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The mentoring-burnout relationship and predictors of nurse mentoring behavior

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THE MENTORING-BURNOUT RELATIONSHIP AND PREDICTORS OF NURSE MENTORIGN BEHAVIOR

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Abstract

Employee burnout can be costly for organizations as well as employees as it contributes to turnover intentions, lost productivity and negative health outcomes (Aiken & Paice, 2003; Maslach & Leiter, 2008; Shaufeli & Bakker, 2004). The nursing profession appears to be particularly influenced by this stress-related phenomenon and is the targeted population in the current study (Shaufeli & Enzman, 1998). Using the Job Demands-Resources model, mentoring was examined as a factor that may impact burnout among experienced nurses. While positive mentoring experiences could serve as a resource that buffers against burnout, negative mentoring experiences may be a job demand that contribute to nurse burnout. While results of path analysis did not support these hypotheses, several moderators of the mentoring burnout relationship were identified. Predictors of actual nurse mentoring behavior, rather than stated willingness to serve as a mentor, was also examined. High workload and fixed shifts were associated with a greater proclivity to mentor.

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The Mentor Burnout Relationship and Predictors of Nurse Mentoring Behavior

Nursing appears to be a high-risk occupation for the development of burnout. In a study of burnout across professions Shaufeli and Enzman (1998) found that nurses report some of the highest burnout scores of any profession, scoring especially low in the personal accomplishment subdimension of burnout. Their rate of burnout is quite high, with Dollard, LaMontage, Caulfield, and Blewett (2007) estimating that upwards of 40% of nurses experience high levels of burnout. This may be due to the unique nature of the nursing profession which often requires long hours and shift work (Demir, Ulusou, & Ulson, 2003), as well as stressful contact with patients and high time pressure (Demerouti, Bakker, Nachreiner, & Schaufeli, 2000).

The outcomes of burnout encompass both personal well-being and the quality of interactions with others. Burnout in nurses is linked to negative health outcomes (Maslach & Leiter, 2008) as well as negative patient outcomes (Leiter, Harvie, & Frizell, 1998). Thus, the impact of burnout reaches even beyond the stress level of the individual and impacts others as well. There is a significant link between burnout and turnover intentions for nurses (Aiken & Paice, 2003). Given the need to retain nurses in the face of a potential nursing shortage in the future, identifying measures for reducing burnout in nurses provides additional impetus for understanding the nature of burnout in the nursing profession and how to ameliorate it.

The Job Demands-Resources model and the Conservation of Resources theory provide useful foundations for understanding how employees cope with stress at work. These theories suggest that the resources available to employees allow them to effectively

buffer ongoing challenges at work, and that the balance between demands and resources in the work setting may be used to effectively conceptualize and predict the level of stress experienced by employees. In the current study, we will use these theories to understand burnout among experienced nurses, and how burnout may be lessened by mentoring interventions.

The classic definition of burnout suggests that it is a form of psychological stress that has negative implications for personal well-being and for professional well-being (Maslach, 1982). Burnout, as conceptualized by Maslach (1982) is comprised of decreased personal accomplishment, depersonalization, and emotional exhaustion. While burnout is often conceptualized as a generalized syndrome, this study will focus on the three separate burnout dimensions and their relationship to mentoring. High levels of burnout on each of these three dimensions is prevalent in demanding professions and given the significance of the outcomes of continued burnout for individuals and firms, it is of great interest in organizational settings.

While different techniques have been examined as a means to decrease burnout, enhancing the quality of interactions with others is one potential technique for decreasing stress, particularly in more senior nurses. Engaging in mentoring of less senior nurses appears to be one potential means for reducing nurse burnout. Positive mentoring relationships are known to have many benefits for mentors (Eby & Lockwood, 2005; Parise & Forret, 2008) and may serve as a job resource that helps to buffer against some of the negative effects of job demands on nurse burnout. However, little is known about the relationship between mentoring and burnout especially in this particularly high-stress

profession. Not all mentoring experiences are positive, and there is the potential that negative mentoring experiences could actually increase burnout for nurses. Thus, the nature of the mentoring relationship, and whether it is positive or negative, may be one central factor that influences burnout. This factor will be measured and explored in the current study.

A better understanding is also needed of dispositional and situational factors that may make the mentoring-burnout relationship more or less positive. In terms of dispositional factors, individual difference variables such as generativity may moderate the relationship between mentoring and burnout (Schaffer & Taylor, 2010). In terms of situational factors, formal or informal organizational policies relevant to mentoring may serve as an additional moderator of the relationship between mentoring and burnout. Perceived consequences of protégé mistakes and perceived value of mentoring could impact the mentoring-burnout relationship. In addition, the extent to which serving as a mentor produces additional job demands for overworked nurses may negate some of the positive outcomes associated with the relationship.

In the current study, generativity, perceived consequences and value of mentoring, and workload are hypothesized to moderate the relationship between both positive and negative mentoring experiences and burnout. The nature of the mentoring-burnout relationship needs to be more clearly understood to better guide hospitals in promoting and maintaining positive mentor-protégé relationships.

Finally, a better understanding is needed of the factors that predict actual mentoring behavior in nurses. While there is a stream of research regarding factors that

predict willingness to mentor or mentoring intentions, very little research examines predictors of actual mentoring behavior (Allen, 2003). No studies have been identified that examine predictors of mentoring behavior specifically in the nursing profession. A better understanding of predictors of actual mentoring behavior in nurses will help to better guide hospitals that hope to encourage informal nurse mentoring as a relationship that can benefit both mentors and protégés as well as the hospital itself. The present study focuses on actually engaging in mentoring as a dependent variable rather than expressed willingness to mentor.

The present study replicates and extends previous research by Schaffer and Taylor (2010). In an earlier study, Schaffer and Taylor (2010) examined the mentoring-burnout relationship. Direct links between positive and negative mentoring and the three burnout dimensions did not reach statistical significance (although all were in the hypothesized direction). This lack of significant findings may have been due to small sample size. Even in the face of small sample size, Schaffer and Taylor (2010) did find significant interactions. Namely, generativity was found to moderate the relationship between both positive and negative mentoring and personal accomplishment as did perceived organizational support for mentoring. As anticipated, individuals who were more generative and who perceived greater support for mentoring did not experience the same reduction in personal accomplishment as did those who were less generative when faced with more negative mentoring experiences. However, contrary to the hypothesis, results indicated that those low in generativity actually experienced the strongest increases in personal accomplishment when they experienced many positive mentoring experiences

while those high in generativity experienced reduced personal accomplishment with more positive mentoring experiences.

The present study will attempt to further examine this surprising finding while also considering perceived consequences and value of mentoring as well as workload as potential moderators of the mentoring burnout relationship. A larger sample size will allow the authors to re-examine the direct effects of positive and negative mentoring and burnout. Finally, this study will further extend previous research by examining predictors of actual mentoring behavior.

Burnout

Burnout is often referred to as a psychological strain that is the result of accumulated work stress (Maslach, 1982). While there are several current models and measures of burnout (i.e., Hablesleben & Demerouti, 2005; Shirom, 1989), Maslach's earlier model (1982) of burnout remains highly popular. This model has become synonymous with its measurement device, the Maslach Burnout Inventory, or MBI, and its various versions, which are the most the commonly used measurement devices for assessing burnout. Schaufeli and Enzman (1998) reported that the MBI was used in 90% of burnout literature. More recently, in a review of burnout measures Cox, Tisserand, and Taris (2005) continue to refer the MBI as the most popular measure of the construct.

Maslach initially conceptualized burnout as a syndrome that effected human service workers specifically due to the unique nature of their work. This syndrome is characterized by emotional exhaustion, depersonalization and decreased personal accomplishment. Emotional exhaustion is viewed as the central component to burnout (Maslach, 1982; Maslach, Schaufeli, & Leiter, 2001), and is characterized as the draining of emotional resources in the face of excessive work demands. While other researchers disagree on the exact number of burnout dimensions, there is generally consensus that emotional exhaustion is the key burnout component (Cox et al., 2005). Some researchers choose to focus exclusively on this burnout dimension (cf., Eby, Butts, Durley, & Ragins, 2010) as it is viewed as central to the burnout construct. Emotional exhaustion may lead to depersonalization or treating others like objects or generally distancing yourself from work. More recent conceptualizations of burnout which seek to apply the concept to non-

service type jobs refer to this dimension as cynicism (Maslach, Jackson, & Leiter, 1996). The final dimension of burnout is decreased personal accomplishment, also referred to as low professional efficacy. This refers to the sense that you are not meeting your objectives or are generally performing your work poorly.

Maslach initially viewed these dimensions as relatively independent but sequential or progressive in nature (1982). Emotional exhaustion could contribute to depersonalization as a coping mechanism which could cause the individual to feel decreased personal accomplishment. This sequential link has been debated, and more recently, Maslach et al. (2001) have clarified this position in noting that the link between depersonalization and personal accomplishment may not be clear. This is supported by research by Jawahar, Stone, and Kisamore (2007) who found that decreased personal accomplishment can occur even in the absence of depersonalization. Thus, the dimensions of burnout may be relatively independent.

As mentioned above, the Maslach model of burnout is assessed using the MBI (Maslach & Jackson, 1981) which was initially developed to assess burnout exclusively in human service professionals. The Maslach Burnout Inventory General Scale (MBI-GS) (Maslach et al., 1996) was developed to extend the measurement of burnout to other, more general, job types. Thus, newer conceptualizations of the construct view burnout as something that can be experienced by workers of any job type. Demerouti et al., (2001) propose that burnout can occur in any job where resources are low and demands are high.

While the MBI may be the most popular measure of burnout, other measures exist. For example, the Oldenurn Burnout Inventory (OLBI) only assesses the exhaustion

and disengagement dimensions of burnout as its developers view personal accomplishment as more of an individual differences variable (Hablesleben & Demerouti, 2005). This measure of burnout is viewed as related to but independent of the MBI and is unique in that it utilizes both positively and negatively worded items which the MBI does not. Shirom (1989) developed another measure of burnout, the Shirom-Melamed Burnout Inventory (SMBI) that is based on Conservation of Resources Theory (Hobfoll, 1989) and focuses on the depletion of energetic resources. Shirom also uses a three-dimensional model of burnout which includes the dimensions of emotional exhaustion, physical fatigue and cognitive weariness (Shirom, 1989). Across these different measures and conceptualizations of burnout, Qiao and Schaufeli (2010) conclude that exhaustion and withdraw are the two core elements of burnout that exist across the measures.

While there is a good deal of division over competing burnout theories, measurement of the construct and conceptualizations of the relationship between dimensions, the present paper will utilize Maslach's definition of burnout. This paper will address burnout in nurses, a group for whom Maslach's initial conceptualization of burnout was developed, justifying the suitability of this measure in the current setting. Further support for the use of this particular conceptualization of burnout is empirically based. Strong support has been reported for the MBI and its three dimensional nature (Worley, Vassar, Wheeler, & Barnes, 2008) and the measure remains a highly popular tool for assessing burnout.

We do adopt the view that the three dimensions of burnout are not necessarily sequential and may be relatively independent. While Maslach conceptualized burnout as a syndrome compromised of the three burnout dimensions, the present study will consider these three dimensions separately. Thus, combinations of high or low scores on different burnout dimensions are not considered, rather the relationships between different burnout dimensions and predictors will be considered separately.

