick, 2009), ranging from 6.3% to 33.5% (Baernholdt & Mark, 2009; Kovner et al., 2014), with as many as 50% of new nurses leaving the job within one year of starting (Winfield et al., 2009). These statistics are particularly problematic as turnover contributes to increased hiring costs without payoff for the organization, making it crucial to examine potential antecedents of this phenomenon within nurses.

### Theoretical Framework: Person-Environment Fit Theory

The primary theoretical foundation of this study is the Person-Environment Fit theory. The P-E Fit theory approach to occupational stress posits that dissimilarity between the characteristics of the individual (e.g., individual values, personality, abilities) and the environment (e.g., organizational values, demands, supplies) causes strain (Dewe et al., 2012; Edwards & Cooper, 1990). In comparison, a "good fit" between an individual and his or her organization promotes more positive outcomes, such as job satisfaction (Dendaas, 2011; Yang et al., 2008). P-E fit theory is the foundational framework for several occupational stress models. For example, the transactional model of stress portends that aspects of the person and the environment interact to influence an individual's appraisal of stressors, potentially leading to strains (Lazarus, 1999, 2001). The facet model of occupational stress depicts the stress process, emphasizing the temporal element of stressors (e.g., acute, chronic) along with the interaction of aspects of the person and the environment that evoke strains (Beehr & Newman, 1978). The healthy values model focuses on aspects of a person's cognitive state (the person component of the P-E fit model) as a predictor of well-being (Sagiv & Schwartz, 2000). Finally, the Attraction-Selection-Socialization-Attrition (AS(S)A) framework proposes that when a person who is attracted to an organization, is selected to join it, and then socialized to acclimate to it, he or she will be more similar to the organization and less likely to leave it (Schneider, Smith, Taylor, & Fleenor, 1998).

The Transactional Model of Stress. The transactional model of stress is markedly similar to P-E fit theory in that the person and the environment influence the stressor-strain relationship (Lazarus, 1999, 2001). However, the transactional model differs in that through the appraisal of stressors, we can forecast if strains will develop (Lazarus, 1999, 2001). Lazarus's (1999, 2001) theory differentiates between two types of appraisal: primary appraisal and secondary appraisal. Primary appraisals are when a person acknowledges that he or she has something "at stake" (Lazarus, 1999, p. 76), and this can result in four appraisal types: harm/loss, threat, challenge, and benefit (Lazarus, 2001). The way in which an individual appraises a situation will determine how he or she

copes, and in turn, the strains or outcomes that develop. In comparison, Lazarus (1999) defines secondary appraisals as "constantly changing cognitive and behavioral efforts a person makes to manage specific external or internal demands that are appraised as taxing or exceeding the resources of the person" (p. 110). These definitions of appraisal are rooted in P-E fit theory; however, they are not the intended focus of the current study. Instead, this study focuses on a different cognitive factor: values. The study of value congruence at the most basic level posits a transactional relationship as congruence is based on the person (i.e., the individual's perception of his or her own values) and the environment (i.e., the individual's perception of his or her organization's values) together influencing the stressor-strain relationship.

Beehr and Newman's Facet Model of Occupational Stress. Beehr and Newman's (1978) model depicts occupational stress through personal and environmental facets that lead to consequences affecting the individual and organization. However, a feature of this theory is its inclusion of a time facet, which is often overlooked in occupational stress research and theory (Beehr, 1995), likely due to the facet's lack of clarity (Beehr, 1998). It is essential to study stressors over time because of the nature of the study variables. While values remain relatively stable over time (Rokeach, 1973), environmental conditions change (e.g., perception of role stressors), allowing for the study of how values may influence stressor-strain outcomes. Role stressors, particularly role ambiguity and role conflict, are chronic stressors, meaning they occur over time, thus are associated with strains when studied in long-term research (Beehr, 1998). In comparison, acute stressors occur in the short-term (e.g., a nurse meeting a new patient).

Additionally, the nature of the strains proposed by a lack of P-E fit suggest that time plays a role in the stressor-strain relationship, as individuals simply do not experience outcomes, such as burnout, overnight. Indeed, Leiter and Maslach (2009) stipulated that burnout results from prolonged exposure to stressors over time. Although researchers (e.g., Han et. al., 2015; Kim & Stoner, 2008; Siegall & McDonald, 2004) examined the effects of stressors on burnout and turnover intention, most have not examined the development of burnout and turnover intention due to on-going experiences

of stressors in a longitudinal-style design (an exception is Beehr et al.'s, 2000, study that looked at chronic versus acute stressors in door-to-door booksellers and found that chronic stressors had larger effect sizes on strains than acute stressors). Therefore, in this study I test if exposure to stressors over time percolates into strains by testing whether stressors at T1 influence burnout and turnover intention ratings at T2.

Attraction-Selection-(Socialization)-Attrition. The Attraction-Selection-(Socialization)- Attrition (AS(S)A) framework is a four-part process used to explain the tendency for employees to work at organizations that hold similar organizational values to their own. This framework firmly links the Attraction-Selection-Attrition model with research on socialization and suggests that the socialization process is a part of employee-organization homogeneity (Schneider et al., 1998). The first step of the process is attraction, which is the degree to which an applicant perceives an organization as an appealing place of employment. The appeal may be due to the perception that the organization endorses values that are consistent with the applicant's values (i.e., value congruence; Nameth & Staw, 1989 as cited by Edwards & Cable, 2009). Selection is the organization's method for choosing applicants who appear to have the qualifications required for the organization. The applicant is also part of this step, as she or he decides to join (or not) upon an offer. Both parties may consider if their values align with the other.

After the selection process, employees are integrated into their new work environment through the process of socialization. Organization's reinforce its values through implicit and explicit practices, policies, procedures, and rewards and sometimes corrective actions (Van Maanen & Schein, 1979). If individuals do not feel comfortable with the socialization process (e.g., training), they will likely leave the organization or the organization will terminate the person. The attrition process can be influenced by value congruence because individuals may leave the organization when they perceive that their values are not aligned with the organization's values (Cable & Parsons, 2001).

The AS(S)A framework is a work-based application of P-E fit through value congruence. It is essential to include this framework because it highlights that value

congruence affects every stage of the cyclical job process, from job seeking to selection and socialization, to retention or attrition. Thus, it is essential to examine the variable of value congruence as it directly relates to the socialization and attrition facets of the AS(S)A model.

Organizations that use training or employee performance feedback discussions to socialize its incumbents are normally impressing upon the incumbents the organization's values by rewarding and disciplining on organizational processes and practices. Through reinforcements and punishments, the processes and practices are instilled and inform incumbents of the company values. Thus, values are a common construct measured in P-E fit studies (Verquer et al., 2003). Indeed, because values are motivational states, which influence a person's experiences in the organization, organizations are keen on imparting these values as swiftly as possible. However, personal values are not the same as organizational values.

Personal values transcend situations and thus affect individuals' interpretations of stressors and outcomes (Schwartz, 1992). Interacting with perceived organizational values, value congruence has direct effects on well-being. For example, in a study of 1,129 German adolescents, person-environment value congruence was positively correlated with satisfaction with life, although effect sizes were low (Musiol & Boehnke, 2013). Additionally, in a study of 1,261 students and adults from Israel and former East and West Germany, Sagiv and Schwartz (2000) found strong positive relationships between value congruence and well-being. In this study that utilized Schwartz's (1992) 10 basic values, the congruence of achievement and power (self-enhancement) values was significantly stronger related to well-being than the congruence of universalism and benevolence (self-transcendence) values. The findings of Sagiv and Schwartz's (2000) study suggest that the strength of the relationship between value congruence and wellbeing may be influenced by the type of value (e.g., benevolence vs. power). This study expands on the findings of Sagiv and Schwartz (2000), suggesting that categorizing values as 'healthy' or 'unhealthy' may help explain the differences in the effect value congruence has on stressor-strain relationships.

#### **Values**

**Defining Values.** Rokeach (1973) defined a value as "an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state existence" (p. 5). Drawing on Rokeach's work, Schwartz (1992, 2012; Schwartz & Bilsky, 1987) defines values as beliefs about desirable goals or guiding principles important in one's life. Values are not domain specific; across situations, values (a) motivate what people attend to, (b) how stimuli are interpreted, and (c) how they respond to stimuli. People tend to strive to reduce impediments to goal fulfillment and, therefore, when people are impeded from fulfilling their values, they may experience a reduced sense of well-being (Sagiv & Schwartz, 2000). Values are hierarchically ordered in people's minds; therefore, values that are more important, but blocked from fulfillment, will likely be more detrimental to well-being than values that are lower on the hierarchy. The relative importance of values differs between individuals and, therefore, represent a cognitive-motivational state that differs from norms or attitudes (Schwartz, 1992, 2012).

Basic Human Values. Schwartz (1992) categorized 45 individual values into 10 basic human value types: Achievement, benevolence, conformity, hedonism, power, security, self-direction, stimulation, tradition, and universalism (see Appendix B). Schwartz proposed competing values structures that have been found consistently across culturally distinct samples, although value strength differs (Schwartz & Bardi, 2001). That is, the value types are represented around a circular continuum to emphasize that some values are compatible and others conflicting with one another (see Figure 2). Values that are incompatible have competing interests; some values promote growth and self-expansion, and others self-protection. In other words, the value structure proposed by Schwartz highlights that when an individual highly favors a particular value (e.g., benevolence) they are thus less likely to highly favor a value that competes with that favored value (e.g., power), as these value structures have distinct, opposing characteristics.



*Figure 2*. Relations among ten value types (adopted from Sagiv & Schwartz, 2000 with copyright permission provided by John Wiley and Sons and Copyright Clearance Center).

Healthy Values. Sagiv and Schwartz (2000) classified 9 of the 10 value types (hedonism was excluded), as either *healthy* or *unhealthy*. Values that positively relate with happiness and well-being (e.g., achievement) were labeled as *healthy values*, whereas values that decreased happiness and well-being were labeled as *unhealthy values* (see Table 1). Although some of the hypotheses of this study were not fully supported, Sagiv and Schwartz posed some theoretical explanations for the relationship between (un)healthy values and well-being which are theoretically useful to understanding the impact that healthy value congruence may have on the stressor-strain relationship. The first explanation suggests that an individual's attainment of subjective well-being stimulates pursuit of healthy values, such that when a person is *well*, he or she tends to endorse healthier values (Sagiv & Schwartz, 2000). This explanation forwards a reverse-causal relationship from well-being to values. However, because most researchers have found that values endure over time (Rokeach, 1973), and deeply held principles may

shape how people interpret stimuli and, consequently, develop (or not) strains, it is not an explanation that supports the premise of the study, nor other studies. Instead, this study proposes that because values shape cognition (Schwartz, 1992), and the cognitive appraisal of stressors influences outcomes (Lazarus, 1999; Lazarus & Folkman, 1987), values influence the extent to which role stressors relate to strains. The theoretical explanation of growth and deficiency needs connects values to needs, and might better explain why some values may be more likely to influence subjective well-being (Bilsky & Schwartz. 1994).

Maslow (1955, as cited in Bilsky & Schwartz, 1994) proposed that individuals seeks to satisfy deficiency needs (e.g., health, safety) when they feel deprived. In fact, when these deficiency needs are satisfied, these needs become less important to the individual, or even inactive. That is, deficiency needs represent a gap between a desired standard and the individual's current state. Once the gap between standards and reality is closed, an individual no longer needs to seek these needs and can pursue higher-level needs (i.e., growth needs). In comparison, growth-needs (e.g., self-actualization) represent that which an individual seeks to satisfy even after *high* levels of satisfaction have been obtained. In summary, although an individual may cease to pursue deficiency needs once a perceptual gap between standards and reality closes, no such standard exists for growth needs. Instead, the individual continues to pursue the need, even after the needs are satisfied.

Bilsky and Schwartz (1994) built on Maslow's (1954, 1955, as cited by Bilsky & Schwartz, 1994) work that related values to needs, and classified (a) achievement, (b) benevolence, (c) self-direction, (d) stimulation, and (e) universalism as growth needs values, and (a) conformity, (b) security, and (c) power as deficiency needs. The research by Bilsky and Schwartz (1994) proposed that values could be conceptualized as being motivated by either growth or deficiency needs, and as values are motivating factors that influence behaviors, individuals who endorse deficiency needs values will pursue behaviors to compensate for deprivation. Sagiv and Schwartz (2000) further proposed

that specific values classified as either growth or deficiency needs may be theoretically related to subjective well-being.

Goal realization relates to a positive perception of well-being (Sagiv & Schwartz, 2000). Thus, an individual who prioritizes growth needs values (e.g., benevolence) is likely to have a higher perception of his or her well-being because he or she is actualizing goals associated with such values. Values that are not actualized decrease in importance because individuals seek to endorse values they are able to realize. In comparison, deficiency needs values (e.g., power) are often endorsed to compensate for deficiencies. Rather than contributing to positive well-being, actualizing these values simply reduces an individual's negligence of their basic needs. Said another way, individuals who endorse deficiency values are unable to reap the positive benefits of goal-attainment because they are solely aiming to reach a basic standard of functioning. Indeed, Sagiv and Schwartz (2000) suggested that individuals who prioritized deficiency needs were more likely to feel powerless, threatened, and unsafe, and thus report lower well-being than individuals who endorsed growth needs values. Similar to Herzberg's (1974) motivational model, this study proposes that two separate outcome continua exist for deficiency needs values (i.e., hygiene factors) and growth needs values (i.e., motivational factors). Although prioritizing growth needs values is thought to increase perceived wellbeing, prioritizing deficiency needs values decreases the perception of negative wellbeing, instead of simply decreasing positive well-being. That is, individuals who attempt to close the gap between basic human needs and reality by endorsing deficiency needs values are not viewed as existing on the positive well-being continuum, but rather being absent of positive well-being. Thus, although goal-attainment is an important piece in understanding the motivational role of values, some values, though motivating, do not promote well-being; people holding such values continue to strive to fulfill the deficient need.

Based on the conceptualization of growth and deficiency needs values, Bilsky and Schwartz (1994) classified (a) achievement, (b) benevolence, (c) self-direction, (d) stimulation, and (e) universalism as growth (i.e., healthy) needs, and (f) conformity, (g)

power, and (h) security values as deficiency needs (i.e., unhealthy) values. Sagiv and Schwartz (2000) later used similar reasoning to identify tradition as an unhealthy value. Based on the conceptualization of grown and deficiency needs, Sagiv and Schwartz added that the value of tradition is unhealthy, while excluding the value of hedonism from healthy or unhealthy classifications (see Table 1).

Table 1
Definitions of Value Types and Health Classification

		Health
Values	Goals	Classification
Achievement	Personal accomplishment according to social tenets.	Healthy*
Benevolence	Improving the wellbeing of the 'in group.' Caring, trustworthiness, accountability, compassionate,	Healthy
Conformity	Restraint of impulses that would violate social norms. Compliance, self-control, courtesy.	Unhealthy
Hedonism	Pleasure and sensuous gratification for oneself	Unclassified
Power	Status, control, and dominance.	Unhealthy
Security	Sanctuary, peace, and stability of society, relationships and of self.	Unhealthy
<b>Self-Direction</b>	Autonomous thought, choosing, and exploration, curious.	Healthy*
Stimulation	Excitement, novelty, and challenge in life.	Healthy*
Tradition	Reverence and commitment of cultural and religious customs.	Unhealthy*
Universalism	Appreciation and defense for all people and for the environment.	Healthy

*Note.* \*Asterisk represents values that were supported as influencing subjective wellbeing in Sagiv and Schwartz's (2000) Healthy Values model. Hedonism was excluded from the healthy or unhealthy categorization, consistent previous research and theory (Sagiv & Schwartz, 2000).

Whereas Sagiv and Schwartz (2000) analyzed the relationship between (a) value congruence and well-being and (b) healthy values and well-being (in two separate studies), the present study expands this previous work, by examining the implications of a newly created variable, healthy values congruence. Indeed, Sagiv and Schwartz (2000) conceptually propose, but do not test healthy value congruence. They argued that no value types were inherently healthy or unhealthy, but that value

congruence with the environment (e.g., organization's values) played a role in impacting positive or negative outcomes. Drawing on previous research (Bilsky & Schwartz, 1994; Sagiv & Schwartz, 2000), growth needs values are expected to positively correlate with well-being.

I present two reasons for the anxiety-avoidant and anxiety-free values and their association with health. It is possible that when someone endorses growth values (e.g., achievement) and is able to actualize these values, higher well-being and lower anxiety ensues (Sagiv & Schwartz, 2000). However, when people do not achieve their goals to actualize growth values (due to lack of resources or another cause), growth values decrease in importance, and they strive toward deficiency values (e.g., power), which may reduce inherent anxiety (Sagiv & Schwartz, 2000). Growth values are theorized to positively correlate with measures of well-being, and negatively correlate with measures of anxiety.