Conservation of Resources Theory and the Job Demands-Resources Model

Some (cf., Shirom & Melamed, 2006) have criticized Maslach's model for its lack of a theoretical foundation. However, subsequent research has applied two theories to the burnout literature to better explain the phenomenon and have bridged the gap between purely empirical investigations of burnout and more theoretical explanations of stress. Conservation of Resources Theory, or COR (Hobfoll, 1989) states that we seek to attain and retain resources. When these resources are threatened, we may experience stress. As applied to burnout, COR theory would suggest that burnout can occur when resources are lost or depleted or not able to meet demands. Leiter (1993) and others (cf., Hablesleben, 2006; Lee & Ashforth, 1996) have applied this theory to explain the three dimensional model of burnout proposed by Maslach more specifically and hypothesized differential relationships between job demands and job resources and the various burnout dimensions. Thus, their work extended Maslach's model by demonstrating that the burnout dimensions are conceptually distinct and are related to different organizational and interpersonal stressors. Their work helped to define specific relationships between resources, demands, and each of the three dimensions of burnout. Job demands are threats

to our resources that may contribute to emotional exhaustion, an outcome which is most similar to other strain outcomes. Job resources are factors that may help workers to better deal with stress, thus they may be considered to be more similar to coping mechanisms, and for this reason may be more strongly linked to the depersonalization and decreased personal accomplishment dimensions of burnout.

Lee and Ashforth (1996) conducted a meta-analysis that assessed the application of COR theory in relation to past research findings relating to burnout and it correlates, providing further evidence of the differential relationships between resources, demands, and the burnout dimensions. Results indicated that demands such as workload were more strongly related to emotional exhaustion while resources such as social support and were more strongly related to depersonalization and decreased personal accomplishment supporting this application of COR theory to Maslach's three-dimensional model of burnout. Similarly, Jawahar et al. (2007) applied COR theory to their research in burnout and found that perceived organizational support, which they characterized as a job resource, was most strongly related to depersonalization while role conflict, which they characterized as a job demand was most strongly related to emotional exhaustion. Finally, Hablesleben (2006) conducted a meta-analysis utilizing a COR framework to assess the relationship between various forms of social support and the three burnout dimensions. Hablesleben (2006) hypothesized that social support, as a job resource, would be more strongly related to depersonalization and decreased personal accomplishment than emotional exhaustion, however, this was not found to be the case. Contrary to his hypothesis, Hablesleben (2006) found that work related social support was more strongly

related to emotional exhaustion while non-work related social support was more strongly related to the other burnout dimensions. These findings may be due to the stronger link between work related social support and job demands. Having support from those at work could actually lead to a reduction in demands indicating that these findings do not necessarily go against this application of COR theory.

A slightly different and equally valuable perspective on the relationship between demands, resources, and burnout dimensions is supplied by Job Demands-Resources theory. Job demands resources theory (JD-R) (Schaufeli & Bakker, 2004) states that job stress and burnout occur when demands are high and resources are low. Demands can be considered as those aspects of the job that require sustained effort that is either mental or physical in nature. Resources are those aspects of the job that can reduce job demands and their cost, stimulate personal growth and development, or help individuals achieve their goals. Schaufeli and Bakker (2004) not only propose that demands and resources can contribute to burnout, but that job resources can contribute to job engagement, the positive opposite of burnout. According to this model, and consistent with other positive psychology theories, engagement is not seen as merely the absence of burnout, but a distinct experience entirely. Engagement reflects an employees' level of vigor or willingness to exert effort, dedication or pride and enthusiasm in their work, and absorption or sense of being highly engrossed in the job. While engagement has been found to have a moderate negative correlation with burnout, it is distinct enough to be viewed as an independent construct (Schaufeli & Bakker, 2004).

According to the JD-R model, and supported by empirical findings, job demands contribute to the development of burnout which can lead to health problems and turnover intentions while job resources contribute to both burnout and engagement (Schaufeli & Bakker, 2004). Job resources can serve as protective factors that reduce the chance of developing burnout by buffering against excessive work demands. These resources may be most important in buffering against burnout in situations where job demands are high (Bakker & Demerouti, 2006). A substantial amount of empirical research has supported the JD-R model including findings that resources such as job control, social support and positive social climate are predictive of whether employees were categorized as burntout or not burtout (Peterson, Demerouti, Bergstrom, Asberg, & Nygren, 2008). Other researchers have also examined the relationship between job demands, job resources and specific burnout dimensions indicating the demands may be more strongly linked to emotional exhaustion while resources may be more strongly linked to depersonalization (Bakker, Demerouti, & Berbeke, 2004; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). For example, Demerouti et al. (2001) found that time pressure, a job demand, is more strongly related to emotional exhaustion, while feedback, a job resource, is more strongly related to depersonalization. Both COR theory and JD-R theory predict differential relationships between job demands and job resources and the various burnout dimensions. Specifically, both predict that job demands are more closely linked to emotional exhaustion and job resources are more closely linked to depersonalization and personal accomplishment. In the present study, positive mentoring experiences and generativity are viewed as job resources which may help to alleviate burnout while

negative mentoring experiences, perceived workload and perceived consequences of mentoring are viewed as job demands that could exacerbate burnout.

Predictors and Outcomes Associated with Burnout

Burnout research suggests that both factors internal to the individual and external organizational factors are predictive of burnout. For example, personality factors such as Neuroticism (Bakker, van der Zee, Lewig, & Dollard, 2006; Langelaan, Bakker, van Doornen, & Schaufeli, 2006), and Extraversion and Agreeableness (Bakker et al., 2006; Zellars & Perrewe, 2001) have been linked to various burnout dimensions. Higher self-efficacy is also associated with a decreased tendency to experience burnout (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007) as is increased age and work experience (Xie, Wang, & Chen, 2010).

While these personal factors have been associated with burnout, Leiter & Maslach (1987) suggested that environmental factors may be more influential in the development of burnout. A host of environmental/organizational factors have been linked to the development of burnout including lack of equity (Van Dierendonch, Schaufeli, & Bununk, 1998), perception of a lack of fairness (Maslach & Leiter, 2008), perceived organizational support (Peterson et al., 2008), decision latitude (Rafferty, Friend, & Lansbergis, 2001), and job control (Sundin, Hochwalder, Bildt, & Lisspers, 2007) suggesting that individuals are as reactive to these negative aspects of the work environment as they are to more supportive aspects of the environment.

In the same way that internal and external factors may contribute to the development of burnout, burnout has consequences for both the individual and the

organization. Similar to other stress phenomena, burnout has been linked with negative health outcomes such as headache, muscle tension and sleep disturbances (Maslach, & Leiter, 2008; Maslach et al., 2001) and general negative physiological symptoms (Halesleben & Buckley, 2004). Other research has linked burnout to increased depression and substance abuse (Schaufeli & Enzman, 1998).

Overall, burnout appears to have a negative impact on the health and well-being of the individual and this impact may be felt by the organization. Burnout is associated with increased sickness absences as well as an increased prevalence of workers continuing to work while sick (Peterson et al., 2008). Furthermore, burnout is associated with lower productivity, decreased job satisfaction, and decreased commitment (Maslach et al., 2001). These factors may also explain the relationship between burnout and thoughts of finding a new job (Jackson, Schwab, & Schuler, 1986) as well as turnover intentions (Lee & Ashforth, 1996; Schaufeli & Bakker, 2004). Thus, developing strategies aimed at reducing burnout in employees should prove beneficial not only to individual employees but to the organization as a whole.

Given the prevalence of this stress-related phenomenon among nurses, understanding the consequences and predictors of burnout in this population seems particularly important. While the general findings in research provide guidance for understanding the nature of burnout and broad categories of the predictors and outcomes of burnout, it seems quite likely that there are occupation-specific variables that would inform our understanding of this phenomenon as well. This detailed level of analysis is important in guiding any applied interventions.

Burnout in Nursing

As noted in the introduction, burnout has been studied in a wide variety of occupational setting including engineers (Xanthopoulou et al., 2007), those working in logistics (Meier, Semmer, Elfering, & Jacobshagen, 2008), and even in blue collar food processing jobs (Langellan et al., 2006), however, the phenomenon has been studied in healthcare workers more than any other occupational group (Schaufeli & Enzmann, 1998). This interest is likely due to the high prevalence of burnout among nurses and healthcare workers as well as some of the unique predictors and consequences of burnout in these professions.

Few professions have been identified as more prone to burnout than nursing. Xie et al., (2010) refer to nursing as an at risk profession for the development of stress and burnout. Ergin (1992, as cited by Gunusen & Ustun, 2010) consider nurses to be the riskiest occupational group in terms of developing burnout. While higher burnout has been found in human service workers in general (Dollard et al., 2007), burnout in nurses may be particularly prevalent. In a study of American nurses, Aiken et al. (2001) found that 43% of nurses surveyed reported burnout scores that were considered to be in the high range. Those working in hospital settings may be especially at risk for burnout. Aiken, Clarke, Sloan, Socholaski, and Sibler (2002) found that 40% of hospital nurses reported burnout scores above the norm for other healthcare workers.

There are several possible explanations for the high prevalence of burnout among nurses. In a review of the literature, McVicar (2003) revealed several key stressors for nurses, many of which are unique to the nursing profession. Nurses often face high

workloads and a good degree of professional conflict with doctors and other nurses and even hospital management. The nursing profession has a high level of unique emotional demands associated with caring for patients and working with the families of patients. Consequences of mistakes are high and may directly impact the well-being and caretaking of their clients. Nurses are also often required to work long hours and engage in shift work. Additional evidence supplied by Demir et al., (2003) also identifies some of the unique stressors for nurses. These researchers point to the stressful nature of shift work and long hours along with the understaffing that many hospitals face. Nurses also work under a high level of time pressure and responsibility and may become disillusioned between what they expected the job to be when they began and the actual nature of the work.

Using a JD-R framework, Demerouti et al., (2000) classified demanding contact with patients, poor environmental conditions, problems with shift-work, time pressure and work load as unique demands that may face those in the nursing profession. High patient to nurse ratio may also contribute to job burnout. Aiken et al. (2002) found each additional patients added to a nurse's workload increased their burnout scores by 23% on average. In summary, it appears that certain aspects of the nursing environment may differ from that of other professions and uniquely contribute to the development of nurse burnout.

Other research indicates unique consequences of burnout for nurses and those in other health related professions. While burnout may lead to individual and organizational outcomes in other professions, burnout in nurses and other healthcare professionals may

contribute to negative patient outcomes. Similarly to other professions, nurse burnout is associated with increased turnover intentions. Aiken et al. (2002) found that 43% of nurses experiencing burnout intended to quit. While the link between burnout and turnover intentions is mirrored in other professions, for nurses and other healthcare professionals, burnout is uniquely linked to patient safety outcomes. West et al. (2006) studied resident doctors and found that higher burnout was associated with a higher rate of self-reported medical errors. Furthermore, making medical errors was associated with increased burnout at a later time point. Resident doctors experiencing depersonalization have been found to be two to three times more likely to report giving suboptimal patient care (Shanafelt, Bradley, Wipf, & Back, 2002) and physician burnout is generally linked to decreased quality of care (Shirom, Nirel, & Vinokur, 2006). In the nursing profession in particular, burnout has been linked to decreased patient satisfaction (Leiter et al., 1998) as well as the perception that the unit the nurses worked on was not a safe environment for patients (Hablesleben, Wakefield, Wakefield & Cooper, 2008).

Given the link between negative patient outcomes and safety in healthcare workers in general and nurses more specifically, strategies to ameliorate nurse burnout appear to have the potential to be highly beneficial for nurses themselves, the hospitals they work for, as well as the patients that they care for. Furthermore, the importance of burnout for such a range of significant outcomes emphasizes the importance of better understanding how to decrease it is a significant goal for health care professionals. Examining the impact of mentoring on burnout in the nursing profession specifically

reveals that it may have a more complex relationship to stress in this profession than in others.

Mentoring

Engaging in mentoring relationships appears to be prevalent in the nursing profession. Many experienced nurses may feel obligated to serve in a mentoring capacity to less experienced nurses to further their education and improve their performance. While mentoring may have many benefits for both nurse mentors and their protégés, the link between mentoring and burnout has not been carefully examined. There is some evidence to suggest that engaging in mentoring could, under some circumstances reduce burnout for nurse mentors. However, given the high job demands that nurses face and the potential for mentoring to be viewed as just another job demand, there is also the potential that under some circumstances, mentoring could contribute to increased burnout. Likely these links are dependent on the quality of the mentoring relationship in question. In the next segment, we examine the nature of mentoring more closely, differentiating informal from formal mentoring, and exploring the nature of the interactions between mentor and protégé.

Definitions and Distinctions in Mentoring Research

Kram (1985) defined mentoring as a work relationship involving an older, more experienced worker who helps and guides a younger, less experienced worker. This type of work relationship is unique in that the main focus of the relationship is on growth and career development (Ragins & Kram, 2007). Johnson (2002) uses terms such as guide, teacher, sponsor, and role model to describe a mentor. While there are many ways to describe mentoring relationships, they are generally described in terms of type (formal or informal) and content (career or psychosocial).

Mentoring may be defined as either formal or informal mentoring. Informal mentoring relationships are those that develop spontaneously between individuals based on mutual identification and liking (Ragins & Cotton, 1999). Because of the many known positive effects of informal mentoring relationships, many organizations have developed formal mentoring programs in an attempt to mimic the success of this informal mentoring (Baugh & Fagenson-Eland, 2007). Formal mentoring relationships are those that are developed through the influence of the organization and follow a set of rules or guidelines set out by the organization. Within formal mentoring programs, organizations generally match mentors and protégés while taking into consideration such factors as similarity in cognitive style and gender (Armstrong, Allinson, & Hayes, 2002). The organization may set guidelines regarding how often and for what duration interactions between mentors and protégés are to occur and the mentoring relationship may be given a specific focus such as short term career goals or imparting specific types of knowledge to the protégé (Ragins, Cotton, & Miller, 2000). Interactions between informal mentors can occur as convenient for both parties and mentors may have a greater ability to focus on long-term career goals (Karm, 1985). Formal relationships generally last for a set period of time predetermined by the organization while informal relationships may last for much longer (Ragins & Cotton, 1999).

This distinction between formal and informal mentoring appears to be meaningful as it can influence the types of activities engaged in during the mentoring relationship as well as how beneficial the relationship is overall (Wanberg, Kammeyer-Mueller, & Marchese, 2006). Ragins and Cotton (1999) suggest that informal relationships may be

closer relationships because they are based on mutual identification and that these relationships may have more trust because there is the perception that the mentor interacts with the protégé because he or she wants to. There may even be a greater amount of interpersonal comfort between mentors and protégés in these relationships (Allen, Day, & Lentz, 2005). Informal mentors may be better able to intervene on their protégés behalf because there may not be the same charges of favoritism that could accompany similar behavior in formal relationships (Ragins et al., 2000) and those who are informally mentored receive greater benefits in the form of compensation over time than those who are formally mentored (Ragins & Cotton, 1999). Level of commitment to the mentoring relationship may also vary between formal and informal mentoring relationships. This commitment may impact the relationship quality (Allen & Eby, 2008).

As one might expect given these findings, formal mentoring is seen as a less desirable substitute for informal mentoring (Baugh & Fagenson-Eland, 2007). Chao, Walz, and Gardner (1992) found that only informally mentored workers reported higher job satisfaction than nonmentored workers. Formally mentored workers reported similar levels of job satisfaction as those who received no mentoring at all. While formal mentoring may generally not be viewed as favorably as informal mentoring, formal mentoring programs are also beneficial in that they may be a means to target certain groups such as women and minorities who tend to miss out on informal mentoring relationships and they also tend to be more visible than informal relationships (Baugh & Fagenson-Eland, 2007). This could mean that mentors in formal mentoring relationships receive more recognition than those in informal relationships. Overall, however,

empirical research suggest that informal relationships are more beneficial and given the stronger benefits of informal mentoring, this study will focus on potential benefits of informal mentoring for nurses. It should be noted that assessing the effects of informal mentoring for nurses poses challenges for the power of the effects of this variable, given that many young nurses have preceptors, or formal trainers or mentors, in most situations. Thus any benefits of informal mentoring would be incremental over the baseline effect of preceptors.

The content of mentoring provided is also often considered in mentoring research. Generally two forms of mentoring are described. Career mentoring is aimed at helping the employee "learn the ropes" (Ragins & Cotton, 1999) and to gain the information needed to succeed as an employee in the organization. This may include coaching, giving challenging assignments, sponsorship, and exposure (Kram, 1985). Psychosocial mentoring focuses on helping the protégé grow as a person as well as an employee and may be aimed at increasing their self-efficacy (Ragins & Cotton, 1999). This form of mentoring may include factors such as counseling, friendship and role modeling (Kram, 1985). Different mentors may choose to focus on providing more of one form of mentoring or the other and this may be impacted by the gender of the individuals involved in the mentoring relationship. Research indicates that men may receive more career mentoring and less psychosocial mentoring while women report receiving more psychosocial mentoring and less career mentoring (O'Brien, Biga, Kessler, & Allen, 2010). Similarly, mentors who are more other-oriented may provide more psychosocial mentoring while those who are more interested in self-enhancement may provide greater

career mentoring (Allen, 2003). While a distinction between career and psychosocial mentoring will not be made in the present study, it is important to understand that different mentoring relationships may involve varying amounts of each form of mentoring. It is likely that these forms differ not only by occupation, but by the dyad of each mentor-protégé pair as well.

Benefits of Mentoring

Organizations that seek to encourage informal mentoring or develop formal mentoring programs work on the assumption that mentoring relationships have a beneficial impact on those involved. Generally, the benefits of mentoring are considered from the protégés perspective. In fact, a review of mentoring research revealed that the protégé is the focus of mentoring research approximately 80% of the time while the mentor is the focus of mentoring research only about 30% of the time (Allen, Eby, O'Brien, & Lentz, 2008). A meta-analysis by Eby, Allen, Evans, Ng, and Dubois (2008) reports on many of the potential benefits of mentoring relationships for protégés. The authors found that for protégés, mentoring can result in increased performance, improved attitudinal outcomes, increased motivation and decreased stress and strain, though effect sizes tended to be small. Other research indicates that having a mentor is related to improved employment outcomes such as increased salary and promotions (Kammeyer-Mueller & Judge, 2008). For nurses specifically, mentoring is thought to help new nurses more quickly adjust to the profession and should enhance the quality of care they provide because the mentoring process incorporates peer review (Harrington, 2011). Green and Puetzer (2002) refer to nurse mentors as role models and socializers who help protégés

feel like part of the peer group, learn about organizational culture and further their education. They found that a nurse mentoring program had the additional benefit of improving retention among new nurses.

Though less well researched, it appears that mentoring relationships can prove to be beneficial for mentors as well as protégés. Parise and Forret (2009) report that mentors perceive such benefits as improved job performance, recognition, and having a loyal base of support as beneficial outcomes associated with engaging in mentoring. In a qualitative study, Eby and Lockwood (2005) found that the most common benefit of mentoring that mentors perceive is personal learning. While mentoring is generally seen as a tool to help protégés learn information, mentors seek information from protégés as well (Mullen & Noe, 1999) and have the potential to learn from these relationships. In fact, the amount of mentoring that mentors provide is associated with mentor learning, a factor that contributes to increased job performance for the mentor (Liu, Liu, Kwan, & Mao, 2009). Thus, it is not only the job performance of protégés that has the potential to improve as a result of mentoring relationships, but the job performance of mentors may be beneficially impacted as well.

Other benefits mentioned by mentors in the Eby and Lockwood review (2005) included personal gratification, improved managerial skills, and the ability to develop personal relationships. Other research has also linked mentoring to the development of impactful personal relationships. Mentoring has been linked to increased social interactions which may contribute to improved social status for mentors in the organization (Liu et al., 2009). Mentoring may not only contribute to increased learning,

performance, and improved social relationships, but can also serve as a source of rejuvenation and renewal for mentors (Hunt & Michael, 1983). In terms of economic and professional benefits of mentoring, mentoring contributes to increased salary, increased chance of promotion, and improved subjective career success for mentors (Allen, Lentz & Day, 2006). Eby, Durley, Evans, and Ragins (2006) found that mentors reported improved job performance and having a rewarding experience as short term benefits of mentoring while improved job satisfaction and improved organizational commitment were more long term positive outcomes.

A question of interest in the current study is whether mentoring provides benefits for mentors within the nursing occupation. While nurse mentoring is generally proposed as a means of helping new nurses acclimate to the profession and improve retention of nurse protégés, it also appears that mentoring may improve retention in some situations for older more experienced nurses that tend to serve as mentors. Older nurse mentors have described mentoring as positive, stimulating, and rewarding (McDonald, Mohan, Jackson, Vickers, & Wilkes, 2010), factors that have the potential to lead to increased job satisfaction and possibly increased retention. While these positive effects are well-documented in the literature, we expand our study to include potential negative effects as well. Thus, we examine both negative and positive mentoring experiences and their relationship to dimensions of burnout.

The Relationship Between Mentoring and Burnout

The relationship between mentoring and burnout is not well documented. Thomas & Lankau (2009) looked at the potential for mentoring to reduce burnout in protégés and found that nonsupervisory mentoring was related to improved socialization which in turn predicted reduced role stress for those who received mentoring. This reduced role stress was associated with reductions in emotional exhaustion scores for protégés.

The relationship is even less well researched from the mentor's perspective. Only one published study has been identified that addresses the relationship between mentoring and burnout for mentors, although this was not the focus of the research. In a validation study of a new scale assessing negative mentoring from the mentor's perspective, Eby, Durley, Evans and Ragins (2008) collected emotional exhaustion scores and provided a correlation table reporting the correlation between emotional exhaustion and several mentoring variables. Results indicated a negative correlation between emotional exhaustion and mentors perceptions of the overall quality of the mentoring relationship as well as their perception that the relationship involved fair exchange. No published research has been identified that has assessed the relationship between mentoring and other burnout dimensions. In an unpublished thesis, Schaffer and Taylor (2010) found a significant correlation between positive mentoring experiences and emotional exhaustion, however, the relationship between positive mentoring and other burnout dimensions failed to reach statistical significance. As noted earlier, this may have been due in part to the small sample size of the study and the resulting lack of power.

Outside of these studies, the relationship between mentoring and burnout for mentors has not been well documented and warrants further investigation.

While the relationship between mentoring and mentor burnout has not been well established, there is a good deal of research that suggests that positive mentoring relationships may in fact contribute to reduced mentor burnout. Mentor benefits such as increased learning appear to be conceptually related to the personal accomplishment dimension of burnout. Those who are learning on the job could potentially feel an increased sense of personal accomplishment. Nurse educators have described the reward of sharing their insight with others as the highest individual benefit of mentoring (Sawatsky & Enns, 2009). Other mentoring benefits such as feeling rejuvenated and renewed appear to be in stark contrast to the burnout experience. Older nurse mentors in particular report that they gain enjoyment from feeling useful as mentors which could contribute to reduced burnout scores. Mentoring relationships involve increased social interaction with a coworker. If a relationship is positive, it may result in pleasant coworker contact a variable associated with reduced depersonalization and increased personal accomplishment (Leiter & Maslach, 1987). Another potential benefit of mentoring is the development of a loyal base of support within the organization (Parise & Forret, 2008). Social capital in general is associated with decreased emotional exhaustion (Kowalski et al., 2010) and social support specifically has been linked to improved burnout scores across burnout dimensions (Lee & Ashforth, 1996; Sundin et al., 2007).