General Well-Being and Job-Related Anxiety. In their study of healthy value priorities, Sagiv and Schwartz (2000) investigated healthy values using Schwartz's (1992) theory of basic values, which identified 10 value types that guide individuals in life. To test the hypothesis that endorsing some value types may be more related to health outcomes, Sagiv and Schwartz (2000) examined subjective well-being, using measures of affective well-being and cognitive well-being. Values identified as healthy correlated positively with subjective well-being, whereas values identified as unhealthy correlated negatively with subjective well-being. Before examining healthy values as a moderator variable in the relationship between role stressors and outcomes, the current study sought to examine potential indicators of well-being (i.e., anxiety and general well-being), in order to procure evidence that healthy values exist.

Wright, Cropanzano, and Bonett (2007) define well-being as an affective or emotional experience that is related to healthy psychological functioning. The impact of values on well-being have been examined in research, most notably by Sagiv and Schwartz (2000), who proposed their theory of the existence of healthy and unhealthy values. However, other research avenues have targeted how values may affect well-being.

In a study of 92 business students, Kasser and Ahuvia (2002) found that money, image, and popularity values were related to lower well-being scores, even when an individual's environment supports these values. Furthermore, Burroughs and Rindfleisch (2002) attempted to examine value incongruence in the materialism value, finding that the interaction between materialism and cultural values (i.e., collectivism-oriented values) significantly predicted psychological tension. They found that values focused in materialism may not be beneficial for well-being, especially when they are incongruent with generally-accepted cultural values.

Anxiety has been examined as a physio-psychological sensation, resulting from an individual's perception of stressors (Glazer & Beehr, 2005). That is, anxiety is an initial reaction to perceived stressors. An example of anxiety is feeling tense. Job-related anxiety adjusts the target of anxiety to focus on physiological and psychological feelings about the job. Job-related anxiety has been examined in numerous studies, such as Glazer and Kruse (2008) who found a positive relationship between job-related anxiety and intention to leave in 506 Israeli nurses. In a summary of correlates of well-being, Warr (1990) reported that anxiety is an affective state resulting from a combination of high arousal and low pleasure. Further, anxiety was proposed as an indicator of well-being, such that individuals had lower levels of affective well-being based on more negative responses on either the arousal or pleasure dimensions. That is, anxiety represents an indicator of less affective well-being.

Although general well-being and job-related anxiety only target affective well-being, and thus fail to include cognitive well-being, it is arguable that they still present indicators of subjective well-being, as examined in Sagiv and Schwartz's (2000) study of healthy values. In the present study, general well-being was conceptualized as a positive indicator of well-being, whereas job related anxiety was examined as a negative indicator of well-being, which is consistent with literature (Warr, 1990; Wright et al., 2007). Thus, I propose that healthy values should positively correlate with general well-being and negatively correlate with job related anxiety.

Value Congruence. Value congruence derives from the concept of P-E fit (Bocchino et al., 2003; Edwards & Cooper, 1990) and refers to the degree to which an individual's values are similar to those of others or an organization (Cable & Edwards, 2004). For the most part, studies have shown that value incongruence plays an important role in reducing well-being and motivation, and increasing strains and lethargy (Bao et al., 2013; Edwards & Cooper, 1990; Verquer et al., 2003), though a small degree of incongruence between the individual and organization may be motivating (Argyris, 1964, as cited in Verquer et al., 2003). Individuals with similar values as their organization typically (a) share the goals of the organization (Bao et al., 2013), (b) have a positive psychological relationship to work (Leiter, Gascon et al., 2009), and (c) experience greater subjective well-being (Sagiv & Schwartz, 2000) compared to people whose values are not congruent with their organization.

Given the argument that personal healthy values are expected to buffer the relationship between stressors and strains, and that incongruence of healthy values is expected to intensify the stressor-strain relationships, the present study tests the moderating effects of healthy values congruence on the stressor-strain relationship. In particular, when an organization is perceived to maintain the same healthy values as the person upholds, the negative effects of stressors on strains will be mitigated. In contrast, when the person's healthy values are met with a perception of the organization as not upholding those values, the relationship between stressors and strains will intensify. These expectations are predicated not only on research findings relating values or value congruence with stress-related variables, but also on occupational stress and health theories.

#### Alternative Frameworks

The focal theoretical basis for the present study is P-E Fit theory, however other occupational stress frameworks, developed over the years, are presented as additional support for the models employed in this study.

**The Michigan Model.** The Michigan Model, also known as the Institute of Social Research model, developed in 1962, is one of the first models to examine occupational

stress (Mark & Smith, 2008). The Michigan model emphasizes personality and subjective appraisal of stressors. The theory stipulates that an individual's perception of the work environment affects an individual's physical and mental health. The focus on individual perception overlaps with the P-E fit framework, but values are not personality nor do they represent appraisal of stressors, rather they are beliefs of what is important, and therefore guide how stressors are appraised, as becomes evident in whether strains ensue.

**Job Demands-Control Model.** In the Job Demands-Control (JDC) model, Karasek (1979) argues that job demands and work control interact to affect the wellbeing of employees. When job demands are high, but work control is low, a person's job is said to be in a high strain job. When job demands are low and work control is low, a person's job is said to be passive. A person's job is considered active when job demands are high and work control is high. Finally, a low-strain job is characterized by low demands and high control (Dewe et al., 2012; Karasek, 1979). Some studies have found empirical support for the JDC model, particularly as it relates to burnout (e.g., Demerouti et al., 2001; Proost, De Witte, De Witte, & Evers, 2004). However, others have not found support for the JDC model (e.g., Beehr, Glaser, Canali, & Wallwey, 2001). For example, Bao et al. (2013) argued that balancing demands with sufficient resources does not sufficiently explain why some individuals in the same environmental conditions experience burnout though others do not. This rationale suggests that the environment is not the sole influencer of stressor-strain relationships, but that the interaction between the person and environment may interact with job demands to influence outcomes. Combining the notion of control with that of P-E fit, I assert that one way an employee may experience a sense of control over the work environment is when the personal values and the values of the organization align. Thus, in line with the JDC, high job demands and low value congruence could yield a high strain job. However, control is more situational and dynamic than values, which transcend situations and are stable. Therefore, the JDC model is an influential, but not the prime theoretical model guiding this study.

**Conservation of Resources.** The Conservation of Resources (COR) theory (Hobfoll, 2001) is markedly similar to P-E fit theory, as both theories examine (a) the

interaction between the person and the environment, and (b) the relationship between environmental demands and individual resources (Dewe et al., 2012). However, the models differ methodologically in that P-E fit mostly focuses on measuring stressors using individuals' perceptions, whereas Hobfoll (2001) argues that COR theory incorporates more objective measures of the environment, such that many resources (e.g., medical insurance, savings or emergency money) are determined objectively. COR theory considers (a) subjective, (b) objective, and (c) sociocultural elements of stressors, and also argues that the importance of subjective indicators of stressors has been inaccurately inflated and as such, focuses on objective components of stressors (Hobfoll, 2001). Thus, although the COR theory's basic premise, that stressors can cognitively drain an individual's resource reservoir, is valid and recognized in the transactional model, COR theory does not adequately attend to individual differences that may affect stressor appraisals (Lazarus, 2001), such as perceived value congruence.

Nonetheless, drawing on the COR theory, the current study labels healthy values as resources. Hobfoll (2001) defined resources as anything important to the individual that in turn supports his or her well-being, and specifically identified categories of (a) personal or (b) environmental resources. Even though Hobfoll (2001) has identified values as a resource, research has not clarified whether values are conceptually personal or environmental resources. This study seeks to extend previous resource literature, defining values as both personal and environmental resources, where personal healthy values represent environmental resources, and organizational healthy values represent environmental resources. If personal and organizational healthy values each represent a resource, then congruence of these values (i.e., value congruence) may serve as an additional resource, mitigating the effects of stressors on well-being. Thus, I propose that personal healthy values will buffer the stressor-strain relationship.

Moreover, focusing on healthy values can further help explain why some individuals experience burnout and turnover intention, but other individuals are less prone to these strains. Indeed, when an employee perceives that the organization does not endorse healthy values any ameliorative impact personal healthy values would otherwise

have, may be compromised. Thus, studying perceptions of an organization's healthy values as a resource that promotes well-being and aligns with individuals' healthy values presents an opportunity to dive deeper into understanding how values impact the extent to which role stressors affect strains.

## **Measuring Person-Environment Fit**

Despite both theoretical and methodological drawbacks of the P-E Fit theory (see Edwards & Cooper, 1990), its merits outweigh the drawbacks. P-E Fit theory focuses on individuals' perceptions of their own values and the values of the organization. Fit can be measured subjectively, perceptually, or objectively (Kristof, 1996; Verquer et al., 2003). Subjective P-E fit measures study how well the individual believes his or her characteristics fit with the organization. In perceived P-E fit measures, respondents describe or rate themselves on some characteristics and then describe or rate their organization on similar characteristics, which are then used together to identify fit (Verquer et al., 2003). Finally, objective fit involves a comparison of the individuals' self-reported characteristics to the organization's characteristics as reported by other people deeply embedded within the organization (e.g., Head of Human Resources; Verquer et al., 2003).

Researchers have argued that subjective fit measures are better correlates of self-reported attitudinal outcomes than objective or perceived fit, because subjective fit and self-reported outcomes directly reflect a person's perceptions, whereas objective and perceived fit are determined through calculations of self-reported attitudes and reports of others' attitudes (Kristof-Brown et al., 2005; Verquer et al., 2003). However, subjective fit does not allow researchers to distinguish between individual and organizational values, because the single measure fails to compute difference scores or correlations (Verquer et al., 2003). Thus, the perceived fit measure identifies a more complex model of fit, provides a fuller range of value perceptions, and enables researchers to observe the degree and direction of incongruence (e.g., whether individual's healthy values exceed the organization's perceived healthy values). Additionally, by employing a perceived, instead of a subjective fit measure, I am potentially reducing a sense of onus on the

individual to better fit the organization, suggesting that perhaps the organization needs to change to better fit the needs of its incumbents. This study utilizes a perceived measure of P-E fit.

There are several ways to calculate perceived fit, including difference scores or intra-individual correlations. The former, which utilizes absolute scores to determine fit, is oftentimes discouraged in P-E fit research (see Edwards & Cooper, 1990). However, the latter is consistent with the definition of values, stipulating that values are ordered in a cognitive hierarchy based on their importance (Schwartz, 1992, 1994, 2012).

## **Summary**

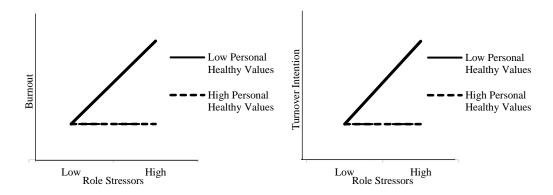
Even though past studies have linked burnout to turnover intention (Boamah & Laschinger, 2016; Leiter, & Maslach, 2009), none have done so in a multifaceted model that links role stressors to burnout and turnover, as moderated by healthy values congruence. Thus, this study makes four important contributions. First, by using a longitudinal survey design, I evaluate the implications of stressors on strains over time (Beehr & Newman 1978; Zapf et al., 1996). Second, I test whether the value types introduced in Sagiv and Schwartz (2000) values typology reflect healthy vs. unhealthy values. Third, this study focuses on personal healthy values as a cognitive-motivational trait that can mitigate when stressors influence strains (Sagiv & Schwartz, 2000). Finally, extending studies that have looked solely at value congruence in relation to strain (Boamah & Laschinger, 2016; Maslach & Leiter, 1997), or healthy values in relation to well-being (Sagiv & Schwartz, 2000), I test if perceived organizational healthy values interact with personal healthy values to moderate the stressor-strain relationship. That is, I test if healthy values congruence buffers the stressor-strain relationship (see Figure 3).

### **Hypotheses and Research Questions**

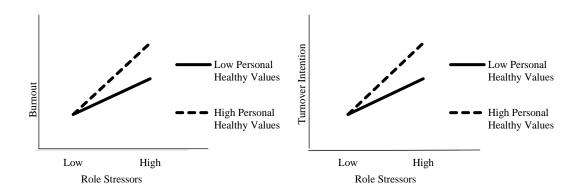
- $H_1$ : (a) Role ambiguity, (b) role conflict, and (c) role overload at T1 will each positively correlate with burnout at T2.
- $H_2$ : (a) Role ambiguity, (b) role conflict, and (c) role overload at T1 will each positively correlate with turnover intention at T2.

- *R*<sub>1</sub>: Do healthy values (i.e., achievement, benevolence, self-direction, stimulation, and universalism) negatively correlate with anxiety and positively correlate with wellbeing, and do unhealthy values (i.e., conformity, power, security, and tradition) positively correlate with anxiety and negatively correlate with well-being?
- *R*<sub>2</sub>: Do each of the personal healthy values (i.e., achievement, benevolence, self-direction, stimulation, and universalism) negatively relate to role stressors?
- *H*<sub>3</sub>: Each personal healthy value (i.e., achievement, benevolence, self-direction, stimulation, and universalism) will negatively relate with (a) burnout and (b) turnover intention.
- $H_4$ : Each healthy value congruence will negatively relate with (a) burnout and (b) turnover intention.
- *H*<sub>5</sub>: The positive effects of stressors (T1) on strains (T2) will be weaker due to endorsement of healthy values. More specifically, each personal healthy value will moderate the stressor-strain relationship, such that endorsing the healthy value will buffer the relationship between the T1 role stressors (a. role ambiguity, b. role conflict, and c. role overload) and T2 strains (d. burnout and e. turnover intention).
- $H_6$ : Healthy value congruence will moderate the stressor-strain relationships, such that when healthy values are incongruent, particularly when the person endorses the healthy values, but perceives that the organization does not, the positive relationship between role stressors and strains will be stronger than when healthy values are congruent. Said differently, healthy value congruence will buffer the positive relationship between stressors and strains (see Figure 3).

# High Organizational Healthy Values



# Low Organizational Healthy Values



*Figure 3.* Hypothesis 6: Three-way interaction hypotheses to be tested for predicting burnout and turnover intention for values perceived as high and low on organizational values.

#### **METHODS**

#### **Procedure**

Data used in the current study are archival, sourced from a larger project on stress and leadership among nurses across cultures. This study was a longitudinal design with two survey administrations separated by four to five weeks. Data were collected in June and July 2010. The Principal Investigator presented the purpose and reasoning behind the study to the nursing leadership team to aid in the understanding and acceptance of the study in the hospital setting.

Researchers attended nursing leadership meetings to provide the surveys for dissemination among the nurses. Paper surveys were given to participants, who were able to take the survey home to complete. All participants were instructed to return surveys sealed in provided envelopes to Chief Nursing Offices, addressed directly to the Principal Investigator (who was not a member of the hospitals' staff).

The original study maintained participant confidentiality through a unique coding system that matched participants from T1 to T2. In each survey administration, participants were asked to provide their parents' given, middle, and last name initials to generate a code (e.g., David William Mulder and Dana Katherine Anderson would yield the code DWMDKA).

Additionally, all participants received a ticket to a local theater (a \$10 value) along with the first survey as a token of gratitude and motivator to complete the survey. As an incentive to complete both surveys, 16 items (valued between \$80 and \$200) were raffled in each hospital. To participate in the raffle, nurses had to mark on their T2 survey that they were interested in participating in the raffle. Along with the T2 survey was a raffle ticket. The nurse kept one half of the ticket and turned in the other half with his or her survey. On the back of the submitted raffle ticket, nurses wrote their self-generated code. Prior to drawing winners for the raffle, only nurses who had surveys matching for T1 and T2 were entered into the raffle. Winners were informed by posting lists of self-generated codes around the hospitals.

#### **Data Reduction**

A total of 390 participants responded to the survey, across T1 and T2. The first data reduction strategy utilized was to eliminate individuals who did not provide both T1 and T2 data, as variables essential for testing this study's hypotheses would be absent or incomplete. To ensure that analyses are meaningful, I created new variables that computed the number of times an individual used each scale number (i.e., -1 through 7) to respond to the 57 items of Schwartz's Values Scale (SVS). As recommended by Schwartz (2009), if individuals used any single number in the scale (i.e., -1 to 7) 35 or more times (e.g., the anchor point 5 is selected 35 times), then the case was eliminated. This is necessary because if respondents had too many of the same response choice, it may indicate that they (a) failed to read the instructions and answer meaningfully, or (b) they were unable to discriminate between values and create a value hierarchy (Glazer, 1999). Although the possibility remains that a hierarchy of values may not exist, theoretical and empirical evidence suggests otherwise (Bilsky & Schwartz, 1994; Sagiv & Schwartz, 2000; Schwartz et al., 2012; Schwartz, 1992, 1994, 2012) has maintained that the hierarchy exists, providing both.

Additionally, in a second elimination procedure, I eliminated cases that had more than 15 unanswered value items for either the personal value or organizational value scales. Participants were also eliminated if more than 30% of the items were missing for any individual scale (e.g., two or more items missing from the tradition scale). All elimination procedures involving value variables resulted in the removal of 131 cases. This procedure was carried over for the other study variables (i.e., role ambiguity, role conflict, role overload, job-related anxiety, general well-being, burnout, and turnover intention). That is, three participants with more than 30% of missing data for any of these scales were removed from the sample. For cases with minimal missing data, mean imputation was performed. These elimination procedures yielded a final sample of 98. The highest percentage of cases were removed due to the absence of both T1 and T2 data, where 119 cases were removed for lack of T1 data and 137 cases were removed for lack of T2 data for a total of 256 cases removed.

## **Participants**

This study was conducted at two hospitals in northern California, United States and consisted of licensed nurses and registered nurses. Response rates varied but were relatively consistent such that, after data cleaning procedures, 44 nurses from Hospital 1 completed both surveys and 54 nurses completed both surveys from Hospital 2. For the purpose of this study, analyses only focus on the 98 nurses from both hospitals (matched through a self-generated unique code) who completed surveys at T1 and T2 . Due to the small number of participants that responded to both T1 and T2 surveys within each hospital, between-hospital comparisons were not analyzed, and p < .10 was used as the cutoff for significance.

Demographic information, such as age, sex, number of months spent in position, hours worked weekly, and ethnicity were measured. Participants varied in age, from 26 to 66 years, with a mean of 50.10 years (SD = 9.70). A majority of participants were female (93.9%), which is consistent with the profession (U.S. Census Bureau, 2013), and many identified as White, Caucasian, or of European descent (66.3%), or Asian (16.3%). Additionally, a majority of participants identified their primary job duty as patient care (67.3%), in comparison to non-direct care (32.7%).

Comparing the 98 participants in the current study to the full sample (N = 390), the sample utilized for this study had a larger percentage of participants who reported White, Caucasian, or European descent (63.3%). Additionally, the sample utilized for this study (n = 98) had more complete demographic data than the full sample (see Table 2). A full demographic comparison between the full sample of participants and the sample utilized in this analysis can be viewed in Table 2.

#### Measures

Data were collected through two survey administrations (T1 & T2) and contained several different measures, as this was part of a larger research project (a summary of items used in the current study can be viewed in Appendices B and C). Although values and burnout were only assessed at either T1 and T2, respectively, other measures were assessed on both occasions (see Table 3). Values were deemed unnecessary to measure at

both survey administrations, as values are generally consistent over time (Rokeach, 1973).

Table 2
Socio-Demographic Information of Nurses in Two Hospitals

~ *	nformation of Nurses in Two	Full	Ctudy Commist
		Sample <sup>a</sup>	Study Sample <sup>t</sup>
Variables		N = 390	n = 98
Hospital	1	37.4%	44.9%
	2	53.3%	55.1%
Sex	Male	5.7%	6.1%
	Female	94.3%	93.9%
Average Age	M	47.0	50.1
	SD	10.3	9.7
	Missing <sup>c</sup>	65.1%	48.0%
Education level	High School Degree	1.0%	1.2%
	Bachelor's Degree	36.4%	45.9%
	Master's Degree	10.0%	17.3%
	Doctorate	0.5%	1.0%
	Other	14.9%	17.3%
	Missing	37.2%	17.3%
Marital Status	Single	10.3%	14.3%
	Married/Re-married	50.8%	63.3%
	Living with partner(s)	1.8%	2.0%
	Divorced/Separated	10.8%	18.4%
	Widowed/Widower	1.5%	2.0%
Ethnicity	American Indian/Alaska Native	0.3%	1.0%
	Asian	17.7%	16.3%
	Black/African American	2.1%	2.0%
	Hispanic, Latino, Or Spanish Origin	3.3%	4.1%
	White/Caucasian/ European decent	37.8%	63.3%
	Other	4.9%	6.1%
	Missing	33.1%	7.1%

Number of dependent	None	29.2%	56.1%
children	1	17.7%	22.4%
	2	15.9%	10.2%
	3	7.4%	8.2%
	4	2.8%	2.0%
	Missing	26.4%	1.0%
Average Hours	1-20 hours a week	3.6%	4.0%
Worked Per Week	21-40 hours a week	20.8%	27.5%
	41-80 hours a week	10.5%	17.2%
	Missing	64.6%	51.0%
Primary Job Purpose	Patient Care	59.5%	67.3%
	Non-Direct Care	14.6%	32.7%
Supervise Others	Yes	20.2%	16.3%
	No	50.3%	66.4%
	Missing	29.5%	3.1%

*Note.*  $M = \text{Mean. } SD = \text{Standard deviation.}^{\text{a}} \text{Entire sample of participants who responded to surveys at Time 1 and Time 2 (including individuals with missing data). <math>^{\text{b}}$  Final sample of participants included in the study.  $^{\text{c}}$  Percentage of data coded as missing for individuals who did not respond to question, or might have lacked accuracy (e.g., age entered as 400).

Table 3
Measures Utilized for the Current Study Based on Survey Administration

Time 1 measures	Time 2 measures	Time 1 and Time 2 measures
Values (57 items)	Burnout (10 items)	Role Stressors (10 items)
		Job-Related Anxiety (4 items)*
		General Well-Being (11 items)*
		Turnover Intention (3 items)*

*Note.* \*Although items were measured at both T1 and T2, only T2 scores will be utilized to test the hypotheses.

Role Stressors (see Appendix C.1). Role stressors were examined as predictor variables of burnout and turnover intention, thus utilizing T1 and T2 data. Ten items sourced from Glazer and Beehr (2005) measured role conflict, role ambiguity, and role overload and all items were averaged to form scores for each individual role stressor, a process replicated from Glazer and Beehr (2005). Three items were used to measure role

ambiguity (e.g., "I have clear, planned goals and objectives for my job"-reverse coded), three items examined role conflict (e.g., "I work with two or more groups who operate quite differently"), and four items assessed role overload (e.g., "I receive an assignment without the work force to complete it"), as examined in Glazer & Beehr, 2005). A previous measure of role stressors contained five items for each measure, but on the basis of a multi-country factor analysis, the principle investigator of the original study shortened the survey to include a representative subset of items. Items on this scale were rated on a 7-point Likert-type scale ranging from 1 ("Strongly Disagree") to 7 (
"Strongly Agree"). The Cronbach alpha reliabilities (T1 & T2) for the role ambiguity ( $\alpha = .88$ ;  $\alpha = .83$ ), role conflict ( $\alpha = .75$ ;  $\alpha = .81$ ), and role overload ( $\alpha = .89$ ;  $\alpha = .91$ ) scales were high. Together, the Cronbach alpha reliabilities for the role stressor index were high for both T1 and T2 ( $\alpha = .84$ ;  $\alpha = .86$ ).

Schwartz's Values Survey (see Appendix B and Appendix C.2). The Schwartz's Values Survey is a 57-value (e.g., Equality, Inner Harmony, Social Power, Pleasure, Freedom, a Spiritual Life) measure that asks individuals to first rate their own values on the extent to which they are "a guiding principle in my life" and then rate the hospital's values on the extent to which they are "a guiding principle" within the organization. The nine-point rating scale ranged from "opposed to my values or to my organization" (-1) and "not important" (0) to "of supreme importance" (7). This nonsymmetrical scale compresses around the lower scale ratings, where ratings 1 and 2 are "unlabeled," and expands around higher scale ratings, where ratings 3 through 5 are "important" and "very important." Schwartz (2012) suggested this scalar modeling to "map the way people think about values, as revealed in pre-tests" (p. 10).

Based on the recommendations of previous research (Schwartz, 1992), 45 of these values were used to calculate19 value types. The reliability coefficients for each value type, which ranged from .63 to .80 are consistent with previous findings where Cronbach alpha scores ranged from 0.49 to 0.73 (Sagiv & Schwartz, 2000). Value types were then grouped based on their designation as "healthy" or "unhealthy," as defined by Sagiv and Schwartz (2000). Five value types were designated as healthy: (a) achievement, (b)

benevolence, (c) self-direction, (d) stimulation, and (e) universalism, whereas four value types were designated as unhealthy: (f) conformity, (g) power, (h) security, and (i) tradition. As in previous research, the hedonism value type was not given a distinction regarding health (Sagiv & Schwartz, 2000). Although value types are categorized into healthy, unhealthy, or unclassified categories, each value type's impact on the relationship between role stressors and burnout and turnover intention were analyzed.

**Burnout** (see Appendix C.3). Ten items were used to assess burnout, which Pines and Aronson (1988) refer to as tedium. An example item is "When you think about your work overall, how often do you feel trapped?" Items were rated on a 7-point Likert-type scale ranging from 1 'never' to 7 'always.' This measure was administered at T2 only. The Cronbach's alpha score for the burnout scale was high ( $\alpha = .87$ ).

**Turnover Intention** (see Appendix C.4). Turnover intention was measured using three items adapted from Glazer and Beehr (2005). An example item is: "I will actively look for a new job in the next year." Items were assessed on a 7-point Likert-type scale ranging from 1, 'strongly disagree' to 7, 'strongly agree.' Cronbach's alpha coefficients for T1 and T2, respectively, were high ( $\alpha$  =.87;  $\alpha$  = .86).

General well-being (see Appendix C.5). Eleven items were modified from Goldberg and Hillier's (1979) *General Health Questionnaire* (*GHQ-12*) to measure physical and psychological distress. The original *GHQ* consists of twelve items, but the original survey administration did not include the item "felt constantly under strain," because it does not operationalize strain and may confound results. "I" statements were added to each item in order to remain consistent with other survey items. For example, the statement "feeling unhappy or depressed" was reworded to "I have been feeling unhappy or depressed." Additionally, the scale was modified in order to remain consistent with other measurement scales used in the survey. The 4-point scale ranging from 1 'not at all' to 4 'very often' was altered to a seven-point Likert-type scale, ranging from 1, 'strongly disagree' to 7, 'strongly agree.' The Cronbach's alpha reliabilities for the general well-being scale were strong at T1 and T2 ( $\alpha = .83$ ;  $\alpha = .82$ ).

**Job-Related Anxiety** (see Appendix C.6). Job-related anxiety was measured using four items adapted from Parker and DeCotiis' (1983, as cited in Glazer & Beehr, 2005) 15-item questionnaire. An example item is: "Sometimes when I think about my job I get a tight feeling in my chest." Items were assessed on a 7-point Likert-style scale ranging from 1, 'strongly disagree' to 7, 'strongly agree.' The Cronbach alpha reliabilities for the job-related anxiety measure were strong at both T1 ( $\alpha$  =.92) and T2 ( $\alpha$  = .88). This study only utilizes T2 scores.

# **Data Analysis**

Hypotheses 1 and 2 were tested using correlational analyses, controlling for stressors at T2. Correlational analyses were also employed to address Research Question 1. Value variables were used in correlational analyses to test Research Question 2, and Hypothesis 3.

Prior to testing the remaining hypotheses and research questions, interaction variables were computed to test the two-way and three-way moderating effects of values and value congruence, respectively. In each analysis, the predictors (i.e., role ambiguity, role conflict, and role overload), as well as the proposed moderators (e.g., benevolence personal value) were centered to reduce the influence of multicollinearity on results. I created interaction variables between each role stressor (e.g., role ambiguity; RA), and each personal value (PV) type (e.g., Achievement personal value or ACPV) to form two-way interactions (e.g., RAxACPV) and each role stressor (e.g., RA), each personal value type (e.g., ACPV) and each perceived organizational value type (e.g., Achievement organizational value or ACOV) to form three-way interaction variables (e.g., RAxACPVxACOV).

In order to examine any significant three-way interactions, two-way interactions between stressors and personal healthy values for high and low organizational healthy value types were compared (Figure 3). Hypothesis 4 was examined using correlational analyses. Both Hypothesis 5 and Hypothesis 6 were examined using moderated regression analyses. Due to the small sample size, in order to probe the interaction effects, a median split technique was employed, such that for two-way interactions,

participants were divided into two groups, one below the personal value type median and one above the personal value type median (e.g., ACPV Low, ACPV High). In order to probe three-way interactions, these two groups were also subjected to a median split once more, such that one group was below the organizational value type median, and another group was above the organizational value type median, forming four groups overall. An example of the proposed probing technique for a three-way analysis is modeled in Table 4.

Table 4
Example of Probing Analysis Using Median Split Technique for Three-Way Interaction
Effects

Two-Way Interaction Slope Analysis	Three-Way Interaction Slope Analysis
ACPV <sup>a</sup> Low	ACOV <sup>b</sup> Low
	ACOV High
ACPV High	ACOV Low
	ACOV High

Note. <sup>a</sup> Achievement Personal Value. <sup>b</sup> Achievement Organization Value.

#### **RESULTS**

## **Correlational Analysis of Main Study Variables**

In order to test Hypotheses 1 and 2, I performed correlation analyses of the main study variables, T1 and T2 role stressors and T2 strains (see Table 5). Hypothesis 1 stated that role ambiguity, role conflict, and role overload at T1 would positively correlate with burnout, after controlling for the same stressors at T2. Hypothesis 2 stated that role ambiguity, role conflict, and role overload at T1 would positively correlate with T2 turnover intention, after controlling for the same stressors at T2. This study does not utilize statistical forms of control, rather it utilizes temporal control. That is, this study reduces the potential for common method bias because although all measures were collected via self-report survey, T1 role stressors are temporally distinct from T2 outcomes. Correlating T2 role stressors with T2 outcome variables could possibly compound on common method error, but to examine T1 role stressors with T2 outcomes avoids this difficulty because temporally, T2 role stressors did not yet exist at T1 measurement (i.e., they were yet to be measured). Hypotheses 1 and 2 received mixed support. T1 role conflict (r = .25, p < .05) and T1 role overload (r = .35, p < .01)significantly correlated with T2 burnout, however the correlation with T1 role ambiguity was not significant (r = .16, ns). Furthermore, T1 role ambiguity (r = .24, p < .05) and T1 role overload (r = .29, p < .01) significantly correlated with T2 turnover intention, but the correlation with T1 role conflict (r = .14, ns) was not supported.

Next, to ensure job-related anxiety and well-being are indeed on opposing sides of a spectrum to assess healthy and unhealthy values, their correlation was determined to be strong and negative (r = -.57, p < .01). Additionally, anxiety and burnout (r = .51, p < .01), and well-being and burnout (r = -.67, p < .01) yielded strong correlations, in the expected directions.

Value Correlations. Value types were developed based on procedures suggested in the Schwartz (2009) manual for proper use of the Schwartz Value Survey. Although 57 items are included in the Schwartz Value Survey, only 45 of the items are used to determine the ten value types (see Appendix B). Means, standard deviations, and

Cronbach's alpha scores for each of the values are presented in Table 6. Information regarding organizational values will be presented later in this thesis for clarity.

Table 5
Means, Standard Deviation, Reliabilities (on diagonal), and Intercorrelations Between
Role Stressors (T1), Anxiety (T2), Well-Being (T2), Burnout (T2), and Turnover Intention
(T2)

Variables	M	SD	1	2	3	4	5	6	7
1. Role	2.61	1.11	(.88)						
Ambiguity									
2. Role Conflict	4.40	1.41	.41**	(.75)					
3. Role Overload	4.40	1.53	.29**	.31**	(.89)				
4. Anxiety	3.44	1.53	.27**	.31**	.43**	(.88)			
5. Well-Being	5.43	.74	31**	25*	21*	57**	(.82)		
6. Burnout	2.87	.84	.16	.25*	.35**	.51**	67**	(.87)	
7. Turnover	2.57	1.40	.24*	.14	.29**	.32**	28**	.39**	(.86)
Intention									

*Note.* n = 98. \*\*p < .01, \*p < .05.

Table 6
Means, Standard Deviations and Cronbach's Alpha Reliabilities among Ten Value Types

Variable	M	SD	α	
1. Achievement	4.77	0.94	.67	
2. Benevolence	5.43	0.78	.69	
3. Conformity	4.92	1.02	.65	
4. Hedonism	4.05	1.50	.77	
5. Power	2.77	1.38	.76	
6. Security	4.82	0.98	.62	
7. Self-Direction	4.83	0.93	.64	
8. Stimulation	3.75	1.46	.76	
9. Tradition	3.99	1.33	.72	
10.Universalism	4.73	1.01	.80	

*Note.* n = 98.