Overall, positive mentoring experiences may be considered a job resource in the JD-R model. Bakker & Demerouti (2006) describe job resources as factors that stimulate

growth, learning and development. Positive mentoring experiences appear to fit this definition of job resources, and as such should be negatively related to burnout.

Hypothesis 1: Positive mentoring experiences will be negatively related to burnout across the three burnout dimensions.

Hypothesis 1a: As a job resource, positive mentoring experiences will be more strongly related to depersonalization and personal accomplishment than to emotional exhaustion.

Perceived Workload and the Mentoring Burnout Relationship

While there is ample evidence to suggest that positive mentoring experiences could alleviate burnout for mentors, there is also the potential that engaging in mentoring could lead to increased workload for mentors. For nurse mentors who already face high work demands, this increase in workload associated with mentoring could be detrimental and potentially contribute to increased burnout.

While mentoring is often encouraged by organizations, oftentimes workload of mentors is not reduced to take into account the additional responsibilities associated with serving as a mentor (Johnson, 2002). In nursing, preceptorships are relationships that share many aspects in common with mentoring. These are formally established relationships between experienced nurses and new or student nurses aimed at aiding in the transition between nursing student and practicing nurse. In a study of nurse preceptors, Kemper (2007) found that preceptors reported added workload and increased responsibilities and time requirements as stressors associated with serving as a preceptor. These results are echoed by Yonge, Krah, Trogan, Reid, and Haase (2002) who found

that 76% of preceptors found serving in this capacity to be at least mildly stressful. This increased stress was mainly due to added responsibilities associated with the role. Similarly, Omansky (2010) reports that preceptorship can lead to general overload for nurse preceptors and suggests that hospitals decrease patient assignments to make up for these added responsibilities. Others suggest incorporating scheduling flexibility to make these preceptor relationships less demanding (Greene & Puetzer, 2002). However, both of the previous suggestions are often not carried out in practice. Given the similarity between preceptorships and nurse mentoring, it seems likely that serving as a nurse mentor also has the potential to lead to a perception of increased workload and responsibility. Given the high consequence of mistakes made in the nursing profession, supervision of a young and less experienced individual in this occupation may carry increased workload. Workload is a factor that has been strongly linked to burnout in nursing as well as other professions.

In general, increased nurse workload is associated with increased stress (Lewis, Yarker, Donaldson-Fielder, Flaxman, & Munir, 2010) and high workload plays a role in job turnover intentions for nurses (Chang, Hancock, Johnson, Daly, & Jackson, 2005). In relation to burnout specifically, meta-analytic results indicates a relationship between workload and burnout across employment samples (Lee & Ashforth, 1996). The relationship between workload and emotional exhaustion was found to be stronger than the relationship between workload and either depersonalization or personal accomplishment.

Not surprisingly, this pattern of relationships appears to generalize to nurses. Kowalski et al. (2010) also found workload to be a strong predictor of emotional exhaustion in a sample of nurses. In fact, workload was a stronger predictor of emotional exhaustion than other variables such as decision latitude, social capital, and demographic information. Similarly, Peterson et al. (2008) found that nurses who were categorized as burntout tended to report working more overtime which could be a reflection of increased workload.

Using a JD-R framework, Demerouti et al. (2000) mention workload specifically as a job demand that nurses face. As a job demand, workload should be associated with increased burnout.

Hypothesis 2: Workload will be positively associated with burnout across the three burnout dimensions.

Hypothesis 2b: As a job demand, workload will be more strongly related to emotional exhaustion than to depersonalization or personal accomplishment.

While positive mentoring may provide many resources for nurse mentors, the benefits of these increased resources may not be experienced by nurse mentors with very high workload because of the corresponding increase in job demands. Peterson et al (2008) report that high job demands can still contribute to burnout even in the face of job resources. Nurses who do not feel overburdened by their workload may be better able to handle the increased workload that is likely associated with mentoring and may be better able to reap the benefits of the relationship.

Hypothesis 3: Workload will moderate the relationship between positive mentoring and burnout such that positive mentoring will be more beneficial when workload is low.

Negative Mentoring

Much research seems to assume that mentoring relationships will be associated with only positive outcomes for mentors and protégés. A host of more recent research indicates that this is not the case. Not all mentors have the same capacity for mentoring and not all nurses have the skills needed to serve as successful mentors (Hayes, 2005). Mentors may have dysfunctional beliefs about serving as mentors or mentoring relationships in general. For example, they may feel that their protégé cannot disappoint them and that because of the investment the mentor has put into the relationship, the protégé must be very high achieving and follow all suggestions of the mentor (Johnson, 2002). In real world mentoring relationships these unrealistic expectations are unlikely to be met.

Overall, mentoring relationships, as is the case with any interpersonal relationship, can differ in terms of quality. Eby (c.f. Eby 2007) has done a good deal of research examining the importance of the quality of the mentoring relationship. She proposes that to better understand outcomes associated with mentoring, it is important to consider mentor-protégé interaction and relationship quality. If mentor-protégé interaction is not positive, it is possible that many of the positive outcomes generally associated with mentoring may not occur. Of course, mentoring relationships should not be viewed as a good/bad dichotomy. In all likelihood, mentoring relationships contain both positive and negative interactions. But for those mentoring relationships that contain negative consequences, it is likely that in the nursing profession, this type of relationship exacerbates burnout.

Other researchers have described negative mentoring relationships as dysfunctional (Scandura, 1998) or toxic (Feldman, 1999). Most relationships are likely not extremely dysfunctional and may fall somewhere in between on a functional to dysfunctional continuum (Gormley, 2008). While these dysfunctional relationships are least common, they may still exist and can negatively impact those involved (Eby & McManus, 2004).

As support for the proposition that positive and negative mentoring are not endpoints on the same continuum, Eby (2007) points to research by Ragins and Scandura (1999) which found that the anticipated costs of mentoring are only moderately associated with the anticipated benefits of mentoring. It appears that these positive and negative mentoring experiences are conceptually distinct and may be differentially related to outcomes. For instance, quality of mentoring relationships has been associated with important outcomes such as protégé salary (Kammeyer-Mueler & Judge, 2008). Thus, we follow the advice of these researchers and examine positive and negative mentoring as separate constructs.

Negative mentoring relationships are often blamed on the mentor because of their more powerful position in the relationship (Ragins et al., 2000) but mentors also perceive negative mentoring relationships that they believe develop due to problems with protégés (Eby, 2007; Feldman, 1999). Problems in mentoring relationships could range from minor (having superficial interactions) which may be due to problems with mentor-protégé communication, to taxing (uncomfortable interactions and negative growth) which may be due to mismatches in personality and values, to serious (hostile

interactions that could be damaging) (Eby, 2007). Eby et al. (2008b) developed a scale of negative mentoring experiences and described several different forms of negative mentoring experiences from the mentor's perspective. The mentor may have problems with protégé performance problems or a general inability or unwillingness to learn that may reflect poorly on the mentor. Mentors may also experience interpersonal conflict or even more severe problems such as destructive relational patterns which could include exploitive behavior or harassment.

There are practical consequences for negative mentoring at the level of the firm as well. While many organizations encourage mentoring among their employees, they must consider the potential that not all mentoring relationships may be positive. For this reason, they may consider developing mentor training programs or venues to deal with negative relationships (Eby, 2007). While positive mentoring experiences may have the potential to contribute to positive outcomes for mentors including reduced stress and burnout, negative mentoring experiences may be linked to more negative outcomes. For protégés, negative mentoring experiences have been associated with increased stress along with decreased job satisfaction and increased turnover intentions (Eby & Allen, 2002). For mentors, dysfunctional mentoring is not only associated with a decreased willingness to mentor in the future, it is also linked to increased stress and anxiety (Scandura, 1998). In the only published study identified that examined the relationship between negative mentoring experience and mentor burnout, Eby et al. (2008b) examined the relationship between the emotional exhaustion dimension of burnout and negative mentoring. Two forms of negative mentoring, interpersonal problems and destructive

relational patterns, were associated with increased emotional exhaustion. In an unpublished thesis, Schaffer and Taylor (2010) found that a composite measure of negative mentoring experiences was correlated with increased emotional exhaustion for mentors in a population of nurses, suggesting that negative mentoring experiences have important consequences within this specific occupation.

Research on social exchange theory offers a means of examining how negative relationships contribute to burnout. While we generally assume that having increased contact with those at work would lead to increased social support, it is important to keep in mind that these contacts may not always be supportive. In general, negative social interactions with coworkers are a source of stress (Leiter & Maslach, 1987). Specifically, Schaufeli (2006) found that unbalanced helping relationships contribute to emotional exhaustion and incivility from those at work can contribute to exhaustion and cynicism among nurses (Leiter, Price, Spence, & Laschinger, 2010). Lee & Akhtar (2011) suggest that having positive relationships with those at work is critical to reducing burnout and suggest that the social context of the workplace may be an even stronger predictor of burnout than job content. Using the framework of the JD-R, it would appear that having negative interactions with a coworker protégé could be viewed as an additional job demand.

Hypothesis 4: Negative mentoring experiences will be positively associated with burnout across the three burnout dimensions.

Hypothesis 4b: As a job demand, negative mentoring experiences will be more strongly related to emotional exhaustion than depersonalization or personal accomplishment.

When workload is very high, these negative mentoring experiences may be particularly detrimental. In these instances, nurse mentors are not only increasing their workload by serving as mentors, but they are faced with the additional detriment of suffering the ill effects of a negative relationship.

Hypothesis 5: Workload will moderate the relationship between negative mentoring and burnout such that negative mentoring will be more detrimental when workload is high.

Perceived Consequences of Mentoring

While Eby et al. (2008b) define negative mentoring experiences in terms of protégé performance problems, interpersonal conflict and destructive relational patterns, it seems likely that in the nursing profession specifically the perceived consequences of protégé mistakes may impact mentor outcomes. In contrast to many other professions, mistakes by nurse protégés could be particularly costly. A mistake made by a nurse could be a matter of life and death. Some mentors could assume some level of responsibility for mistakes made by those they have mentored which could cause the mentoring relationship to be particularly stressful.

Nurse preceptors report experiencing stress when they feel that their students are not prepared or knowledgeable (Kemper, 2007) and general knowledge and skill level has been reported as sources of conflict in preceptor relationships (Mamchur & Myrick,

2003). Omansky (2010) assessed potential concerns of preceptors and reported a common concern regarding student errors and the potential for liability on the part of the preceptor. Letizia & Jennrich (1998) report that preceptors assume a certain level of responsibility for the care their students provide. While there may be a greater level of responsibility for preceptors for mistakes made by students, given the similarity between preceptorship and nurse mentoring, it seems likely that concern over perceived consequences of protégé mistakes could not only prevent nurses from assuming the role of mentor, but could also serve as another negative, stressful aspect of mentoring for some mentors. Some mentors may feel more responsibility for mistakes made by protégés and may be more inclined to feel that the work their protégé performs could serve as a poor reflection on themselves. We have conceptualized perceived consequences of protégé mistakes as a factor that might cause mentoring to be viewed more negatively and as a more stressful relationship, but could also reduce some of the effects of even positive mentoring relationships.

Hypothesis 6a: Perceived consequences of protégé mistakes will moderate the relationship between positive mentoring and burnout such that positive mentoring will be less beneficial when perceived consequences are high.

Hypothesis 6b: Perceived consequences of protégé mistakes will moderate the relationship between negative mentoring and burnout such that negative mentoring will be more detrimental when perceived consequences are high.