Values and Outcomes. Research question 1 asked if healthy value types (i.e., achievement, benevolence, self-direction, stimulation, and universalism) negatively correlate with anxiety and positively correlate with general well-being whereas and if unhealthy value types (i.e., conformity, power, security and tradition) positively correlate with anxiety and negatively correlate with general well-being. Results of the correlational analysis did not reveal any significant correlations, though the correlations for some value types and both anxiety and well-being were in the intended direction (see Table 7).

Table 7
Intercorrelations between Schwartz 10 Personal Values, Role Stressors, Anxiety, Well-Being, Burnout, and Turnover Intention

Variable	RAª	RC	RO	ANX	GHQ	ВО	TI
Achievement <sup>a</sup>	14	.03	.09	.05	05	.13	05
Benevolence	20*	10	.00	02	.12	.06	26*
Conformity	$17^{\dagger}$	11	05	05	03	03	19 <sup>†</sup>
Hedonism	15	.06	02	.05	$20^{\dagger}$	$.20^{\dagger}$	.05
Power	16	.02	04	.12	11	.04	01
Security	28*	13	16	05	01	.02	16
Self-Direction	$18^{\dagger}$	06	06	01	04	02	.01
Stimulation	16	.06	10	06	.00	.02	.14
Tradition	22*	$17^{\dagger}$	12	02	11	.12	02
Universalism	23*	06	07	04	.06	04	11

*Note.* n = 98. <sup>a</sup>Abbreviations on the horizonal axis are as follows: Role Ambiguity, Role Conflict, Role Overload, Anxiety, General Well-Being, Burnout, and Turnover Intention. \*p < .05, †p < .10.

**Values and Role Stressors.** Research question 2 asked if personal healthy values negatively relate with role stressors. Relationships varied across each role stressor and healthy value type. Role ambiguity negatively correlated with benevolence (r = -.20, p < .05), self-direction (r = -.18, p < .10), and universalism (r = -.23, p < .05) values (see Table 7). However, neither role conflict nor role overload significantly correlated with any of the healthy values, although the directions of the relationships were generally in the proposed direction.

**Personal Values and Burnout.** Hypothesis 3 proposed that each personal healthy value would negatively relate with (a) burnout and (b) turnover intention. Correlation analyses revealed that none of the healthy value types (i.e., achievement, benevolence, self-determination, stimulation, and universalism) significantly correlated with burnout (see Table 7).

**Personal Values and Turnover Intention.** Correlation analyses between personal values and turnover intention revealed some evidence in support for Hypotheses 3 (see Table 7). Analyses revealed a significant negative correlation between benevolence value type and turnover intention (r = -.26, p < .01). Hypothesis 3 was mostly not supported.

## **Two-Way Interaction Analyses**

Hypothesis 5 proposed that the relationship between (a) each role stressor (i.e., role ambiguity, role conflict, and role overload) and burnout, and (b) each role stressor (i.e., role ambiguity, role conflict, and role overload) and turnover intention would be less positive for individuals with higher endorsement of each individual healthy value (i.e., achievement, benevolence, self-direction, stimulation, universalism) than for people with lower endorsement of these healthy values. Regression analyses were performed for each individual role stressor, where a single role stressor was entered in step 1 (e.g., role ambiguity or RA), a single personal value was entered in step 2 (e.g., achievement or AC), and the interaction between the role stressor and the value was entered in step 3 (e.g., RAxAC). These analyses were conducted to predict both burnout and turnover intention, yielding 60 regression analyses. Of those 60 analyses, only one yielded significant interaction results supporting the hypothesis, whereas six yielded significant results that opposed the hypothesis entirely.

**Burnout.** Burnout was regressed on each of role ambiguity, role conflict, and role overload, each personal value type, and the role stressor-personal value interactions. Results show that role ambiguity did not contribute a significant amount of variance to the prediction of burnout, but role conflict accounted for 5.4% of the variance in burnout (F(1, 96) = 6.55, p < .05) and role overload accounted for 12.2% of the variance in burnout (F(1, 96) = 13.32, p < .05).

Hypothesis 5 proposed that healthy personal values would act as a moderator for the relationship between role stressors (i.e., role ambiguity, role conflict, and role overload) and burnout, such that individuals who endorsed healthy values more, would experience less burnout. Multiple regression analyses revealed that the only healthy PV that yielded significant results as a moderator was the stimulation value.

Stimulation Value. Burnout was regressed on each of the three role stressors, stimulation PV, and the stressor-value interaction yielding a significant regression model  $(R^2 = .159, F(3.94) = 5.93, p < .01)$ . Most of the variance in burnout was accounted for by role overload  $(R^2 = .122, p < .01)$ , but the interaction term of role overload and

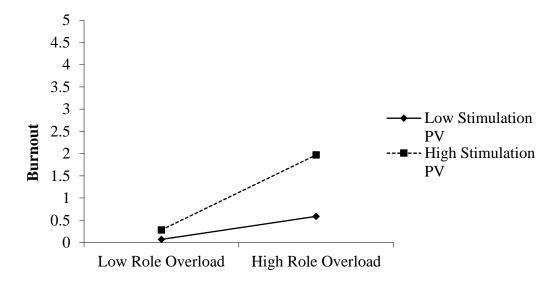
stimulation PV contributed an additional 3.7% of unique variance in the prediction of burnout ( $\beta = .24$ ,  $\Delta F$  (1, 95) = 4.15, p < .05; see Table 8).

Table 8
Hierarchical Regression of Burnout on Role Overload (RO), Stimulation Personal Value (STPV), and their Interaction

	Outcome Burnout				
Variables	$R^2$	$\Delta R^2$	β		
Step 1 RO	.122**	.122**	.349**		
Step 2 STPV	.122**	.000	.013		
Step 3 ROxSTPV	.159**	.037*	.235*		

*Note.* n = 98. \*\*p < .01, \*p < .05.

Simple slopes analyses, using a median split technique, were conducted for the relationship between role overload and burnout, for low (below the median) and high (above the median) stimulation personal values. The median split technique was used for all slope analyses due to small sample size and a large amount of data points clustered around the mean. Simple slope analyses were conducted using raw mean scores for stimulation value (i.e., non-centered), in order to make slopes more interpretable by using the original survey metric. The simple slope analyses revealed a significant positive association between role overload and burnout when personal stimulation values were high (b = .29,  $SE_b = .07$ ,  $\beta = .49$ , t (54) = 4.16, p < .01), but a nonsignificant, although smaller, positive association when personal stimulation values were low (b = .06,  $SE_b = .08$ ,  $\beta = .12$ , t (40) = .78, ns). A graphical depiction of the two-way interaction can be seen in Figure 4. This interaction failed to support Hypothesis 5.



Low Stimulation: b = .06, ns High Stimulation: b = .29, p < .01

Figure 4. The relationship between role overload and burnout as moderated by personal stimulation value. Stimulation values were dummy coded to split respondents who were above or below the median on the stimulation value moderator variable.

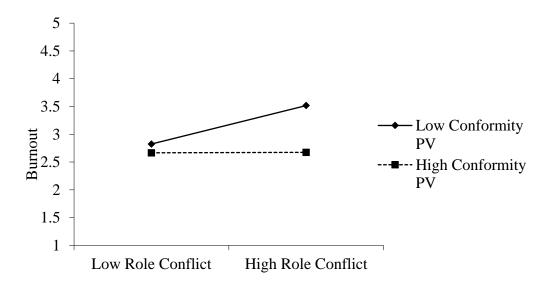
Conformity Value. Interaction effects were also found for some personal values proposed as unhealthy. Burnout was regressed on each of the three role stressors and conformity PV, revealing significant effects for the role conflict analysis ( $R^2 = .124$ , F (3,94) = 4.43, p < .01; see Table 9). The interaction term of role conflict and conformity PV contributed 5% of unique variance in the prediction of burnout ( $\beta$  = -.26,  $\Delta F$  (1, 94) = 5.41, p < .05).

Simple slopes analyses using a median split technique were conducted for the relationship between role conflict and burnout, for low (below the median) and high (above the median) conformity personal values. Simple slopes analyses were conducted using raw mean scores for conformity (i.e., non-centered). The simple slope analyses revealed a nonsignificant positive association between role overload and burnout when personal conformity values were high (b = .04,  $SE_b = .10$ ,  $\beta = .06$ , t (43) = .41, ns), but a significant, stronger positive association when personal conformity values were low (b = .23,  $SE_b = .07$ ,  $\beta = .143$  t (51) = 3.36, p < .05). A graphical depiction of the two-way interaction can be seen in Figure 5. This interaction failed to support Hypothesis 5

Table 9
Hierarchical Regression of Burnout on Role Conflict (RC), Conformity Personal Value (COPV), and their Interaction

	Outcome				
		Burnout			
Variables	$R^2$	$\Delta R^2$	β		
Step 1	.064*	.064*	.25*		
RC					
Step 2	.074*	.010	01		
COPV					
Step 3	.124**	$.050^{*}$	26*		
RCxCOPV					

*Note.* n = 98. \*p < .05.



Low Conformity: b = .23 p < .05 High Conformity: b = .04, ns

*Figure 5*. The relationship between role conflict and burnout as moderated by personal conformity value. Conformity values were dummy coded to split respondents who were above or below the median on the conformity value moderator variable.

*Security value.* Moderated multiple regressions of burnout on each of role conflict and role overload, as well as the unhealthy security PV were significant. Burnout was

regressed on role conflict, security PV, and their interaction. The regression model was significant ( $R^2 = .113$ , F(3,94) = 3.99, p < .05; see Table 10). The interaction term of role conflict and security PV contributed a significant 4.9% of unique variance in the prediction of burnout ( $\beta = -.24$ ,  $\Delta F(1, 94) = 5.15$ , p < .05).

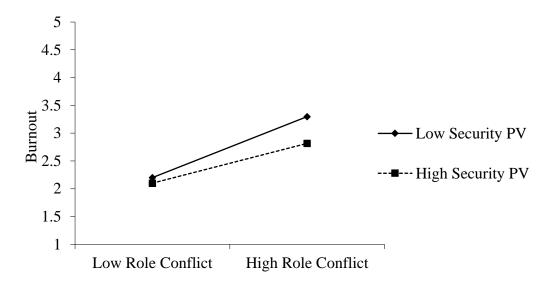
Table 10 Hierarchical Regression of Burnout on Role Conflict (RC), Role Overload (RO), Security Personal Value (SEPV), and their Interaction

	Outcome				
		Burnout			
Variables	$R^2$	$\Delta R^2$	$\beta$		
Role Conflict (RC)					
Step 1	.064*	.064*	.25*		
RC					
Step 2	.064*	.000	02		
SEPV					
Step 3	.113*	$.049^{*}$	24*		
RCxSEPV					
Role Overload (RO)					
Step 1	.122**	.122**	.35**		
RO					
Step 2	.122**	.000	.02		
SEPV					
Step 3	.169**	.047*	23*		
ROxSEPV					
$N_{\text{oto}} = 00^{-88} \text{ s} < 01^{-8} \text{ s} < 05$					

*Note.* n = 98. \*\*p < .01, \*p < .05.

Simple slopes analyses using a median split technique were conducted for the relationship between role conflict and burnout for low (below the median) and high (above the median) security PV. Simple slopes analyses were conducted using raw mean scores for security (i.e., non-centered). When personal security value endorsement was high, there was a smaller positive nonsignificant association between role conflict and burnout (b = .08,  $SE_b = .07$ ,  $\beta = .16$ , t (45) = 1.07, ns), whereas when personal value endorsement of security was low, there was a stronger positive, significant relationship

between role conflict and burnout (b = .27,  $SE_b = .10$ ,  $\beta = .37$  t (49) = 3.36, p < .01). The two-way interaction is presented in Figure 6. This interaction failed to support Hypothesis 5.

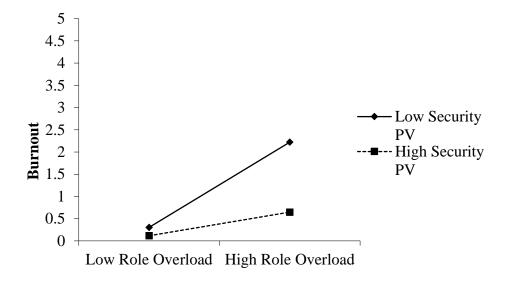


Low Security: b = .27, p < .01 High Security: b = .08, ns

Figure 6. The relationship between role conflict and burnout as moderated by personal security value. Security values were dummy coded to split respondents who were above or below the median on the security value moderator variable.

Second, burnout was regressed on role overload, security PV, and their interaction, yielding a significant model ( $R^2 = .169$ , F(3.94) = 6.36, p < .01; see Table 10). Although most of the variance in the model was accounted for by role overload ( $R^2 = .122$ , p < .01), the interaction term of role overload and security PV contributed 4.7% of unique variance in the prediction of burnout ( $\beta = -.23$ ,  $\Delta F(1.94) = 5.28$ , p < .05).

Simple slopes analysis for the relationship between role overload and burnout revealed that the relationship was significant at both the low and high levels of personal security value endorsement. Specifically, when security value endorsement was high, the relationship between role overload and burnout was weaker (b = .18,  $SE_b = .07$ ,  $\beta = .38$  t (45) = 2.75 p < .01) than when security value endorsement was low (b = .22,  $SE_b = .09$ ,  $\beta = .34$  t (49) = 2.56, p < .05; see Figure 7). This interaction failed to support Hypothesis 5.



Low Security: b = .22, p < .05 High Security: b = .18, p < .01

Figure 7. The relationship between role overload and burnout as moderated by personal security value. Security values were dummy coded to split respondents who were above or below the median on the security value moderator variable.

**Turnover Intention.** In terms of overall effects of role stressors, role ambiguity contributed a significant amount of variance to the prediction of burnout ( $R^2$ = .056, F (1, 96) = 5.64, p < .05), but role conflict did not contribute meaningful variance, and role overload accounted for 8.5% of the variance in turnover intention (F (1, 96) = 8.92, p < 05). No significant main effects were observed for any of the healthy values. Contrary to the burnout analyses, some of the healthy values, particularly benevolence and stimulation value types yielded significant variance to explain turnover intention.

Self-Direction Value. The full model of self-direction PV, role ambiguity, and their interaction significantly contributed 13.3% to the prediction of turnover intention (F (3, 94) = 4.79, p < .01; see Table 11). The interaction term consisting of role ambiguity and self-direction PV accounted for 6.5% of unique variance ( $\beta$  = .27,  $\Delta F$  (1, 94) = 7.00, p < .05). After performing a median split of the non-centered self-direction value data, where low self-direction was below the median and high self-direction was above the self-direction PV median, simple slopes analyses were used to probe the interaction

effects. When there was high endorsement of self-direction value, the positive relationship between role ambiguity and turnover intention was weaker (b = .19,  $SE_b = .49$ ,  $\beta = .44$ , t (49) = 2.09, ns) than the significant positive relationship when endorsement of self-direction was low (b = .35,  $SE_b = .24$ ,  $\beta = .59$ , t (44) = 2.97, p < .05). The two-way interaction is presented in Figure 8. This interaction supported Hypothesis 5.

Table 11 Hierarchical Regression of Turnover Intention on Role Ambiguity (RA), Self-Direction Personal Value (SDPV), and their Interaction

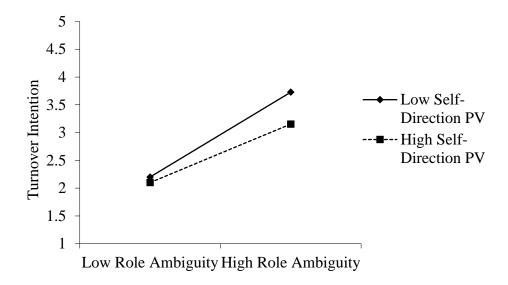
	Outcome Turnover Intention				
Variables	$R^2$	$\Delta R^2$	β		
Step 1	.056*	.056*	.236*		
RA					
Step 2	$.068^*$	.013	.112		
SDPV					
Step 3	.133**	.065*	.271*		
RAxSDPV					

*Note.* n = 98. \*p < .05.

Stimulation Value. The overall model consisting of role overload, stimulation PV, and the interaction variable significantly accounted for 21.3% of variance in predicting turnover intention (F (3, 94) = 8.51, p < .01) The interaction between role overload and stimulation PV accounted for a significant 5.5% of the variance in turnover intention ( $\beta$  = .29,  $\Delta F$  (1, 95) = 6.59, p < .05; see Table 12).

Simple slopes analyses using a median split technique were conducted for role overload and turnover intention for low (below the median) and high (above the median) stimulation PV. Simple slopes analyses were conducted using raw mean scores for security (i.e., non-centered). When the personal value endorsement of stimulation was high, there was a significant, stronger relationship with turnover intention (b = .43,  $SE_b = .11$ ,  $\beta = .466$ , t (54) = 3.87, p < .01), in comparison to the nonsignificant positive relationship with turnover intention for low endorsement of stimulation value (b = .10,

 $SE_b = .14$ ,  $\beta = .113 \ t \ (40) = .72$ , ns). The two-way interaction is presented in Figure 9. This interaction failed to support Hypothesis 5.



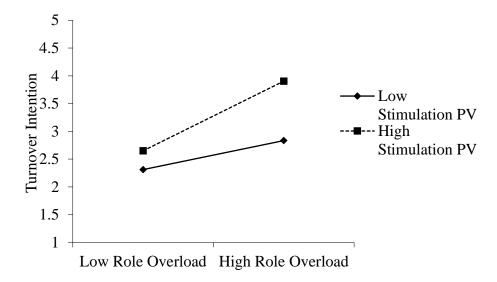
Low Self-Direction: b = .35, p < 05 High Self-Direction: b = .19, ns

Figure 8. The relationship between role ambiguity and turnover intention as moderated by personal self-direction value. Self-direction values were dummy coded to split respondents who were above or below the median on the self-direction value moderator variable.

Table 12 Hierarchical Regression of Turnover Intention on Role Overload (RO), Stimulation Personal Value (STPV), and their Interactions

	Outcome					
	Г	Turnover Intention				
Variables	$R^2$	$R^2$ $\Delta R^2$ $\beta$				
Step 1	.085**	.085**	.29**			
RO						
Step 2	.158**	.073**	.27**			
STPV						
Step 3	.213**	.055*	$.29^{*}$			
ROxSTPV						

*Note.* n = 98. \*\*p < .01, \*p < .05.



Low Stimulation: b = .10, ns High Stimulation: b = .43, p < .01

Figure 9. The relationship between role overload and turnover intention as moderated by personal stimulation value. Stimulation values were dummy coded to split respondents who were above or below the median on the stimulation value moderator variable.

Security Value. Results for models including role ambiguity and role conflict did not reveal any significant findings (see Table 13), but the overall model consisting of role overload, security PV, and the interaction variable significantly contributed 12.1% to the prediction of turnover intention (F (3, 94) = 4.30, p < .01; see Table 13). Although most of the variance was accounted for by role overload ( $R^2$  = .085, p < .01) and the main effect of security PV did not contribute any significant variance to the prediction of turnover intention, the interaction term consisting of role overload and security PV accounted for an additional 2.7% of marginally significant variance ( $\beta$  = -.18,  $\Delta F$  (1, 94) = 2.94, p < .10).

Simple slopes analyses using a median split technique were conducted for role overload and turnover intention for low (below the median) and high (above the median) security PV. Simple slopes analyses were conducted using raw median scores for security (i.e., non-centered). When the personal value endorsement of security was high, there was a significant, stronger positive relationship with turnover intention (b = .29,  $SE_b = .13$ ,  $\beta = .32$ , t (48) = 2.30, p < .05), in comparison to the positive relationship with

turnover intention for low endorsement of security value (b = .26,  $SE_b = .14$ ,  $\beta = .22 t$  (46) = 1.89, p < .10). However, the interaction graph presented in Figure 10 shows that although there was a stronger positive relationship with turnover intention for high endorsement of security values, turnover intention scores were overall higher for low endorsement of security values. The two-way interaction presented in Figure 10 provided mixed support for Hypothesis 5.

Table 13
Hierarchical Regression of Turnover Intention on Role Overload (RO), Security Personal Value (SEPV), and their Interaction

Variables	Outcome Turnover Intention			
	Step 1	.085**	.085**	.29**
RO				
Step 2	.093*	.008	09	
SEPV				
Step 3	.121**	$.027^{\dagger}$	$18^{\dagger}$	
RCxSEPV				

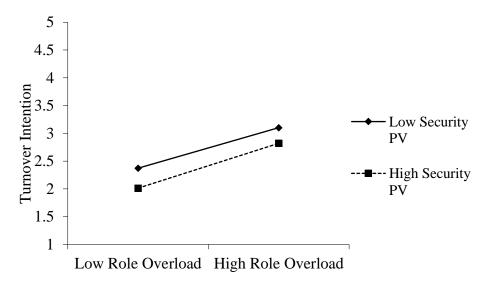
*Note.* n = 98. \*\*p < .01, †p < .10.

## **Three-Way Interaction Analyses**

Three-way interaction analyses were conducted in order to examine the effects of healthy value congruence between personal values and perceived organizational values on both (a) burnout and (b) turnover intention. I proposed that the effects of stressors on strains will be intensified when an individual perceives that the organization does not endorse similar healthy values (Hypothesis 6).

Individual regression analyses were conducted such that each individual role stressor was entered in step 1 (e.g., role ambiguity; RA), and each personal value and organizational value was entered in step 2 (e.g., achievement personal value or ACPV and achievement organizational value or ACOV). In step 3, two-way interaction variables were entered between each role stressor and the personal and organizational values (i.e., RAxACPV and RAxACOV), and the interaction between the personal and organizational

values (e.g., ACPVxACOV). Finally, in step 4 the three-way interaction variable between role stressors, personal values and organizational values (e.g., RAxACPVxACOV) was entered into the hierarchical regression. These procedures yielded a total of 60 hierarchical regression analyses, and a total of seven significant three-way interaction analyses, four for burnout, and three for turnover intention.



Low Security: b = .26, p < .10 High Security: b = .29, p < .05

Figure 10. The relationship between role overload and turnover intention as moderated by personal security value. Security values were dummy coded to split respondents who were above or below the median on the security value moderator variable.

**Burnout.** Three-way interaction analyses sought to examine the role of value congruence in buffering the relationships between role stressors and turnover and burnout. Results revealed that healthy values congruence did not significantly interact with any of the role stressors. That is, the three-way interactions between the three role stressor variables, the healthy personal values (i.e., achievement, benevolence, self-determination, stimulation, and universalism), and the corresponding perceived organizational healthy values, were not significant in predicting burnout. Therefore, Hypothesis 6, regarding healthy values, was not supported regarding burnout as a criterion variable. However, exploratory analyses revealed four significant three-way interactions involving unhealthy values for predicting burnout.

Conformity Value. Two of the significant three-way interactions were related to the conformity value. First, in examining the extent that role ambiguity predicts burnout, the overall model contributed 10.5% of variance (though nonsignificant) in the prediction of burnout. The three-way interaction term between role ambiguity, conformity PV, and conformity OV contributed 4.2% of unique variance in burnout ( $\beta = -.28$ ,  $\Delta F$  (1, 90) = 4.22, p < .05; see Table 14).

Simple slopes analyses using a median split technique were conducted for role ambiguity and burnout in a two-step process in order to examine the three-way interaction (see Figure 11). First, a median-split was conducted for individuals who had low (below the median) and high (above the median) conformity PV. Second, of these two groups, individuals were further separated into low (below the median) and high (above the median) perceived conformity OV. The simple slopes interaction figure was created using uncentered data.

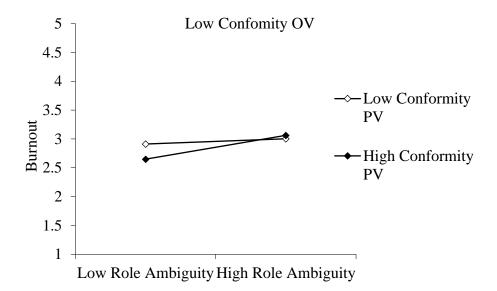
When the perceived organizational endorsement of conformity was low and the personal value endorsement of conformity was low (i.e., value congruence; b = .18,  $SE_b = .16$ ,  $\beta = .22$ , t (24) = 1.25, ns), there was a slightly stronger relationship with burnout than when perceived organizational endorsement of conformity was low and personal endorsement of conformity was high (i.e., value incongruence; b = .15,  $SE_b = .14$ ,  $\beta = .22$ , t (21) = 1.04, ns). In comparison, when perceived organizational endorsement of conformity was high and personal endorsement of conformity was high (i.e., value congruence; b = -.17,  $SE_b = .15$ ,  $\beta = -.23$ , t (24) = -1.18, ns) there was a weaker negative relationship with burnout than when perceived organizational endorsement of conformity was high and personal endorsement of conformity was low (i.e., value incongruence; b = .19,  $SE_b = .15$ ,  $\beta = .27$ , t (21) = 1.24, ns). Figure 11 shows a graphical depiction of this three-way interaction, which partially supports Hypothesis 6.

Second, in examining the relationship between role overload and burnout, the overall model contributed 20.3% of the variance in the prediction of burnout (p < .01). The three-way interaction term, which examined the interaction between role overload, conformity PV, conformity OV, contributed 3.1% of unique variance in predicting

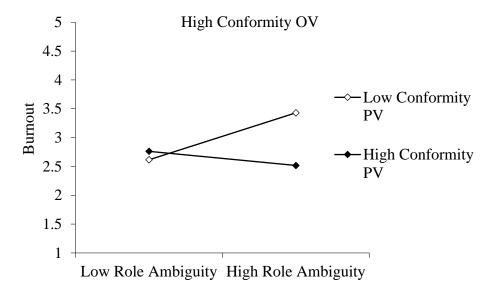
Table 14
Hierarchical Regression of Burnout on Role Ambiguity (RA), Conformity Personal Value (COPV), Conformity Organization Value (COOV), and their Interactions

Variables	Outcome				
		Burnout			
	$R^2$	$\Delta R^2$	ß		
Step 1	.027	.027	.16		
RA (a)					
Step 2	.045	.018	06		
COPV (b) COOV (c)					
Step 3	.063	.017	10		
axb					
axc					
bxc					
Step 4	.105	.042*	28*		
axbxc					

*Note.* n = 98. \*p < .05.



Low Conformity PV, Low Conformity OV: b = .18, ns High Conformity PV, Low Conformity OV: b = .15, ns



Low Conformity PV, High Conformity OV: b = .19, ns High Conformity PV, High Conformity OV: b = -.17, ns

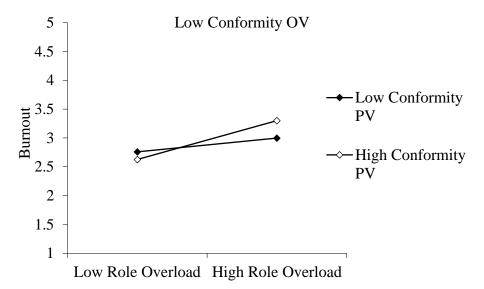
Figure 11. The relationship between role overload and burnout as moderated by personal conformity value and organizational conformity value. Conformity values were dummy coded to split respondents who were above or below the median on the conformity PV and conformity OV moderator variables.

burnout ( $\beta = -.31$ ,  $\triangle F$  (1, 90) = 3.51, p < .10; see Table 15). When the perceived organizational endorsement of conformity was low and the personal value endorsement of conformity was high (i.e., value incongruence; b = .21,  $SE_b = .10$ ,  $\beta = .44$ , t (21) = .2.24, p < .05), there was a slightly weaker positive relationship with burnout than when perceived organizational endorsement was low and personal endorsement was low (i.e., value congruence; b = .22,  $SE_b = .11$ ,  $\beta = .39$ , t (24) = 2.09, p < .05). In comparison, when perceived organizational endorsement of conformity was high and the personal value endorsement of conformity was low (i.e., value incongruence; b = .19,  $SE_b = .12$ ,  $\beta = .32$ , t (21) = 1.60, ns) there was a stronger relationship with burnout than when perceived organizational endorsement was high and personal conformity was high (i.e., value congruence; b = .10,  $SE_b = .10$ ,  $\beta = .20$ , t (24) = .99, ns). This exploratory analysis partially supports Hypothesis 6 (see Figure 12).

Table 15
Hierarchical Regression of Burnout on Role Overload (RO), Conformity Personal Value (COPV), Conformity Organization Value (COOV), and their Interaction

	Outcome			
	Burnout			
Variables	$R^2$	$\Delta R^2$	β	
Step 1	.122 **	.122**	.35**	
RO (a)				
Step 2 COPV (b) COOV (c)	.139 **	.017	07	
Step 3 axb	.172 **	.033	23	
axc bxc	**		4	
Step 4  axbxc	.203 **	.031 <sup>†</sup>	31 <sup>†</sup>	

*Note.* n = 98. \*\*p < .01, † p < .10.



Low Conformity PV, Low Conformity OV: b = .22, p < .05 High Conformity PV, Low Conformity OV: b = .21, p < .05

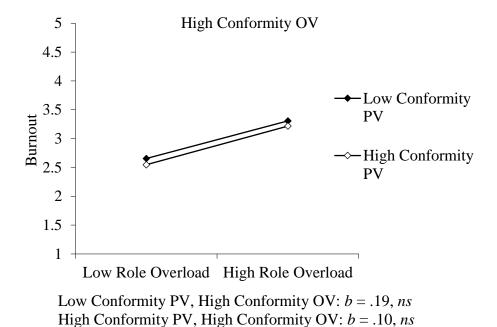


Figure 12. The relationship between role overload and burnout as moderated by personal conformity value and organizational conformity value. Conformity values were dummy coded to split respondents who were above or below the median on the conformity PV and conformity OV moderator variables.

**Hedonism Value.** In examining the relationship between role ambiguity predicted burnout, the overall model accounted for 11.6% of variance in burnout, but this was not significant. However, the three-way interaction term between role ambiguity, hedonism PV, and hedonism OV contributed 3.0% of unique variance in the prediction of burnout  $(\beta = .45, \Delta F(1, 90) = 3.01, p < .10)$ ; see Table 16).

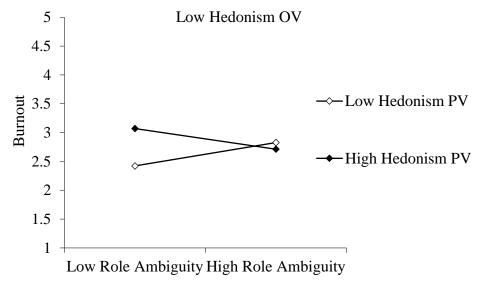
Simple slopes analyses using a median split technique were conducted for role ambiguity and burnout in a two-step process in order to examine the three-way interaction. First, a median-split was conducted for individuals who had low (below the median) and high (above the median) hedonism personal values. Second, of these two groups, individuals were further separated into low (below the median) and high (above the median) perceived hedonism organizational values. Per Figure 13, when perceived organizational value endorsement of hedonism was low and the personal value endorsement of hedonism was low (i.e., value congruence; b = .29,  $SE_b = .104$ ,  $\beta = .49$ , t = .49, t

(26) =2.82, p < .05), there was a stronger positive relationship with burnout than when perceived organizational value endorsement of hedonism was low and the personal value endorsement of hedonism was high (i.e., value incongruence; b = -.16,  $SE_b = .18$ ,  $\beta = -.22$ , t(17) = -.92, ns). In comparison, when the perceived organizational value endorsement of hedonism was high and the personal value endorsement of hedonism was high (i.e., value congruence; b = .27,  $SE_b = 17$ ,  $\beta = .28$ , t(31) = 1.61, ns), there was a stronger positive relationship with burnout than when the organizational value endorsement was high and the personal value endorsement was low (i.e., value incongruence; b = .15,  $SE_b = .19$ ,  $\beta = .18$ , t(19) = .781, ns). The exploratory analysis fails to support Hypothesis 6.

Table 16
Hierarchical Regression of Burnout on Role Ambiguity (RA), Hedonism Personal Value (HEPV), Hedonism Organization Value (HEOV), and their Interaction

		Outcome	
	Burnout		
Variables	$R^2$	$\Delta R^2$	β
Step 1	.027	.027	.16
RA (a)			
Step 2 HEPV (b) HEOV (c)	$.078^{\dagger}$	.051 <sup>†</sup>	.05
Step 3 axb	.086	.009	.01
axc bxc Step 4	.116	.030 <sup>†</sup>	.45 <sup>†</sup>
axbxc	.110	.020	

*Note.* n = 98. †p < .10.