Generativity

Generativity is a term that was coined by Erikson (1950) and refers to the "interest in establishing and guiding the next generation". More recently, McAdams & de St.Aubin (1992) have described generative concern specifically. Generative concern can be conceptualized as an individual difference variable and describes the degree to which individuals identify with this desire to guide the next generation. Generative concern appears to be an individual level variable that has the potential to impact the mentoring-burnout relationship. It seems likely that individuals who are more generative may be less negatively impacted by negative mentoring experiences. Those who are less generative may benefit the most from positive mentoring experiences because they are not as intrinsically rewarded by the "giving back" aspect of mentoring and may need the behavioral outcomes of the relationship to be especially rewarding to be beneficial.

Erikson (1950) described the seventh stage of development in middle adulthood which involves the conflict between generativity and stagnation. In a newer conceptualization of the generativity construct, McAdams and de St. Aubin (1992) describe seven different features of generativity including generative motivation, generative concern, commitment to actually engage in generative behavior, and generative action. While Erikson (cf., Erikson, 1969) often described the construct by discussing highly generative individuals, McAdams and de St. Aubin (1992) developed measures of these different facets of generativity. Specifically they developed the Loyola Generativity Scale (LGS) to assess generative concern, or the amount of importance an individual places on engaging in generative behavior. They point out that this concern

can be motivated by sources that are both internal to the individual and external to the individual. Within the individual, generative concern may develop as the result of a need for symbolic immortality or a general need to be needed. Generative concern is also impacted by societal pressure which demands that you become more generative as you age (McAdams, Hart, & Maruna, 1998). This generative concern is highly related to generative action, or actually engaging in generative behavior (McAdams et al., 1998). Erikson (1977) described this generative behavior in terms of parenting with the idea that providing for and guiding for your children was the exclusive means for expressing generativity. In fact, parents do tend to be more generative than non-parents (Peterson & Klohnen, 1995), however, newer research shows that generativity can be expressed in a variety of forums. Generativity has been linked to political involvement (Hart, McAdams, Hirsch, & Bauer, 2001), volunteering (Kleiber & Nimrod, 2008), and in the workplace through mentoring (Parise & Forret, 2008). Thus, the construct generalizes to settings outside parenting and is generally manifested in a need to "give back" or contribute one's knowledge, time, energy and expertise to others.

Erikson (1950) viewed the conflict between generativity and stagnation as a life stage that takes place in middle adulthood. While the overall goal of generativity is to provide for the next generation, McAdams et al., (1998) argue that being generative is not necessarily something that occurs as a distinct life stage. In fact, generative concern can grow over the course of the lifetime and individuals differ in the degree to which they identify with this desire to provide for the next generation or their level of generative concern. While generativity does appear to be most strongly linked to well-being in

middle adulthood (Ackerman, Zuroff, & Moscowitz, 2000), others have found that generativity may not be exclusive to middle adulthood. For example, McAdams, de St. Aubin, and Logan (1993) found that generativity was higher in both middle adulthood and older adulthood than younger adulthood, but not stronger in middle adulthood than in older adulthood as predicted. Pratt, Norris, Arnold, and Filyer (1999) found no relationship between generativity and age and Frensch, Pratt, and Norris (2007) found that generativity was exhibited even in adolescents. It might be that guiding the next generation is not an exclusive concern of those in middle adulthood, but rather that the ability to behave generatively and express generative concern increases as we age, gain knowledge, and meet our own career goals (Stewart & Vandewader, 1998). Generativity may also become more expected as we age meaning that older adults may feel more obligated to behave generatively than younger adults (Zacher, Rosing, Henning, & Frese, 2011).

Individuals differ in the degree to which the experience generative concern (McAdams et al., 1998), and many researchers have examined factors that predict an individual's level of generative concern. Generativity has been linked to higher Extraversion, Agreeableness, Openness to Experience and lower Neuroticism (de St. Aubin & McAdams, 1995). Cox, Wilt, Olson, and McAdams (2010) examined the relationship between generativity and more detailed personality facets and found that those who are more generative tend to be more altruistic, enthusiastic, confident and productive with a greater level of trust and caring for others. Generativity is something that tends to vary by culture. Specifically individuals in more collectivistic cultures tend

to report higher levels of generative concern (Hofer, Busch, Chasiotis, Kartner, & Campos, 2008) perhaps due to the higher societal expectation of behaving generatively. This may also imply that organizations that are higher in collectivism could anticipate employees who are higher in generative concern or even that emphasizing the importance of helping the younger generation of workers to succeed could perhaps impact levels of generativity of older workers.

While different individuals may be more or less likely to experience generative concern, overall, higher levels of generative concern are associated with positive outcomes. Those who are high in generative concern tend to have more satisfactory social relationships, stronger attachment to their communities, are more engaged in society and report higher levels of well-being (Cox et al., 2010; McAdams et al., 1998). More generative individuals tend to report higher life satisfaction (Huta & Zuroff, 2007) and higher self-esteem (Ackerman et al., 2000) and lower levels of depression (Stewart & Vandewater, 1998). Thus, this interest in guiding and providing for the next generation appears to have a positive impact on those who experience it.

Given the relationship between generativity and many positive outcomes, it appears that the relationship between generativity and workplace behaviors specifically warrants further research. Overall, generativity has been linked to positive work outcomes such as increased work satisfaction (Clark & Arnold, 2008; Peterson & Klohnen, 1995), subjective career success (Clark & Arnold, 2008) and gratification through work (Peterson & Stewart, 1996). Leaders at work who are viewed as more generative by their subordinates tend to have relationships that are rated higher in Leader

Member Exchange (LMX), and these generative leaders are generally seen as more effective and have more satisfied followers (Zacher et al., 2011). Generative workers may be more satisfied in their jobs and could potentially be viewed as more productive. Thus, this construct has widespread benefits for both individuals and for firms.

One specific stream of research examining generativity in the workplace has looked at the importance of generativity for older workers. Many older workers may continue working as a means of fulfilling their generative goals because work allows them to continue to give back (Broughman & Walsh, 2009; Mor-Barak, 1995; Templer, Armstrong-Stassen & Cattaneo, 2010). Older adults who engaged in bridge employment reported that they had generative reasons for doing so. This generative reason for returning to work was associated with the impression that the individual was making a valuable contribution in their job and higher job satisfaction (Denidinger, Adams, & Jacobson, 2005; Templer et al., 2010). This research indicates that avenues that allow workers, especially older workers to behave generatively may have a positive impact. Mentoring at work may be one such avenue for expressing generativity. Mentoring may be a venue that allows workers to behave generatively. Even mentoring relationships that are characterized by negative mentoring experiences may not be experienced as negatively by more generative individuals.

Mentoring and Generativity

Mentors may be motivated to engage in mentoring for a variety of reasons. Both individual reasons and organizational incentives may motivate individuals to mentor although individual variables explain more variance in motivation to mentor than do

organizational variables (Aryee, Chay, & Chew, 1996). Allen, Poteet, Russell, & Dobbins (1997) describe self-focused and other-focused reasons for wanting to be a mentor. Similarly, Allen (2003) points out that motivation to mentor can come from a concern for others. This concern for others may be referred to as generative concern. Generativity and mentoring are often theoretically linked (McAdams & de St. Aubin, 1992) as mentoring may be viewed as a form of generativity, but this relationship is rarely studied empirically. Mentors tend to report higher levels of generativity than nonmentors and this level of generativity increases with number of protégés mentored (Parise & Forret; Schaffer & Taylor, 2010). While generativity likely contributes to who chooses to become a mentor, it may also impact the positive outcomes associated with mentoring. It appears that it is important to understand individual differences in determining motivation to mentor, but it is also likely that individual differences may impact that value of mentoring relationships for mentors.

Those who are highly generative likely engage in mentoring for the opportunity to give back rather than for any organizational incentives for mentoring. In other words, generativity may serve as its own intrinsic reward. Having many positive mentoring experiences may be the norm for highly generative individuals, and may be part of a lifestyle that encompasses other means of giving back as well. Thus, having positive mentoring experiences may have less of an impact for these individuals, while they may be more unique and more important to those who are less generative. These more external rewards associated with positive mentoring experiences may be particularly beneficial for less generative individuals. Schaffer and Taylor (2010) found that less

generative individuals experienced greater feelings of personal accomplishment when relationships were highly positive than did more generative individuals.

Hypothesis 7a: Generativity will moderate the relationship between positive mentoring and burnout such that positive mentoring will be more beneficial for less generative nurses.

When a mentoring relationship is characterized by many negative mentoring experiences, mentors likely experience these relationships as very costly. Thus, negative mentoring experiences may be related to increased burnout for mentors. However, those that are very generative may be more resilient in the face of negative mentoring experiences. They may engage in mentoring to help the next generation of nurses and may find merely serving in the capacity of mentoring to be rewarding. Many mentors may not feel that mentoring is externally rewarded, but they also feel that being externally rewarded would not be appropriate (Dickinson & Johnson, 2000). In addition, as noted earlier, mentoring may be only one outcome of generativity for those high in this predisposition. Thus, the negative mentoring experience may be less salient for these individuals. For these reasons, highly generative individuals may not be as strongly impacted by negative mentoring experiences as less generative individuals. As noted earlier, Schaffer and Taylor (2010) found that generativity buffered against the negative effects of negative mentoring experiences on personal accomplishment.

Hypothesis 7b: Generativity will moderate the relationship between negative mentoring and burnout such that negative mentoring will be less detrimental for those high in generativity.

Perception of the Value of Mentoring

Generative concern refers to the concern within the individual for helping the next generation of nurses to be successful. The desire to help less experienced nurses through mentoring can also be explained by organizational factors. Organizational factors might cause different nurses to perceive differences in the value of mentoring at the hospital in which they work. Some nurses may feel that mentoring is supported or rewarded by the hospital. They may feel that even though informal mentoring is an extra role behavior, it may be critical for their advancement in the organization. Some nurses might perceive that there are a large number of less experienced nurses who are in need of mentoring, while others might not sense this same need for mentoring. This will likely impact the perceived value they place on engaging in mentoring.

The perceived value of mentoring as an organizational factor may also influence the mentoring-burnout relationship. While individual characteristics may play a stronger role in the motivation to mentor, organizational characteristics such as organizational rewards for mentoring are also positively associated with the motivation to mentor (Aryee et al., 1996). Those that perceive a greater value of mentoring are likely more motivated to mentor. They may also be more likely to be more positively impacted by positive mentoring experiences because they feel that they are doing something that is valuable not only for their personal careers, but for the organization as a whole.

Hypothesis 8a: Perceived value of mentoring will moderate the relationship between positive mentoring and burnout such that positive mentoring will be more beneficial for those who perceive a high value for mentoring.

Conversely, if there is a strong perception of the value of motoring, even when mentors have many negative experiences they may not experiences the same increase in burnout. Those who do not view mentoring as particularly valuable and have many negative experiences will likely be the most negatively impacted.

Hypothesis 8b: Perceived value of mentoring will moderate the relationship between negative mentoring and burnout such that negative mentoring is less detrimental for those who perceive a high value for mentoring.

Factors Associated with Mentoring Behavior

A second focus of this study will be to investigate variables that contribute to nurse mentoring behavior. Many of the variables discussed thus far may also influence nurses' decisions regarding actually engaging in a mentoring relationship. Factors such as perceived workload, perceived consequences of mentoring, generativity, and perceived value of mentoring may not only moderate the mentoring-burnout relationship but they may also differentiate between who mentors and who does not. Burnout, perceived workload, and perceived consequences of mentoring may be viewed as barriers to engaging in mentoring and may be related to decreased mentoring behavior. Generativity and perceived value of mentoring could contribute to increased willingness or motivation to mentor and may be associated with increased mentoring behavior. While many studies look at factors that predict intentions to mentor, this study will examine factors that predict actual mentoring behavior.