Low Hedonism PV, Low Hedonism OV: b = .29, p < .05 High Hedonism PV, Low Hedonism OV: b = -.16, ns

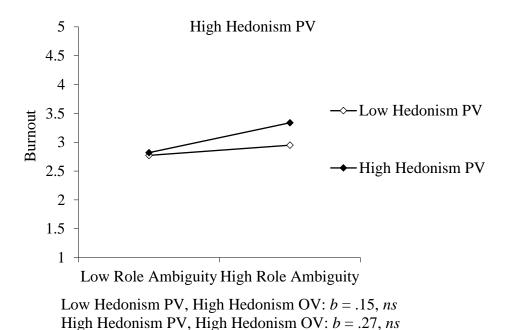


Figure 13. The relationship between role overload and burnout as moderated by personal hedonism value and organizational hedonism value. Hedonism values were dummy coded to split respondents who were above or below the median on the hedonism PV and hedonism OV moderator variables.

*Tradition value.* In examining the relationship between role conflict and burnout, the overall model accounted for 16.0% of variance in burnout (p < .05). The three-way interaction between role conflict, tradition PV, and tradition OV contributed 3.4% of unique variance in the prediction of burnout ( $\beta = .31$ ,  $\triangle F(1, 90) = 3.69$ , p < .10; see Table 17). Simple slopes analyses using a median split technique were conducted for role conflict and burnout in a two-step process in order to examine the three-way interaction. First, a median-split was conducted for individuals who had low (below the median) and high (above the median) tradition personal values. Second, of these two groups, individuals were further separated into low (below the median) and high (above the median) perceived tradition organizational values. Per Figure 14, when the perceived organizational endorsement of tradition was low and the personal value endorsement of tradition was low (i.e., value congruence; b = .22,  $SE_b = .10$ ,  $\beta = .35$ , t (38) =2.34, p < .10.05), there was a stronger positive relationship with burnout than when perceived organizational endorsement of tradition was low and the personal value endorsement was high (i.e., value incongruence; b = -.11,  $SE_b = .22$ ,  $\beta = -.17$ , t(10) = .17, ns). In comparison, when the perceived organizational endorsement of tradition was high, and the personal value endorsement of tradition was high (i.e., value congruence; b = .18,  $SE_b$ = .09,  $\beta$  = .31, t (34) = 1.91, p < .10), the relationship with burnout exhibited the same slope as when organizational endorsement of tradition was high, and the personal endorsement of tradition was low (i.e., value incongruence; b = .18,  $SE_b = .20$ ,  $\beta = .28$ , t(11) = .92, ns). This exploratory interaction fails to support Hypothesis 5.

Turnover Intention. Continuing the tests of hypothesis 6, three-way interaction analyses also sought to examine the role of value congruence in buffering the relationships between role stressors and turnover intention. Results revealed that some healthy values congruence significantly interacted with the role stressors. That is, the three-way interaction between the role stressor variables (i.e., role ambiguity, role conflict, and role overload), the healthy personal values (i.e., achievement, benevolence, self-determination, stimulation, and universalism), and perceived organizational healthy values, significantly predicted turnover intention. In addition, exploratory analyses found

that some three-way interactions between unhealthy value congruence and role stressors in predicting turnover intention were also found. Overall, results revealed three significant three-way interactions for predicting turnover intention for congruence of values classified as healthy or unhealthy.

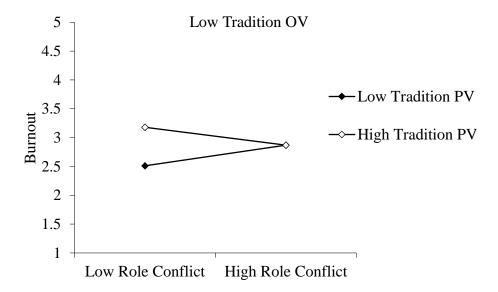
Table 17
Hierarchical Regression of Burnout on Role Conflict (RC), Traditional Personal Value (TRPV), Traditional Organization Value (TROV), and their Interaction

	Outcome  Burnout		
Variables	$R^2$	$\Delta R^2$	ß
Step 1	.064*	.064*	.25*
RC (a)			
Step 2	.091*	.027	.04
TRPV (b)			
TROV (c)			
Step 3	$.125^{\dagger}$	.034	.13
axb			
axc			
bxc			
Step 4	.160*	$.034^{\dagger}$	$.31^{\dagger}$
axbxc			

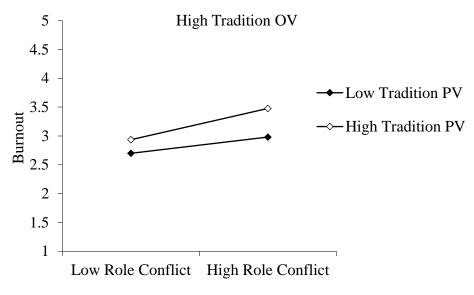
*Note.* n = 98. \*p < .05, †p < .10.

*Benevolence Value.* In examining the relationship between role conflict and turnover intention, the overall model accounted for 19.0% of variance in turnover intention (p < .01). The three-way interaction, which examined role conflict, benevolence PV, and benevolence OV contributed 2.7% of unique variance in the prediction of burnout ( $\beta = -.53$ ,  $\Delta F(1, 90) = 3.04$ , p < .10; see Table 18).

Simple slopes analyses using a median split technique were conducted for role overload and turnover intention in a two-step process in order to examine the three-way interaction. First, a median-split was conducted for individuals who had low (below the median) and high (above the median) benevolence personal values. Second, of these two groups, individuals were further separated into low (below the median) and high (above the median) perceived benevolence organizational values. When the perceived



Low Tradition PV, Low Tradition OV: b = .22, p < .05 High Tradition PV, Low Tradition OV: b = -.11, ns



Low Tradition PV, High Tradition OV: b = .18, ns High Tradition PV, High Tradition OV: b = .18, p < .10

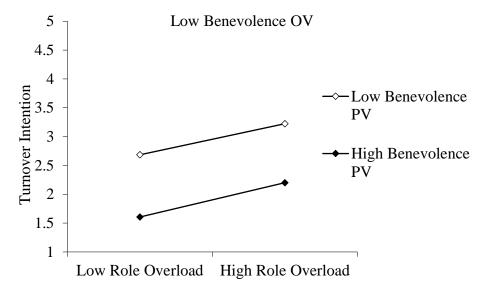
Figure 14. The relationship between role conflict and burnout as moderated by personal tradition value and organizational tradition value. Tradition values were dummy coded to split respondents who were above or below the median on the tradition PV and tradition OV moderator variables.

organizational value endorsement of benevolence was low and the personal value endorsement of benevolence was low (i.e., value congruence; b = .21,  $SE_b = .18$ ,  $\beta = .22$ , t(26) = 1.15, ns), there was a weaker positive relationship with turnover intention than when perceived organizational value endorsement was low and personal value endorsement was high (i.e., value incongruence; b = .54,  $SE_b = .17$ ,  $\beta = .59$ , t(19) = 3.16, p < .05). However, Figure 15 shows low perceived benevolence organizational values paired with low benevolence personal values (i.e., value congruence) is related to higher reports of turnover intention overall, although low perceived benevolence organizational values and low benevolence personal values has a weaker slope. In comparison, when the perceived organizational benevolence endorsement was high and the personal endorsement of benevolence was high (i.e., value congruence; b = .09,  $SE_b = .15$ ,  $\beta = .12$ , t(28) = .62, ns) there was a slightly weaker relationship with turnover intention than when perceived organizational endorsement was high and personal endorsement was low (i.e., value incongruence; b = .11,  $SE_b = .22$ ,  $\beta = .12$ , t(17) = .50, ns). These findings partially support Hypothesis 6. The three-way interaction is presented in Figure 15.

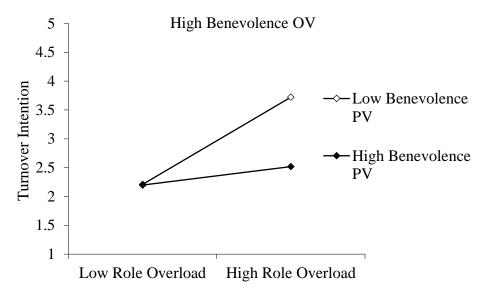
Table 18
Hierarchical Regression of Turnover Intention on Role Overload (RO), Benevolence
Personal Value (BEPV), Benevolence Organization Value (BEOV), and their Interaction

	Outcome  Turnover Intention		
Variables			
	$R^2$	$\Delta R^2$	β
Step 1	.085**	.064**	.29**
RO (a)			
Step 2 BEPV (b) BEOV (c)	.137**	.052 <sup>†</sup>	.05
Step 3 axb axc	.163*	.025	.07
bxc Step 4	.190**	.027†	53 <sup>†</sup>
axbxc			

*Note.* n = 98. \*\*p < .01, †p < .10.



Low Benevolence PV, Low Benevolence OV: b = .21, ns High Benevolence PV, Low Benevolence OV: b = .54, p < .05



Low Benevolence PV, High Benevolence OV: b = .11, ns High Benevolence PV, High Benevolence OV: b = .09, ns

Figure 15. The relationship between role overload and turnover intention as moderated by personal benevolence value and organizational benevolence value. Benevolence values were dummy coded to split respondents who were above or below the median on the benevolence PV and benevolence OV moderator variables.

Universalism Value. In examining the relationship between role ambiguity and turnover intention, the overall model accounted for 11.8% (ns) of variance in turnover intention, which was not significant. The three-way interaction term, which examined personal and organizational universalism value congruence was significant. That is, the interaction between role ambiguity, personal universalism value, and perceived organizational universalism value contributed 3.7% of unique variance in the prediction of turnover intention ( $\beta = -.25$ ,  $\triangle F(1, 90) = 3.81$ , p < .10; see Table 19).

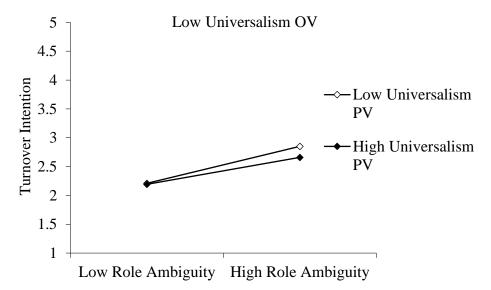
Simple slopes analyses using a median split technique were conducted for role ambiguity and turnover intention in a two-step process in order to examine the three-way interaction. First, a median-split was conducted for individuals who had low (below the median) and high (above the median) universalism personal values. Second, of these two groups, individuals were further separated into low (below the median) and high (above the median) perceived universalism organizational values. When the perceived organizational value endorsement of universalism was low and the personal value endorsement of universalism was low (i.e., value congruence; b = .35,  $SE_b = .19$ ,  $\beta = .30$ , t(35) = 1.85, p < .10), there was a slightly stronger positive relationship with turnover intention than when perceived organizational value endorsement was low and personal value endorsement was high (i.e., value incongruence; b = .33,  $SE_b = .35$ ,  $\beta = .25$ , t(13) = .25.93, ns). In comparison, when the perceived organizational endorsement of universalism was high and personal value endorsement of universalism was low high (i.e., value congruence; b = .10,  $SE_b = .26$ ,  $\beta = .08$ , t(23) = .41, ns), there was a weaker relationship with turnover intention than when perceived organizational endorsement was high and personal universalism endorsement was low (i.e., value incongruence; b = .50,  $SE_b = .42$ ,  $\beta = .27$ , t(19) = 1.21, ns).

The three-way interaction model partially supports Hypothesis 6, such that individuals who highly endorse universalism and perceive that the organization also highly endorses universalism (i.e., value congruence) have lower reports of turnover intention, in comparison to perceived organizational and personal universalism values that are not congruent. The three-way interaction is presented in Figure 16.

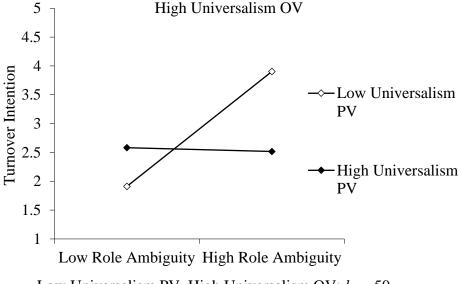
Table 19
Hierarchical Regression of Turnover Intention on Role Ambiguity (RA), Universalism
Personal Value (UNPV), Universalism Organization Value (UNOV), and their
Interaction

	Outcome  Turnover Intention		
Variables			
	$R^2$	$\Delta R^2$	ß
Step 1	.056*	.056*	.24 <sup>†</sup>
RA (a)			
Step 2 UNPV (b) UNOV (c)	.063	.008	.07
Step 3	.081	.017	06
axb axc bxc			
Step 4	.118	$.037^{\dagger}$	$25^{\dagger}$
axbxc			

*Note.* n = 98. \*p < .05, †p < .10.



Low Universalism PV, Low Universalism OV: b = .35, p < .10 High Universalism PV, Low Universalism OV: b = .33, ns



Low Universalism PV, High Universalism OV: b = .50, ns High Universalism PV, High Universalism OV: b = .10, ns

Figure 16. The relationship between role overload and turnover intention as moderated by personal universalism value and organizational universalism value. Universalism values were dummy coded to split respondents who were above or below the median on the universalism PV and universalism OV moderator variables.

*Tradition Value.* In examining the relationship between role ambiguity and turnover intention, the overall model accounted for 16.3% of variance in turnover intention (p < .05). The three-way interaction term, which examined role conflict, tradition PV, and tradition OV contributed 3.4% of unique variance in the prediction of burnout ( $\beta = -.29$ ,  $\Delta F(1, 90) = 3.62$ , p < .10; see Table 20).

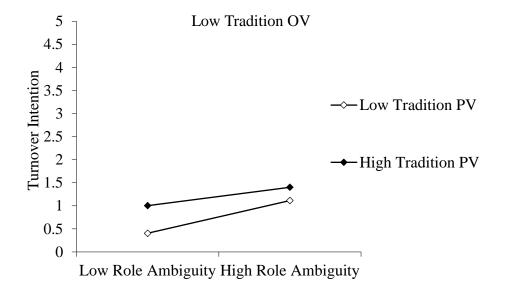
Simple slopes analyses using a median split technique were conducted for role ambiguity and turnover intention in a two-step process in order to examine the three-way interaction. First, a median-split was conducted for individuals who had low (below the median) and high (above the median) tradition personal values. Second, of these two groups, individuals were further separated into low (below the median) and high (above the median) perceived tradition organizational values. When the perceived organizational endorsement of tradition was low and the personal value endorsement of tradition was low (i.e., value congruence; b = .28,  $SE_b = .20$ ,  $\beta = .23$ , t (34) =1.40, ns), there was a slightly stronger positive relationship with turnover intention than when perceived

organizational endorsement was low and personal value endorsement was high (i.e., value incongruence; b = .22,  $SE_b = .28$ ,  $\beta = .22$ , t (13) = .77, ns). Similarly, when perceived organizational endorsement of tradition was high and personal endorsement of tradition was high (i.e., value congruence; b = .38,  $SE_b = .25$ ,  $\beta = .26$ , t (35) = 1.55, ns) there was a stronger relationship with turnover intention than when perceived organizational endorsement was high and personal value endorsement was low (i.e., value incongruence; b = .20,  $SE_b = .68$ ,  $\beta = .09$ , t (10) = .29, ns). The exploratory three-way interaction is presented in Figure 17 and fails to support Hypothesis 6.

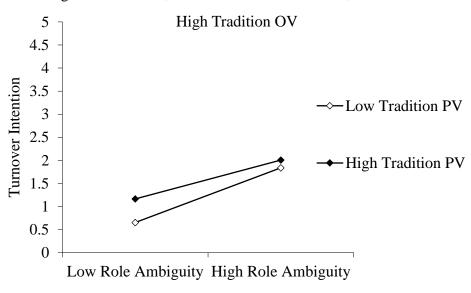
Table 20
Hierarchical Regression of Turnover Intention on Role Ambiguity (RA), Tradition
Personal Value (TRPV), Tradition Organizational Value (TROV), and their Interaction

		Outcome	
		Turnover Inte	ntion
Variables	$R^2$	$\Delta R^2$	β
Step 1	.056*	.056*	.24*
RA (a)			
Step 2 TRPV (b) TROV (c)	.081*	.026	.16
Step 3 axb	.129*	.047	09
axc bxc	162*	.034 <sup>†</sup>	29 <sup>†</sup>
Step 4 axbxc	.163*	.034†	29'

*Note.* n = 98. \*p < .05, †p < .10.



Low Tradition PV, Low Tradition OV: b = .28, ns High Tradition PV, Low Tradition OV: b = .22, ns



Low Tradition PV, High Tradition OV: b = .20, ns High Tradition PV, High Tradition OV: b = .40, ns

Figure 17. The relationship between role ambiguity and turnover intention as moderated by personal tradition value and organizational tradition value. Tradition values were dummy coded to split respondents who were above or below the median on the tradition PV and tradition OV moderator variables.