Many variables have been researched as barriers to mentoring or factors that may be associated with a decreased willingness of individuals to serve as mentors. Some of these barriers relate to a decreased willingness for a mentor to take on a particular individual as a protégé. For example, mentors appear to be more willing to mentor those who they perceive to be high in ability (Allen, Poteet, & Russell, 2000). Mentors tend to be more willing to mentor those who have positive attributes and competencies and who they view as higher performing (Lapierre, Bonaccio, & Allen, 2009). For a mentor to be willing to mentor a specific individual they must feel that the benefits of doing so outweigh the costs that might be involved in the relationship (Ragins & Cotton, 1993).

While characteristics of a potential protégé might deter a mentor from mentoring that specific individual, there are a host of other factors that may be viewed as barriers against mentoring in general. In describing barriers to mentoring in medical professions, Sambunjak, Straus & Marusic (2009) describe personal barriers such as feeling that you don't have the skills required to be a strong mentor, relational barriers such as the perception that protégés might be potential competition, and structural barriers such as time constraints, lack of continuity or lack of incentives. Allen et al., (1997b) use a similar classification of factors that may contribute to willingness to mentor. Willingness may be influenced by individual characteristics such as personality or previous mentor experience or organizational factors such as social support, job stress, or relationship with your supervisor. Allen, Poteet, & Burroughs (1997) also include protégé attractiveness as a factor that influences willingness to engage in mentoring.

Empirical evidence supports the idea that factors falling under these categorizations influence willingness to mentor. Ragins and Cotton (1993) considered a potential mentor's perception that they were not qualified to mentor as a drawback to mentoring as well as the feeling that they do not want to be put in a bad light by the failures of their protégé. Personality factors such as being helpful and other-oriented empathy are associated with fewer perceived barriers to mentoring and greater intentions to mentor (Allen, 2003) as is locus of control (Allen et al., 1997b). Those who are more educated also tend to view fewer perceived barriers to mentoring (Allen et al., 1997b). A host of research supports the claim that those who have past experience as either a mentor or a protégé perceive fewer drawbacks of mentoring and report that they are more willing

to mentor (Allen et al., 1997b; Chislieri, Gatti, & Guaglino, 2009; Ragins & Cotton, 1993). These factors that may inhibit or contribute to mentoring are considered to be person based.

Other factors that may encourage or discourage mentoring stem from the organizational context. Allen et al. (1997a) found that an organizational culture that facilitates and promotes learning promotes mentoring, while stressful organizational environments with low social support and poor relationships with supervisors serve as barriers to mentoring (Allen et al., 1997b). For nurses in particular, one the most important organizational barriers to mentoring may be lack of time (Hurley & Snowden, 2008; Sawatsky & Enns, 2009). When nurses have very high time constraints, they may simply feel that they don't have the time to devote to a mentoring relationship.

Generally, researches have looked at potential barriers or perceived costs of mentoring in relation to intentions or willingness to mentor. Allen et al (1997b) point out that while we know a good deal about willingness and intentions to mentor, we know very little about what predicts actual mentoring behavior. Allen (2003) claimed to be the first study to examine factors that predict actual mentoring behavior. Allen (2003) found that actual mentoring behavior was predicted by an individual's level of helpfulness while willingness to mentor was related to both helpfulness and other-oriented empathy. These differing findings between predictors of willingness to mentor and actual mentoring behavior suggest that further research into predictors of actual mentoring behavior is warranted as those factors that predict willingness to mentor may not always align with factors that predict actual mentoring behavior.

Allen et al. (1997b) found that both individual and organizational factors explain unique variance in understanding the willingness to mentor and perceived barriers to mentoring. For this reason, the present study will examine both individual factors and organizational factors in relation to their impact on mentoring behavior.

Individuals may vary in the degree to which they perceive potential consequences from protégé mistakes. Some individuals might rate this as a potential barrier to or downside of mentoring while others may not consider this factor or may not view it as negatively. This factor likely contributes to who chooses to engage in actual mentoring behavior. Allen et al. (1997a) propose that concerns about protégé ability, lack of performance or general concerns about responsibility of protégés may be demotivating for mentors. Ragins and Cotton (1993) also report that mentors may be turned off by mentoring because they do not want to be put in a bad light by their protégé's failures. Mentors want to mentor those who they feel have many positive attributes (Lapierre et al., 1999), and it may be that if potential mentors feel that protégés only bring the potential for more problems or costly mistakes, they may not be willing to take on this burden. Embarrassment associated with mistakes has also been described as another perceived cost of mentoring (Allen et al., 1997). For nurse mentors, the cost of protégé mistakes may go far beyond simply feeling embarrassed; nurse mentors may feel liable for costly mistakes made by their protégés. For this reason, it is likely that those who perceive more potential consequences from protégé mistakes will be less likely to serve as mentors.

Hypothesis 9: Nurses who perceive greater consequences from protégé mistakes will be less likely to serve as mentors.

Generativity is another individual factor that likely contributes strongly to whether or not nurses serve as mentors. An individual's willingness to serve as a mentor likely comes from an evaluation that the benefits of doing so outweigh any costs associated with mentoring (Ragins & Cotton, 1993). A more generative individual, who sees the value and importance in guiding the next generation likely perceives more benefits and fewer costs in engaging in mentoring. Intentions to mentor have also been shown to relate to fewer perceived barriers (Allen et al., 1997). It could also be the case that more generative individuals perceive fewer barriers to mentoring. Motivation to mentor may come from other focused reasons such as the desire to help others and to pass on information (Allen et al., 1997a). These are likely factors that would be much more motivating to generative individuals who see the importance in guiding others and passing on information.

Hypotheses 10: Nurses who are higher in generativity will be more likely to serve as mentors.

Allen et al. (1997b) found that those with higher job induced stress perceived more barriers for mentoring. It seems likely that nurses who are experiencing high levels of burnout may also perceive more barriers to mentoring. Burnout is distinguished by high levels of exhaustion and withdraw. It seems unlikely that nurses who are exhausted and withdrawn from their jobs would be likely to want to take on the extra role behavior of mentoring.

Hypothesis 11: Nurses who are higher in job burnout will be less likely to serve as mentors.

Organizational factors also contribute to perceived barriers to mentor and willingness to mentor and will likely also impact actual mentoring behavior. It is likely that nurses who experience high workload would be unwilling to take on the additional demand of serving as a mentor. In fact, lack of time has been found to be the strongest perceived barrier to nurses for engaging in mentoring (Hurley & Snowden, 2008; Sawatsky & Enns, 2009). Generally, it does not appear that nurses who serve as mentors get to reduce their workload for doing so. They must fulfill their regular job responsibilities as well as the role of a mentor. Those who feel that they already have very high workloads are likely less inclined to take on additional mentoring responsibilities.

Hypothesis 12: Nurses with high perceived workloads will be less likely to serve as mentors.

Perceived value of mentoring is another variable that will be examined in this study. Individuals likely differ in how important or needed they believe mentoring to be, or the amount of value they believe it adds to their own career and to the hospital they work for. Those who feel that mentoring is very valuable would likely be more willing to take on the responsibility and engage in mentoring.

Hypothesis 13: Nurses who perceived mentoring to be more valuable will be more likely to serve as mentors.

Shift Work

Finally, the effects of shift work as a predictor of mentoring behavior will be examined. Although there does not seem to be a set definition of what exactly constitutes shift work, it is generally defined as working outside of the conventional daytime schedule. It could include working nights, evenings, or rotating shifts (Boggild & Knutsson, 1999). Smith, Folkard, Tucker, & Evans (2011) give a similar definition in saying that shift work is "any schedule that differs from standard daylight weekday hours" (pg. 186). This type of schedule is very common in healthcare, a profession where care must be provided 24 hours a day.

In general, shift work can be very detrimental to employees. In summary Costa (1996) reports that shift work is related to problems with relationships, biological disturbances, and medical problems for employees and may be associated with decreased productivity. Those who engage in shiftwork are at an increased risk for cardiovascular disease and many of the risk factors that predict disease such as sleep disturbances, increased stress, and poorer health habits such as increased prevalence of smoking and poorer diets (Boggild & Knutsson, 1999).

Studies that have compared those working night shift to those working a day or afternoon shift have found that working the night shift is a major source of turnover intentions and that this schedule contributes to more work-life conflict and lack of perceived control over the job (Pisarski et al., 2006). In nursing specifically, working rotating shifts is associated with higher role ambiguity and overload as well as lower job

satisfaction and commitment which may contribute to increased turnover intentions (Jamal & Babba, 1992).

It seems likely that working either rotating or night shifts may contribute to decreased mentoring behaviors. In fact, scheduling limitations have been described as an obstacle for nurse mentoring (Hayes, 2005). These irregular schedules are related to increased workload (Yildrim & Aycan, 2008), which is a major perceived barrier for engaging in mentoring (Hurley & Snowden, 2008; Ragins & Cotton, 1993). Irregular schedules have also been found to be linked to reduced social support (Boggild, Burr, Tuchsen, & Jeppesen, 2001). Mentoring is similar to social support in many ways. It may be that those who work irregular schedules may be unable or less willing to provide any type of social support that could include mentoring. Finally, age is associated with a decreased probability of engaging in working irregular schedules (Bohle & Tilley, 1998). It may be that one of the rewards of increased seniority may be some control over your schedule, so fewer senior nurses might work night or rotating schedules. Rank is strongly related to willingness to mentor and the perception of fewer drawbacks to mentoring (Chislieri et al., 2009; Ragins & Cotton, 1993). It may be that high ranking nurses are more willing and able to engage in mentoring, but less likely to work night shifts. Therefore, nurses working night shifts might have less opportunity to be mentored.

In comparison to those who work the day shift, those who work the night shift report having lower perceived control and decision latitude (Boggild et al., 2001; Pisarski et al., 2006). Those working the night shift might not have enough control over their time and resources to engage in mentoring. Nurses who work during the night shift report

having a greater level of responsibility (Bohle & Tilley, 1998) which could mean that they are less willing to take on the additional responsibility of mentoring. Night shift workers also tend to report reduced supervisor support and supervisor satisfaction (Blau & Lunz, 1999; Wittmer & Martin, 2010). Having a high quality relationship with your supervisor is related to the willingness to mentor (Allen et al., 1997b). Working the night shift is also associated with decreased professional participation (Blau & Lunz, 1999) and could contribute to a reduced willingness to take on the extra role behavior of mentoring.

Hypothesis 14: Nurses who work the day or afternoon shift will be more likely to serve as mentors than those who work the night shift.

Working a rotating schedule also likely contributes to a reduction in mentoring behavior. Lack of continuity in who you work with is a structural barrier to engaging in mentoring (Sambunjak et al., 2009). Those who work a rotating shift may not work with the same nurses every shift. For this reason they might not establish the familiarity necessary to form a mentoring relationship. In general, nurses who work fixed shifts tend to be more involved in their jobs and attend more meetings. This is especially true for older nurses (Jamal, 1981). Mentoring may be another form of involvement that nurses working a rotating shift may be less likely to participate in.

Hypothesis 15: Nurses who work fixed shifts will be more likely to serve as mentors than those who work a rotating schedule.

While working the night shift or rotating shift could be confounded by variables such as workload, a potential barrier to mentoring behavior, this study will allow the examination of the effects of shiftwork above and beyond the effects of workload. This

study will look at the effects of workload and shift simultaneously in predicting mentoring behavior. In general there appears to be mixed evidence on the relationship between shift work and workload. While Yildrim & Aycan (2008) found that irregular schedules were related to work overload in nurses, Bohle & Tilley (1998) found that nurses who worked the night shift reported being less busy but with a greater level of responsibility. Looking at workload and shift simultaneously as predictors of mentoring behavior can parcel out the effects of both high workload as well as the decrease in social resources that may accompany working irregular shifts.

Finally, exploratory analysis may give us a better general understanding of which predictors of mentor behavior are most impactful. While main effects are proposed as predictors of mentoring behavior, we will explore the possibility that these variables interact in the prediction of mentoring. Given that the current state of research in this area is very undeveloped, an investigation of simple predictors adds to the literature.

Method

Participants

Participants were 188 nurses working at two hospitals in the southeast of the U.S. 123 nurses participated from hospital A (approximately a 25% response rate) and 66 participated from hospital B (30% response rate). Participants were recruited by their nurse directors via their hospital email address. In the email, nurses were asked to follow a link to an online survey. Due to a very low initial response rate at hospital B, a paper version of the survey was also distributed. Multiple follow up emails were sent from the director of nursing at hospital A to encourage responses.

An early question in the survey allowed us to distinguish between mentors and nonmentors. 75 nurses (39.9%) reported that they were mentors. Both mentors and nonmentors provided demographic information, information regarding their work schedule, perceived consequences of mentoring, perceived value of mentoring, perceived quantitative workload, generative concern and burnout. Those who identified themselves as mentors were directed to additional questions addressing the quality of the mentoring relationship.

Measures

Demographic Information. Participants were asked to provide demographic information regarding gender, age, ethnicity, tenure at the hospital, and tenure as a nurse. The sample was almost exclusively female (95.2%) and white (96.3%). The average age was 41.1 (*SD* = 11.2) with nurses ranging in age from 20 to 67. The average time as a nurse was 15.1 years (*SD* = 11.2) with an average of 8.1 years (*SD* = 7.6) spent at the

hospital. Nurses were also asked if they supervised others, if they worked with less experienced nurses and if they served as preceptors. Only 41% of the sample reported that they supervised others while 62.2 % reported serving as a preceptor. A large majority (89.2%) reported working with less experienced nurses at the hospital indicating that a large portion of the sample was in a position to serve as a mentor if they were so inclined.

Mentoring. One of the primary focuses of this study was to distinguish between mentors and nonmentors for the purposes of identifying factors that may predict mentoring behavior as well as addressing burnout levels in mentors. Participants were asked whether or not they had served as a mentor in the past year. As the focus of the study was the impact that mentoring may have on nurse's current levels of burnout, the focus was on current or very recent mentoring relationships. To identify mentors, a definition of mentoring was provided that combined definitions provided by Allen (2003) and Ragins and Cotton (1999). Participants were asked the following: "We would like to know if you have ever served as a mentor. When we use the term "mentor" we are asking if there has been an individual who you have taken a personal interest in at work; someone who you have guided, sponsored, or otherwise had a positive and significant influence in their professional career development. This individual may or may not be in your unit and s/he may or may not be your immediate subordinate. This should go beyond serving as a preceptor. During the past year have you served as a mentor?" This definition distinguished between mentor and preceptor roles and allowed for the possibility that mentoring may occur across work units or be provided to someone who is not an immediate subordinate.

Nearly 40% of the sample reported that they were a mentor according to this definition of mentoring. The correlation between supervising others and self-identifying as a mentor was low (r = .11). Viewed differently, only 48% of mentors reported that they supervised others indicating that supervising and mentoring were viewed as distinct tasks. Those who indicated that they were mentors were asked if they had ever served as a mentor in the past and approximately how many nurses they have mentored others over their career. Nearly 70% of mentors indicated that they had mentored in the past with mentors indicating that they had mentored as many as 100 individuals in the past (M = 10.6, SD = 16.0).

Mentors were also asked about the duration of the mentoring relationship, whether or not the relationship was ongoing, and the amount of interaction they hd with their protégé. The majority of mentoring relationships were ongoing or had ended in the last 1-3 months (72.0%) indicating that subsequent questions about the mentoring relationship tended to address current or very recently ended relationships. Overall, mentors and protégés interacted on a fairly regular basis. 36% of mentors indicated that they interacted with their protégé on a daily basis while 45.3% said they interacted with their protégé once a week or more. Only 6.7% of mentors indicated that they interacted with their protégé a few times a year or less. Duration of mentoring relationships varied with 53.3% of relationships having lasted for a 6 months or less and the remainder lasting for over 6 months.

Quality of the mentoring relationship. Nurse mentors were asked about both positive and negative experiences associated with the mentoring relationship as well as an

assessment of the overall relationship quality. Positive mentoring experiences were measured using a modified version of Ragins and Scandura's (1994) anticipated benefits of mentoring. To shorten the scale, only those items that received the highest agreement that the items reflected a benefit of mentoring in the original Ragins and Scandura's (1999) study were included in the present study. This resulted in a 14-item measure in which questions were rephrased to the present tense as opposed to expectations about the future. Items reflect positive experiences such as improved job performance, recognition, relational benefits, a base of support, and generativity. For example, "My protégé has enhanced by reputation." Mentors indicated agreement with these items using a 7-point scale where 7 indicated strong agreement. An exploratory factor analysis verified a one factor solution for this scale as only one factor had an eigenvalue greater than one. The 14-item scale used in the present study showed strong reliability ($\alpha = .96$) identical to the reliability ($\alpha = .96$) reported by Ragins and Scandura (1999) in the full 20-item scale.

Negative mentoring experiences were measured using a shortened version of Eby et al.'s (2008b) negative mentoring scale. The original scale contains 36-items addressing protégé performance problems, interpersonal problems and destructive relational patterns. In the original Eby et al. (2008b) measure, alpha levels for all three negative mentoring subdimensions were greater than .93. Four items from the original measure were removed for the present study as they had previously been received unfavorably by the hospital in which the study was conducted. These items addressed issues such as alcohol and drug use by protégés. Furthermore, the destructive relational patterns subdiminsion was not assessed due to extremely low scores on this measure in past use of the survey

with nurse mentors (Schaffer & Taylor, 2010). This resulted in a 12-item 2-dimensional measure and included items such as “My protégé does not seem willing to learn” which were endorsed with a 7-point scale. In the present study the interpersonal problems and protégé performance problems were highly correlated (r = .81) and were combined into one overall measure of negative mentoring which showed strong reliability (α = .97).

One final item from Ensher and Murphy (1997) was included which addressed the mentor’s overall satisfaction with the mentoring relationship: “I am satisfied with the mentoring relationship my protégé and I have developed”. As would be expected, overall relationship quality was negatively correlated with negative mentoring experiences (r = -.37) and positively correlated with positive mentoring experiences (r = .60). Positive and negative mentoring experiences were negatively correlated (r = -.44). While positive and negative mentoring were related, they still appeared to be distinct dimensions rather than merely opposites of one another. All of the quality of mentoring items were assessed using a 7-point Likert scale in which 7 indicated strong agreement.

Burnout. Burnout was measured using the 22-item Maslach Burnout Inventory (Maslach & Jackson, 1981) or MBI. This measure is specifically meant for use in human service professions such as nursing. The scale reflects a three dimensional understanding of burnout with items addressing emotional exhaustion, personal accomplishment and depersonalization. High scores on emotional exhaustion and depersonalization reflect burnout while low scores on personal accomplishment reflect burnout. Sample items are “In my opinion, I am good at my job” (personal accomplishment); “I feel like I am at the end of my rope” (emotional exhaustion) and “I worry that this job is hardening me

emotionally" (depersonalization). Respondents rate how often they experience these feelings from 0 (never) to 6 (everyday). Worley et al. (2008) found strong support for this measure and its 3-dimensional nature although the factors may not be independent as initially conceptualized by Maslach and Jackson (1981). In a review of factor analyses of the MBI, Worley et al. (2008) report correlations between dimensions ranging from -.30 for emotional exhaustion and personal accomplishment to .60 for emotional exhaustion and depersonalization. These reported correlations are very similar to those found in the present study (r = -.37 and r = .62, respectively). Worley et al. (2008) conclude that despite the relatively high intercorrelations among dimensions, there is strong support for the three factor model.

Moderators and predictors of mentoring behavior. Several variables have been proposed as potential moderators in the mentoring-burnout relationship. Perceived quantitative workload was assessed using Spector and Jex's (1998) 5-item quantitative workload inventory (or QWI). Reported reliability for this measure is high (α = .82). This scale addresses the perception of work in terms of both pace and volume. For example, respondents are asked how often their job requires them to work very hard and how often their job requires them to work very fast using a 7-point scale from never to nearly always. High scores reflect high perceived quantitative workload. For the present study, high internal consistency was found (α = .86).

Participants were also asked to report the number of hours they work in the typical week as well as the number of patients they provide care for in the typical week. Responses to these questions reflect a highly diverse sample of nurses in terms of hours

worked and number of patients provided care to. The sample consisted of both part time and full time nurses working from 4 to 65 hours a week (M = 34.94, SD = 9.29) as well as nurses who did not provide care to any patients in the typical week to those who provided care to up to 180 patients a week (M = 20.84, SD = 23.75).

Nurse's perceptions of potential consequences associated with protégé mistakes was assessed using a 5-item 7-point measure developed for the present study. Nurses were asked to rate their agreement with items such as, "When a protégé makes a mistake it is a poor reflection on their mentor." Sufficient reliability was found for this scale (α = .75).

Perceptions of the value of mentoring were also assessed with a 5-item scale developed for the present study. These items addressed the perception that the hospital needed mentoring ("There are many younger/less experienced nurses in need of mentoring at the hospital") as well as the perception that mentoring is important to a nurse's career advancement ("I feel that serving as a mentor is critical to my job advancement in the hospital"). Factor analysis revealed that the perception that the hospital needed mentoring and the perception that mentoring is important to a nurse's career advancement were distinct factors. For this reason a 2-item need for mentoring scale and a 3-item importance of mentoring to a nurse's career were assessed as separate constructs. Both of these scales showed sufficient reliability (α = .76; α = .74). In general, mentoring was seen as something that was needed at the hospital (M = 5.59, SD = .93), but less important to a nurse's career advancement (M = 3.85, SD = 1.08).

Nurse's level of generative concern was assessed using an abbreviated version of the Loyola Generativity Scale or LGS (McAdams & de St. Aubin, 1992). This scale has been utilized previously to measure generativity in the workplace (cf., Clark & Arnold, 2008). McAdams and de St. Aubin (1992) report a reliability of .84 for the full 20-item scale. Seven items from the original scale were utilized in the present study that seemed to most strongly reflect the desire to pass on information and these items were reworded to refer to generativity specifically at the workplace. For example, "I have important job skills that I try to teach to those I work with". Participants were asked to indicate how often these statements applied to them using a 7-point scale from never to everyday. This scale showed high reliability ($\alpha = .89$).

Finally, shift work was assessed by asking nurses about both the time of day they typically worked as well as whether they worked a fixed or rotating schedule. Nurses were asked to indicate whether their typical shift assignment was a day, evening or night shift. The majority of respondents worked the day shift (63.3%). Given the low percent of nurses who indicated they worked an evening shift, evening and night shift were combined (34.6%). The remainder of nurses indicated that they worked day and night shifts equally.

Nurses were also asked to indicate whether they worked a fixed or rotating shift. The sample was nearly evenly split between nurses working fixed and rotating shifts (48.9% fixed, 51.1% rotating). Finally, nurses were asked how many hours they worked during the typical shift. There appeared to be some confusion with this question as

several nurses gave responses such as 40 or 70 hours, therefore responses to this item were not assessed.

Table 1 shows means and standard deviations for only the subset of respondents who were mentors and includes the variables assessing mentor quality. Table 2 shows means and standard deviations for variables that were assessed for the full sample.

Analyses

Before subsequent analyses were conducted, the data was checked for normalcy. Univariate outliers were screened for and outlier scores which were more than three standard deviations from the mean were recoded to the next closest score. Given the small sample size and need to retain participants, this method was deemed to be appropriate (Tabachnick & Fidell, 2007). Only five values (less than .01% of the data) were recoded. All independent variables were subsequently mean centered. All scales were tested for internal consistency and found to be in the appropriate range.