#### **DISCUSSION**

The purpose of this study was to examine the moderating role of healthy value congruence on the stressor-strain relationship. Specifically, this study examined the premise of healthy values, namely that certain values could either negatively or positively affect burnout and turnover intention. In particular, this study also aimed to examine the effects of personal and organizational value congruence on the relationship between stressors (i.e., role ambiguity, role conflict, and role overload), and outcomes (i.e., burnout and turnover intention). Consistent with Sagiv and Schwartz (2000), this study presents empirical evidence that values can be related to health, such that some values (e.g., security) may be more influential in buffering the stressor-strain relationship, dependent on the stressors and outcomes examined. Furthermore, results support the foundational idea of P-E fit theory, such that individuals who held certain values were less negatively impacted by the stressor-strain relationship when personal values were more aligned with organizational values (i.e., value congruence). However, some of the person-organization value alignments moderated the stressor-strain relationship in unexpected ways.

The current study extends prior research on healthy values which has examined either the notion that some values are healthy via correlational analyses of values and well-being variables (Kasser & Ahuvia, 2002; Sagiv & Schwartz, 2000), or the notion of value congruence in relation to well-being (Sagiv & Schwartz, 2000). The current study attempts to confirm the idea of healthy values, but examines healthy and unhealthy value congruence as a moderator of the stressor strain relationship, not just as a predictor of strains. Sagiv and Schwartz (2000) examined the impact of healthy values and value congruence in two studies of subjective well-being within adults and students from Israel and the former East and West Germany. Their study concluded that both value congruence and healthy values may be important in better understanding stressor-strain relationships. However, to my knowledge, no study thus far has addressed a three-way moderation effect of healthy value congruence on potential outcomes, specifically burnout and turnover intention. Thus, the present study targets a gap in the literature by

examining the impact of healthy value congruence on the relationship between role stressors and outcome variables.

## **Stressor-Strain Relationships**

**Role Stressors.** Hypotheses 1 and 2, which proposed that each of the three role stressors examined (i.e., role ambiguity, role conflict, and role overload) would positively correlate with (1) burnout and (2) turnover intention, received mixed support. Role conflict and role overload positively correlated with burnout, but role ambiguity did not significantly correlate with the outcomes, although results were in the proposed positive direction. This finding is contrary to the literature, which generally indicates a significant positive relationship between role ambiguity and burnout (e.g., Tunc & Kutanis, 2009). It is possible that this difference in the significance is related to the measure of burnout, such that many studies examine burnout utilizing the MBI (Cooper et al., 2001). Perhaps burnout as assessed by Pines and Aronson's (1988) measure may examine a different area in the burnout construct than the MBI, thus resulting in different observed relationships. Indeed, meta-analytic findings suggest that role ambiguity has the highest corrected weighted mean correlation with the depersonalization facet of the MBI, whereas the correlations found for the relationship between role ambiguity and the emotional exhaustion and personal accomplishment facets of the MBI were meaningfully smaller in magnitude, although the correlation was still positive (Lee & Ashforth, 1996).

A more recent meta-analysis purports that the correlations between role ambiguity and the facets of burnout are more consistent across facets (Alarcon, 2011), but still, the reduced personal accomplishment facet has a higher correlation with role ambiguity than that of role conflict. Although the relationship between role ambiguity and burnout is frequently reported with moderate to high correlation coefficients (Maslach, Schaufeli, & Leiter, 2001), it is possible that Pines and Aronson's (1988) measure, utilized in this study, does not adequately assess the depersonalization facet from the burnout construct, thus reducing the observed relationship between role ambiguity and burnout. However, based on the positive direction of the correlations, which is consistent with prior research, it is also arguable that the lack of significance resulted from small sample size, and

sampling error, instead of a lack of construct relationship. That is, because the statistical relationship observed is small in magnitude, the sample in this study may not have had enough power for the correlation to reach significance.

Comparably, role ambiguity and role overload significantly correlated with turnover intention, but role conflict did not significantly correlate with turnover intention, although once again, the correlation was in the proposed positive direction. The positive relationships between role ambiguity and turnover intention (e.g., O'Driscoll & Beehr, 1994) and role overload and turnover intention are commonly supported in research literature (e.g., Vandenberghe, Panaccio, Bentein, Mignonac, & Roussel, 2011). Additionally, research frequently reports positive significant relationships between role conflict and turnover intention (e.g., O'Driscoll & Beehr, 1994; Vandenberghe et al., 2011), contrary to the findings of this study. However, because the results are similarly in a positive direction, as hypothesized, it is possible that this relationship is not significant because of low statistical power due to small sample size.

Further, although not the intended premise of the study, an important finding is that role overload accounted for the most variance in burnout in comparison to role ambiguity or role conflict. This is relevant for the study of burnout because it suggests that role overload may be more important than role ambiguity or role conflict in predicting burnout. Similarly, role overload accounted for the most variance in turnover intention, in comparison to role ambiguity and role conflict. This finding is meaningful to research within the field of occupational health psychology because frequently, when role stressors are measured, only measurements of role ambiguity and role conflict are examined (an exception is Glazer & Beehr, 2005). Although work overload is sometimes examined in studies that examine role stress, work overload is conceptually different from role overload, which concerns the explicit and implicit roles that individuals take in their jobs. The findings of this study suggest that for the outcomes of burnout and turnover intention, role overload may be an important factor to further study and attempt to reduce in the workplace.

General Well-Being and Job-Related Anxiety. General well-being and job-related anxiety did not significantly correlate with any of the proposed healthy or unhealthy values, thus failing to provide evidence for Research Question 1. Although values are not assumed to be inherently healthy or unhealthy, prior research (Sagiv & Schwartz, 2000) has proposed that a relationship exists between value types and wellbeing, such that certain values (e.g., achievement, benevolence) could be classified as healthy because they were related to subjective well-being, measured in this study as general well-being, and job-related anxiety. Results did not reveal any significant correlations, but the correlations for some value types and both anxiety and well-being were in the intended direction, supporting the theoretical foundation proposed by Sagiv and Schwartz (2000). Still, these findings are not overall consistent with the subjective well-being foundation of healthy values, perhaps supporting the proposition that the healthiness of values depends on the environment, and not the inherent healthiness of certain value types, as Sagiv and Schwartz (2000) suggested.

Although correlations were nonsignificant, some were in opposite directions of theory and the healthy vs. unhealthy categorization of value types (Sagiv & Schwartz, 2000). It is suggested that this may indicate that these relationships occurred for two possibly interrelated reasons: (a) differential relationships between study variables and (b) differences in the Sagiv and Schwartz (2000) healthy vs. unhealthy value type distinction. To address the first point, the study that identified values as healthy or unhealthy used affective and cognitive measures of well-being (Sagiv & Schwartz, 2000). That is, Sagiv and Schwartz's study utilized three measures to examine subjective well-being: (a) the positive/negative affect scale (Bradburn, 1969, as cited in Sagiv & Schwartz, 2000), (b) the General Mental Health Scale (Becker, 1989 as cited in Sagiv & Schwartz, 2000), and (c) the satisfaction-with-life scale (Diener, Emmons, Larsen, & Griffin, 1985, as cited in Sagiv & Schwartz, 2000). It is possible that a different relationship between the values and outcomes measured in this study were found because of the variables used to represent well-being. That is, in the Sagiv and Schwartz study, affective and cognitive measures were used to model subjective well-being, whereas in

this study, well-being was examined using a measure of general well-being, and job-related anxiety. It is possible that these outcomes may have differing relationships with the values variables, such that the outcome itself may matter when assessing the healthiness of a value. As the current study used a similar, but still different measure of well-being (i.e., general well-being and job-related anxiety), results may differ from those of the Sagiv and Schwartz study.

Although the examination of different outcomes is a plausible explanation for the difference in results in comparison to the research of Sagiv and Schwartz (2000), other potential reasons exist. Thus, I suggest a second possible reason for the different findings, in that the results in this study could be due to the context of the sample used. That is, prior research has proposed that the environment plays a role in impacting the relationship between healthy values and outcomes (Sagiv & Schwartz, 2000), so a different environment (i.e., sample) could produce different outcomes. The current study utilizes a sample of nurses in U.S. hospitals, whereas Sagiv and Schwartz utilized general adult and student samples from Israel and former East and West Germany. It is possible that in the sample of nurses utilized in the current study, value types have a different relationship with well-being due to the contextual setting, hospitals. Endorsing a particular value type (e.g., benevolence) may have a different meaning and relationship with well-being in the context of a hospital than in the context of life in general. It is possible that if this study were conducted in a general context, results may be more consistent with Sagiv and Schwartz. That said, it is important to examine how relationships among variables may differ based on the context, which may suggest differential interventions based on organization, or occupation (e.g., nurses).

Personal Healthy Values. Although significant correlations between role stressors and personal healthy values were found, the overall results do not provide sufficient evidence for research question 2, which asked if personal healthy values negatively relate with role stressors. Interestingly, the significant correlations between some unhealthy values and the role stressors are not in the intended direction, but instead opposite to theory. For example, tradition, a proposed unhealthy value, negatively

correlated with role ambiguity and role conflict. Although these preliminary findings do not support the healthy or unhealthy value categorization (Sagiv & Schwartz, 2000), findings still show that certain value types negatively correlate with role stressors, supporting the premise that values may be healthy or unhealthy.

Still, caution is warranted in drawing conclusions, as this study utilized correlational analyses of cross-sectional data between values and role stressors (only role stressors were collected at both time points); the true direction of the relationship cannot be ascertained. The correlation could instead imply that as role stressors increase, certain values become less important to an individual. The later relationship is less likely due to the conceptualized function of values, as relatively stable over time (Rokeach, 1973). Thus, it would be less likely for relatively dynamic role stressors to influence a sizable change in theoretically static values.

Regarding the relationship between personal healthy values and burnout and turnover intention, only one significant correlation was revealed. Thus, Hypothesis 3 was not supported. This finding is contrary to theory (Sagiv & Schwartz, 2000), which argues that value types can be healthy or unhealthy. I propose that the lack of significant correlations for burnout may be a result of the measure used to assess burnout. It is also possible that burnout should be treated as a facet-level construct and not examined as an overall score. The MBI (Maslach & Jackson, 1981) included instructions that each facet (emotional exhaustion, reduced accomplishment, and depersonalization) should receive its own individual score, rather than calculated as an overall burnout score. The Pines and Aronson (1988) measure utilized for this study does not have the same stipulation, nor does it include individual facets, and thus one composite score is calculated for burnout. It is possible that the measure assesses different facets of burnout and that these facets have differential correlations with healthy values. However, when combined in a composite measure, these correlations may be overlooked. Unfortunately, because the measure used has no facets, this study is unable to detect if the results are due to the measure of burnout utilized, or the actual relationship between burnout and value types endorsed.

The lack of a significant negative relationship between personal healthy values and turnover is not surprising, as turnover intention is not exclusively linked to health variables. It is arguable that turnover intention is not negatively related to personal healthy values due to the various cognitions that influence the intention to turnover. Hom, Mitchell, Lee, and Griffeth (2012) proposed that there are four types of individuals in organizations: (1) enthusiastic stayers, (2) enthusiastic leavers, (3) reluctant stayers, and (4) reluctant leavers, and that individuals in these categories may have different motivation and organizational attitudes. Although turnover intention and actual employee turnover is frequently reported as problematic within literature, especially concerning nurses (e.g., Beecroft et al., 2006; Kovneret al., 2014; Winfield et al., 2009), we are unable to completely connect it to its causes. Literature commonly finds a positive relationship between role stressors and turnover intention, suggesting that as role stressors increase, so does employee turnover intention (e.g., O'Driscoll & Beehr, 1994) However, this may not be the relationship for all individuals. That is, correlational relationships could be muddled by individuals who are reluctant leavers, or people who wish to stay in the job, but for some reason cannot. These people may not experience high role stressors, but still may intend to leave the organization for personal (e.g., moving to a different location) or organizational (e.g., pay) reasons. Current turnover intention measures, including the one utilized in this study, assess employees intention to leave, but not the reasons for such intentions.

## **Two-Way Interactions**

Concerning the outcome of burnout, Hypothesis 5 suggested that proposed healthy values (i.e., achievement, benevolence, self-direction, stimulation and universalism) values would buffer the relationship between role stressors and burnout. This hypothesis was not supported. Indeed, individuals who reported high stimulation PV reported higher levels of burnout. This finding might be a function of the context of the present study, hospital nurses. Individuals who are high in stimulation seek adventure and engagement (Schwartz, 1992). However, when role overload is high, these individuals may be too busy working, thereby leaving no time to seek adventure.

Buffering effects were found for both conformity and security values, which were proposed as unhealthy values (Sagiv & Schwartz, 2000). Individuals who reported high endorsement of conformity and security values also reported lower levels of burnout. In the case of conformity, high conformity PV appeared to protect individuals experiencing role conflict from experiencing high levels of burnout. It is possible that the nurse may simply follow protocol to cope with role conflict. Comparably, individuals who have low security PV are exposing themselves to have greater burnout.

In a hospital context, both conformity and security are requirements, as evidenced by the rules and regulations nurses are expected to follow (American Nurses Association, 2015). Thus, it is perhaps the match with the environment and not the healthiness of a value that is important. That said, these findings support the premise of Hypothesis 5, in that value types can moderate the relationship between role stressors and burnout, but also supports the theory that the healthiness of values may be fluid and variable, or dependent on context. That is, value types are not inherently healthy nor unhealthy, and may in fact depend on environmental or situational factors (Sagiv & Schwartz, 2000). Indeed, Sagiv and Schwartz (2000) proposed that conformity and security acted as unhealthy values, such that highly endorsing these value types would relate to more negative outcomes. However, in the present study, highly endorsing conformity and security value types related to lower reports of burnout.

Regarding turnover intention, results similarly supported the premise of Hypothesis 5, in that value types can moderate the relationship between role stressors and outcomes. Results revealed that self-direction moderated the relationship between role ambiguity and turnover intention such that those who had low endorsement of self-direction reported higher levels of turnover intention. This result directly supports the healthiness distinction of self-direction value (Sagiv & Schwartz, 2000). That said, values that were hypothesized to be healthy were also found to lead to higher reports of turnover intention. Stimulation value, a hypothesized healthy value, moderated the relationship between role overload and turnover intention, such that individuals who highly endorsed stimulation values, also reported higher rates of turnover intention. Indeed, as role

overload increased, individuals who reported low stimulation PV endorsement were nearly unaffected in their reports of turnover intention. It is possible that the role overload reported is due to mundane, repetitive tasks rather than a variety of stimulating tasks, thus negatively impacting individuals who report high stimulation PV.

A novel contribution of this study is finding that value types may differentially impact the relationship between role stressors and outcomes, depending on both the individual role stressor and the outcome examined. Although a value type (e.g., stimulation) moderates the relationship between one role stressor (e.g., role overload) and an outcome (e.g., burnout), this does not mean the value type will moderate the stressor-strain relationship when other role stressors or strains are examined. This is important because it shows that the influence of healthy values is not a universal panacea on the stressor-strain process, as suggested, but not fully examined, in Sagiv and Schwartz (2000). Although values types may buffer the relationship between stressors and outcomes in some situations, in other situations, the effects are negligible.

# **Three-Way Interactions**

Hypothesis 6 was not supported concerning the relationship between role stressors and burnout, such that healthy value congruence did not act as a meaningful moderator. However, congruence in unhealthy values significantly interacted with stressors. Specifically, for the conformity value, value congruence moderated the relationship between role overload and burnout. When both the perceived organizational conformity and personal conformity value types were high, there were lower burnout scores, however, the effects were negligible when both perceived organizational conformity and personal conformity were low. In this analysis, the interaction between high conformity PV in a high conformity OV context with role overload resulted in the lowest levels of burnout. Comparably, when conformity value congruence was used as a moderator of the relationship between role ambiguity and burnout, low conformity PV in a low conformity OV (i.e., value congruence) context protected the individual from burnout due to role ambiguity. However, there were differences when examining the high conformity OV condition. High conformity PV endorsement in a high conformity OV (i.e., value

congruence) context protected the individual from burnout due to role ambiguity, but low conformity PV endorsement in a high conformity OV context increased burnout. It is possible that a nurse who reports low conformity PV does not fit the hospital environment which tends to require conformity.

The Hedonism value, which was not designated as either a healthy or an unhealthy value, also moderated the role ambiguity-burnout relationship, such that in a low hedonism OV context, nurses with high hedonism PV had greater burnout than nurses with low hedonism PV. Furthermore, in the context of high hedonism OV, having high hedonism PV increased burnout as role ambiguity increased, but the slope was not significant. It is possible that nurses who value hedonism thrive in environments that are ambiguous, but not environments that endorse hedonism.

In examining the relationship between role ambiguity and turnover intention, universalism value congruence was supported in the direction proposed, such that when the individual's personal endorsement of universalism and perception of the organization's endorsement of universalism values was congruent, turnover intention was low. In contrast, when both personal and perceived organizational values were low, turnover intention did not differ from when perceived OV of universalism was low and PV was high. This finding suggests that in the context of nursing, there might be a good match between individuals who report high universalism PV and perceive high universalism OV endorsement. In comparison to the universalism value congruence relationship, the relationship between role overload and turnover intention was buffered by benevolence value congruence. When benevolence OV was low and benevolence PV was low, as well as when benevolence OV and PV were both high, turnover intention due to role overload was lower than when benevolence PV opposed benevolence OV. It appears that nurses who have a low value for benevolence may be working in the wrong work environment, which explains their greater turnover intention. These findings, again, support the idea that context matters.

In short, when the congruence between each OV and PV value was examined, it was congruence with context-relevant values that were supported, rather than healthiness

of values. Indeed, benevolence and universalism values are important contextual values in hospitals and congruence on those values moderated specific stressor-outcome relationships (e.g., role overload and turnover intention). The expectation that healthy value congruence would mitigate strains in all instances was not supported and therefore, the extent to which a person's values align with an organization's values appears to have minimal impact on individuals' psychological strain response (burnout) and behavioral intentions (turnover intention) as a whole. Results revealed that values differentially predicted burnout and turnover intention, and that the congruence of organizational and personal values did not always moderate the relationship between role stressors and outcomes. Moreover, these findings suggest that value congruence may buffer stressor-strain relationships only when the value assessed is relevant to the context.

Across the value types examined, value congruence had different impacts on the relationship between role stressors and outcomes. Interestingly, value congruence did not always lead to the reduction of poor outcomes, which is contrary to research, which suggests that value congruence may act as a buffer in stressor-strain relationships (Bao et al., 2013; Sagiv & Schwartz, 2000). Although value congruence generally had a buffering impact on the relationship between role stressors and outcomes, this was not always the case; in fact, in some cases individuals who reported that they endorsed a value highly and perceived that the organization highly endorsed the value (i.e., value congruence) had the strongest stressor-outcome relationship. Indeed, when value congruence does moderate stressor-outcome relationships, it might mitigate deleterious outcomes, but it might also intensify them. This intensification might occur because of the specific personal value endorsed. An alternative explanation may be that that objective context matters when examining value congruence; matching PVs and OVs alone might not explain when stressors relate to strains.

A novel contribution of these three-way interactions is the acknowledgement that both the type of values endorsed, and the congruence of personal and perceived organizational values matter as moderators in the relationship between role stressors and outcomes. Results from this study suggest that a value's healthiness may not be absolute,

but flexible based on characteristics of the environment, as proposed by previous research (Sagiv & Schwartz, 2000). That is, endorsement of a particular value may be healthy in one context and yield positive outcomes, but the same value may be unhealthy in another context and yield undesirable outcomes. Further, it appears that not only might value congruence play a role in the moderating stressor-strain relationships, but that the type of value in context does too.

#### Limitations

The current study is not without limitations, which may influence further improvement in occupational health research studies. First, the measure used to examine role ambiguity, is speculated to instead measure role clarity. Although role ambiguity is thought to be the conceptual opposite of role clarity, research could benefit from examining role ambiguity with items that specifically target the concept, instead of the conceptual opposite.

Second, this study is limited by its small sample size. Although data were collected from many participants, those who did not participate in both survey administrations and/or individuals who could not rate their values appropriately on a hierarchy, reduced the sample dramatically. Sample size limited the analyses, both in power and in complexity (Dawson & Richter, 2006). Although it was the goal of this study to examine both two-way and three-way interactions, the sample is likely too small to rule out issues, such as capitalizing on error. Indeed, slope analyses, which were performed to probe significant interaction effects, resulted in a small number of participants within each group (e.g., Low COPV, High COPV, Low COOV, High COOV). As such, the magnitude, and significance of these relationships may not reflect the actual nature, as significance testing is solely influenced by two things: (a) the magnitude of a correlation, and (b) the number of participants in a study. Thus, the small sample size limited the interpretation of the data. Future research should examine the impact of healthy values congruence with a larger sample size which would be capable of the statistical rigor two-way and three-way interaction analyses require.

Although this study does have a temporal benefit in comparing role stressors at T1 to strain variables at T2, which helps reduce the likelihood of common method variance, burnout was not measured at T1, making it impossible to observe effect in burnout. Thus, burnout results may be dependent on stressors other than those examined in this study. Further, because this study is non-experimental, causal conclusions on the relationship between role stressors and strains cannot be inferred. Future research should examine the relationships longitudinally, collecting information on each variable of interest at every time point for consistency and further clarity into the nature of the relationships between role stressors, values congruence, burnout, and turnover intention.

A final limitation in this study is the usage of many regression analyses. Such high usage allowed for a clearer interpretation of the specific factors, such as individual role stressors, or individual personal values, that may have impacted outcomes. However, this comes at the cost of potentially inflating the variance accounted for by each individual indicator. Furthermore, this study used p < .10 as a cutoff level due to small sample size. This decision combined with the large number of analyses risked more Type I error. Future research should further clarify the role of healthy values in order to (a) clarify which, if any, personal values are healthy, and under which conditions, and (b) create composite-type variables that can be utilized in regression analyses more easily.

Despite these limitations, the current study presents several advantages over prior research in the field. First, this study evaluates the impact of stressors on strains over time utilizing a longitudinal design. Second, I examine 10 healthy vs. unhealthy values per Sagiv and Schwartz (2000)). Finally, this is the first study that has examined the interaction between role stressors and healthy values congruence in relation to burnout and turnover intention. Results from this study suggest that although value health classifications did not generally align with previous research (i.e., Sagiv & Schwartz, 2000), the value type itself, along with the congruence between organizational values and personal values play a role in the relationship between role stressors and outcomes.

#### **Future Research**

Future research should continue to examine the relationships between role stressors, outcome variables and values, but also expand to research other occupations in other organizational contexts. This study meaningfully adds to the understanding of the stress-process; however, it is impossible to discern if these results are related to sample characteristics (e.g., nursing profession) or are actually the result of relationships between role stressors, burnout, and turnover intention. Additionally, future research should examine the impact of healthy values and value congruence relationships using Schwartz and colleagues' (2012) updated conceptualization of value types, which expanded the 10 Schwartz value types to 19 value types. Conceptually disentangling value types may allow researchers to better understand the nature of healthy values. Results revealed that further research on the concept of healthy values is necessary, and it may be useful to use the 19-value type conceptualization of values, in comparison to the broader 10 value types. Future research should continue to test if healthy value types truly exist, and in what contexts they impact the stressor-outcome process. As part of examining if healthy value types exist, future research should also asses well-being at T2 and value types at T2.

Finally, future research might further examine the physical exhaustion component of burnout, as I have attempted in this study, as well as the cognitive component of burnout. Current measures may be inadequate to assess the physical component of burnout. This is problematic at both the research and practitioner level as: (a) relationships between burnout and other factors may go unreported or underreported because the physical component is not adequately measured, and (b) attempts to target individuals at risk for burnout may be unsuccessful as instruments may not capture the experience of individuals who feel extreme physical exhaustion.

### **Implications and Conclusion**

The current study demonstrates the importance of examining an individual's personal values, along with their congruence with organizational values in investigating the impact of stressors on outcomes. The results of this study provide some support for

the combined effects of both personal healthy values and value congruence. Although healthy values and value congruence have been examined separately (e.g., Sagiv & Schwartz, 2000), fewer studies have examined the joint impact of specific values and value congruence/value incongruence (e.g., Burroughs & Rindfleisch, 2002), and little is currently known about the relationship between various value types and congruence of personal and organizational healthy values within a specific organizational context. This study provides some evidence to support the idea that both the individual value types a person endorses and the congruence of those value types with what is perceived as the organization's endorsement of the same values are important in influencing the relationships between role stressors and outcome variables.

The findings of differential relationships between role stressors, personal values, and outcomes express, at a minute level, the vast potential for moderators of the relationship between stressors and outcomes. Results of this study indicate that although some specific values may significantly interact with stressors to account for variance in outcomes, the specific value type endorsed does matter. That is, although one value type does not impact all relationships between role stressors, burnout, and turnover intention, some value types may be better to endorse in some situations, in comparison to others. Similarly, although value congruence generally reduced the magnitude of the relationship between stressors and poor outcomes, this was not always the case, nor was it always significant. It is suggested that some value congruence relationships were significant over others because of the context. That is, both the value type endorsed and value congruence within a specific context matter in better understanding the stress process. Thus, this study suggests that researchers and practitioners should potentially consider the healthiness of personal values and organizational values, as well as value congruence in context when investigating occupational health variables.

Further, due to the role overload findings, it is suggested that researchers and practitioners should include role overload when examining role stress. It is possible that the amount of variance role overload had in predicting burnout and turnover intention over and above role ambiguity and role conflict may be meaningful, and applicable to

interventions that target burnout and turnover intention. Practically, the relationship between role overload and burnout suggests that organization interventions that aim to reduce employee burnout and turnover intention may benefit from programs and training that target reducing role overload. That said, role stressors had differential relationships based on the outcome examined. Therefore, reducing role overload may not act as a universal strategy to reducing all employee strains. Zapf et al. (1996) argued that there are numerous personal and environmental factors (some perhaps not yet identified) that may influence strains. Thus, it is suggested that although role overload accounted for the largest amount of variance in both burnout and turnover intention in this study, management should not simply assume that role overload is the problem within the organization. Instead, organizational interventions should be individually tailored to meet the needs of the employees, as an intervention to target role overload when role overload is low may be less effective than an intervention that targets a stressor that employees rated highly. Management in organizations should consider the cost and potential of employee and organizational benefit when developing interventions that target occupational stress.

Additionally, results indicating that role stressors differentially predicted outcomes have implications for the measurement of role stress. Role ambiguity, role conflict, and role overload are frequently examined separately, as different types of role stressors (e.g., Glazer & Beehr, 2005). However, role stressors have also been conceptualized as an overall composite, combining each of the three (or sometimes two when role overload is not examined) types of role stressors. Findings that role stressors examined separately predict outcomes to a different degree suggests that composite inventories may mask individual variance among predictors. Organizational resources could be wasted in broadly targeting the reduction of role stressors in general, instead of focusing interventions on the specific role stressors that are having the most influential effects on individual and organizational outcomes.

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THE MODERATING EFFECTS OF HEALTHY VALUE CONGRUENCE ON THE ROLE STRESSOR- STRAIN

**RELATIONSHIP** 

Appendix B
Values used to Create Value Types (Schwartz, 1992; Schwartz & Sagiv, 1995)

Value Type	Items on Survey
Achievement	Ambitious, Influential, Capable, Successful.
Benevolence	Loyal, Honest, Helpful, Responsible, Forgiving.
Conformity	Politeness, Self-Discipline, Honoring of Parents and Elders, Obedient.
Hedonism	Pleasure, Enjoying Life, Self-Indulgent.
Power	Social Power, Wealth, Authority, Preserving My Public Image.
Security	Social Order, National Security, Reciprocation of Favors, Family Security, Clean.
Self-Direction	Freedom, Creativity, Independent, Choosing Own Goals, Curious.
Stimulation	An Exciting Life, A Varied Life, Daring.
Tradition	Respect for Tradition, Moderate, Humble, Accepting My Portion in Life, Devout.
Universalism	Equality, A World at Peace, Unity with Nature, Wisdom, A World of Beauty, Social Justice, Broadminded, Protecting the Environment.

# Appendix C Survey Items

#### 1. Role Stressors

## Role Ambiguity

- 1. I have clear, planned goals and objectives for my job.
- 2. I know exactly what is expected of me.
- 3. Explanation is clear of what has to be done.

## Role Conflict

- 1. I work with two or more groups who operate quite differently.
- 2. I receive incompatible requests from two or more people.
- 3. I do thinks that are apt to be accepted by one person and not accepted by another.

#### Role Overload

- 1. I receive an assignment without the manpower to complete it.
- 2. It seems like I have too much work to for one person to complete.
- 3. On my present job, the amount of work seems to interfere with how well I can do the job.
- 4. I often notice a marked increase in my workload.

## 2. Schwartz's Values Survey Items (Schwartz, 1992)

- 1. EQUALITY (equal opportunity for all)
- 2. INNER HARMONY (at peace with myself)
- 3. SOCIAL POWER (control over others, dominance)
- 4. PLEASURE (gratification of desires)
- 5. FREEDOM (freedom of action and thought)
- 6. A SPIRITUAL LIFE (emphasis on spiritual not material matters)
- 7. SENSE OF BELONGING (feeling that others care about me)
- 8. SOCIAL ORDER (stability of society)

- 9. AN EXCITING LIFE (stimulating experiences)
- 10. MEANING IN LIFE (a purpose in life)
- 11. POLITENESS (courtesy, good manners)
- 12. WEALTH (material possessions, money)
- 13. NATIONAL SECURITY (protection of my nation from enemies)
- 14. SELF RESPECT (belief in one's own worth)
- 15. RECIPROCATION OF FAVORS (avoidance of indebtedness)
- 16. CREATIVITY (uniqueness, imagination)

- 17. A WORLD AT PEACE (free of war and conflict)
- 18. RESPECT FOR TRADITION (preservation of time-honored customs)
- 19. MATURE LOVE (deep emotional & spiritual intimacy)
- 20. SELF-DISCIPLINE (self-restraint, resistance to temptation)
- 21. PRIVACY (the right to have a private sphere)
- 22. FAMILY SECURITY (safety for loved ones)
- 23. SOCIAL RECOGNITION (respect, approval by others)
- 24. UNITY WITH NATURE (fitting into nature)
- 25. A VARIED LIFE (filled with challenge, novelty and change)
- 26. WISDOM (a mature understanding of life)
- 27. AUTHORITY (the right to lead or command)
- 28. TRUE FRIENDSHIP (close, supportive friends)
- 29. A WORLD OF BEAUTY (beauty of nature and the arts)
- 30. SOCIAL JUSTICE (correcting injustice, care for the weak)
- 31. INDEPENDENT (self-reliant, self-sufficient)
- 32. MODERATE (avoiding extremes of feeling & action)
- 33. LOYAL (faithful to my friends, group)

- 34. AMBITIOUS (hard-working, aspiring)
- 35. BROADMINDED (tolerant of different ideas and beliefs)
- 36. HUMBLE (modest, self-effacing)
- 37. DARING (seeking adventure, risk)
- 38. PROTECTING THE ENVIRONMENT (preserving nature)
- 39. INFLUENTIAL (having an impact on people and events)
- 40. HONORING OF PARENTS AND ELDERS (showing respect)
- 41. CHOOSING OWN GOALS (selecting own purposes)
- 42. HEALTHY (not being sick physically or mentally)
- 43. CAPABLE (competent, effective, efficient)
- 44. ACCEPTING MY PORTION IN LIFE (submitting to life's circumstances)
- 45. HONEST (genuine, sincere)
- 46. PRESERVING MY PUBLIC IMAGE (protecting "face")
- 47. OBEDIENT (dutiful, meeting obligations)
- 48. INTELLIGENT (logical, thinking)
- 49. HELPFUL (working for the welfare of others)
- 50. ENJOYING LIFE (enjoying food, sex, leisure, etc.)

- 51. DEVOUT (holding to religious faith & belief)
- 52. RESPONSIBLE (dependable, reliable)
- 53. CURIOUS (interested in everything, exploring)

- 54. FORGIVING (willing to pardon others)
- 55. SUCCESSFUL (achieving goals)
- 56. CLEAN (neat, tidy)
- 57. SELF-INDULGENT (doing pleasant things)

# 3. Burnout Items (Pines & Aronson, 1988)

- 1. Tired
- 2. Disappointed with people
- 3. Hopeless
- 4. Trapped
- 5. Helpless

- 6. Depressed
- 7. Physically weak/Sickly
- 8. Worthless/Like a failure
- 9. Difficulties sleeping
- 10. "I've had it"

## **4. Turnover Intention Items** (Glazer & Beehr, 2005)

- 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.

## **5. General Well-Being Items** (Goldberg & Hillier, 1979)

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

## **6. Job-Related Anxiety Items** (Parker & DeCotiis, 1983)

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