Hypotheses 1-8 dealt with relationships between positive and negative mentoring and burnout as well as potential moderators of these relationships. These hypotheses were relevant only to those who classified themselves as mentors. For this portion of the analyses, the data file was split and the relationship between positive and negative mentoring and burnout for mentors was examined. This resulted in a smaller sample size for this portion of the analyses.

Path analyses was utilized to examine the relationship between positive and negative mentoring experiences and the burnout levels of nurse mentors across all three burnout dimensions as well as to analyze the moderating effects of workload, perceived consequences of mistakes, generativity, and perceived value of mentoring on the relationship between quality of mentoring experiences and burnout. Path analysis was preferential in this instance because it allowed us to explicitly model the covariance between the dependent variables of interest: the three burnout dimensions. It also allowed

us to test for differential predication between positive and negative mentoring and the three burnout dimensions.

Hypotheses 1-8 were tested through path analysis. Due to the small sample size and need to preserve degrees of freedom, the full model was not examined in one step. Instead, the model was assessed hierarchically. First, the main effect relationships between positive and negative mentoring and burnout were examined (H1 and H4). Secondly, generativity and quantitative workload were added to the model to examine the main effect relationship between these variables and the three burnout dimensions (H2). The more objective measures of workload were then added. Finally, all interaction terms were entered into the path model to test for the moderating effects of workload, perceived consequences, generativity and perceived need and importance of mentoring (3, 5, 6a, 6b, 7a, 7b, 8a, and 8b). A chi-squared difference test between an unconstrained model and a model in which paths to different burnout dimensions were constrained to be equal allowed us to determine if positive and negative mentoring are differentially related to the different burnout dimensions (Hypotheses 1a and 4b). If the constraining the model caused significant harm to fit, it was determined that paths were not equivalent. Follow up tests allowed us to determine exactly which paths differ from one another.

Hypotheses 9-15 dealt with predictors of mentoring behavior. As mentoring behavior is a dichotomous variable (serve as a mentor vs. do not serve as a mentor), logistic regression was utilized. Hypothesized predictors of mentoring behavior were separated into organizational and individual variables, and their role in the prediction of mentoring behavior was assessed hierarchically. Quantitative workload, time of day of

shift and whether shift was fixed or rotating were viewed as organizational variables. The role of these variables was examined first. Perceptions of potential consequences of mentoring, importance and need for mentoring, as well as generativity and level of burnout were viewed as individual variables. These variables were added to the logistic regression secondarily to determine if they impacted mentoring behavior beyond the organizational variables.

Results

Table 1 shows means, standard deviations, and correlations for variables of interest for mentors only. Several significant correlations were noted. Specifically, significant correlations were noted between various workload indicators and burnout dimensions. Quantitative workload was significantly correlated with both the emotional exhaustion and personal accomplishment dimensions of burnout in the anticipated direction. Of the more objective workload indicators, only patients seen per week was significantly correlated with burnout as it showed a significant positive correlation with depersonalization. It appears that the more patients a nurse sees, the more likely they are to experience depersonalization. Interestingly, those who feel there is a strong need for mentoring at the hospital tended to experience more positive mentoring relationships while nurses who experience more burnout were less likely to say that mentoring was important. Finally, generativity was positively correlated with personal accomplishment and quantitative workload.

Main Effects

To test the main effect relationships between mentoring quality and burnout, an initial path analysis model was conducted with only positive and negative mentoring and mentor quality entered as predictors of burnout. The model was then constrained to determine if assessing overall mentoring quality added predictive value. Constraining the model to force paths between overall quality and burnout dimensions to be equal to paths between positive mentoring and burnout dimensions did not cause significant harm to the model (χ^2 difference = 1.62, 3 degrees of freedom). This indicated that assessing overall

mentoring quality did not improve the fit of the model. Therefore, this variable was not assessed further.

Positive and negative mentoring only were then assessed as predictors of the three burnout dimensions (see Figure 1). One case was removed as it consistently contributed to multivariate kurtosis. Given that analyses could only be conducted for individuals who had complete data across variables, the resulting sample size for this analysis was 65. Results of this initial path analysis indicated that neither positive nor negative mentoring were significant in the prediction of any of the three burnout dimensions. Hypotheses 1 and 4 were not supported. Schaffer and Taylor (2010) also found these relationships to be nonsignificant, but, given that all relationships were in the anticipated direction and that many relationships approached significance, a follow up study with a larger sample size was deemed to be appropriate. Parameter estimates, standard errors and z-scores are reported in Table 3. As there was not a significant relationship between positive or negative mentoring and burnout, Hypothesis 1a and 4b regarding a differential relationship between positive and negative mentoring and burnout dimensions were not tested.

Next, generativity and quantitative workload were entered into the model to examine the main effects of these variables on the three burnout dimensions although no formal hypotheses were made regarding the relationship between generativity and burnout (see Figure 2). There was complete date across all variables for 64 nurse mentors. Parameter estimates, standard errors and *z*-scores of the resulting analysis are reported in Table 3. Both generativity and quantitative workload showed significant

relationships with burnout across all three burnout dimensions. Generativity was negatively related to emotional exhaustion (β = -.36, z = - 2.12, p < .05) and depersonalization (β = -.33, z = - 2.03, p < .05) and positively related to personal accomplishment (β = .44, z = 3.01, p < .05). This replicates findings from the Schaffer and Taylor (2010) and emphasizes the importance of generativity for nurses in buffering against burnout. Those who are more generative experience less burnout. Quantitative workload showed a positive relationship with burnout across all three burnout dimensions. Quantitative workload was positively related to emotional exhaustion (β = .86, z = 6.41, p < .05) and depersonalization (β = .44, z = 3.42, p < .05) and negatively related to personal accomplishment (β = -.23, z = - 2.10, p < .05) supporting Hypothesis 2. Those who feel they have a greater workload also tend to experience more burnout.

Hypothesis 2b predicted that workload would be more strongly related to emotional exhaustion than either depersonalization or personal accomplishment. To test this hypothesis, the model was constrained to force the quantitative workload-emotional exhaustion path to be equal to the quantitative workload-personal accomplishment path. Doing so caused significant harm to model fit (χ^2 difference = 21.67) indicating that quantitative workload is more strongly linked to emotional exhaustion than to personal accomplishment in support of the JD-R model. Similarly, the model was constrained to force the quantitative workload-emotional exhaustion path to be equal to the quantitative workload-depersonalization path. This also caused significant harm to model fit (χ^2 difference = 9.16) indicating that quantitative workload is more strongly related to emotional exhaustion than to depersonalization also supporting the JD-R model.

Several objective measures of workload were also measured. Hours worked per week, hours worked per shift, and patients seen in a week were assessed. Due to response issues described previously, hours worked per shift was not analyzed. Hours worked per week and patients seen per week were entered into the model to determine if these variables were better predictors of burnout than the more subjective quantitative workload measure. Results indicated that nurses who see more patients per week experience greater depersonalization ($\beta = .018$, $z = -2.40$, $p < .05$) further supporting Hypothesis 2. No other objective workload measures were related to burnout (see Table 3).

Moderating Effects

Finally, the moderating effects of generativity, quantitative workload, perceived need for mentoring, perceived importance of mentoring, and perceived consequences of mentoring in the relationship between both positive mentoring and negative mentoring and burnout were assessed. This required entering ten different interaction terms into the path analysis as well as the corresponding main effect variables. Robust methods were utilized. The resulting sample size was 63. Several significant interactions were noted (see Table 4).

The interaction between positive mentoring and quantitative workload was significant in the prediction of emotional exhaustion partially supporting Hypothesis 3. At low values of quantitative workload there is a negative relationship between positive mentoring and emotional exhaustion, while at high values of quantitative workload there is a positive relationship between positive mentoring and emotional exhaustion (see

Figure 3). These findings are in line with Hypothesis 3. When workload is low, positive mentoring is most beneficial. Interestingly, when workload is high, the more positive a mentoring relationship is, the more emotional exhaustion the mentor experiences. This may be because a very positive relationship implies more investment on the part of the mentor, and this could contribute to even more workload. The interaction between positive mentoring and quantitative workload was not significant in the prediction of the other two burnout dimensions. Furthermore, the negative mentoring- quantitative workload interaction was not significant, thus Hypothesis 5 was not supported.

The interaction between positive mentoring and perceived consequences of protégé mistakes was significant in the prediction of both depersonalization and personal accomplishment (see Figures 4 and 5). When relationships were considered to be very positive by the mentor, those who felt there were more consequences to mentoring actually showed decreased burnout. These findings are contrary to Hypothesis 6a which predicted that positive mentoring would be less beneficial when perceived consequences of protégé error were high. Findings actually show positive mentoring to be *most* beneficial when perceived consequences were high. Given that the "perceived consequences" items developed for the study reflect a feeling on the part of the mentor that the work their protégé does reflects on them, these findings may not be surprising. Those with more positive relationships could feel more confident in their protégés and therefore may give them more meaningful work which in turn leads the mentor to feel more personally accomplished and to depersonalize less. In contrast, less positive mentoring relationships, which could reflect a perception on the part of the mentor of a

lower quality protégé, were associated with greater burnout when perceived consequences were high. In these cases, mentors may feel that protégés are not performing, and when consequences are seen to be high (or mentors feel that this poor performance reflects on them) decreased personal accomplishment and increased depersonalization may be the result. The interaction between positive mentoring and perceived consequences was not significant in the prediction of emotional exhaustion. Furthermore, the negative mentoring-perceived consequences of mentoring interaction was not significant, thus Hypothesis 6b was not supported.

Hypotheses 7a and 7b addressed the moderating effect of generativity in the mentoring burnout relationship. Generativity was not found to be a significant moderator of either the positive mentoring-burnout relationship or the negative mentoring-burnout relationship. These findings are contrary to Hypotheses 7a and 7b and to previous findings which found that generativity significantly moderated the relationship between both positive and negative mentoring and personal accomplishment (Schaffer & Taylor, 2010).

The interaction between negative mentoring and perceived importance of mentoring was significant in the prediction of personal accomplishment (see Figure 6). For those who felt that mentoring was very important to their career advancement at the hospital, negative mentoring decreased feelings of personal accomplishment. This is contrary to Hypothesis 8b which predicted that those who valued mentoring would be less impacted by negative relationships. Due to factor analytic results indicating that the "value" construct was two dimensional, this measure was broken down to reflect the

perceived need for mentoring at the hospital as well as the perceived importance to the mentors' career. Given this breakdown, the results are not surprising. If a mentor feels that mentoring is important to their career, but they are not feeling successful in their relationship, this would likely impact burnout. The interaction between negative mentoring and perceived importance of mentoring was not significant in the prediction of the other two burnout dimensions. Furthermore, perceived need for mentoring at the hospital was not a significant moderator of the mentoring-burnout relationship nor were either perceived need or perceived value significant moderators of the positive mentoring-burnout relationship.

Overall, hypothesis regarding moderation were not supported. Only Hypothesis 3 was partially supported in that positive mentoring was more beneficial in reducing emotional exhaustion when quantitative workload was low. Other significant moderating effects were counter to hypotheses, although likely not surprising. Mentors who believe that their protégé is a reflection on themselves are more positively impacted by positive mentoring. Similarly those that feel that mentoring is important for career advancement are more negatively impacted by negative mentoring relationships rather than this sense of importance buffering against the negative impact of negative mentoring. Furthermore, whether or not nurses felt that there was a strong need for mentoring at the hospital did not impact the mentoring/burnout relationship. Surprisingly, although results of the main effect of generativity on burnout mirror previous findings, generativity did not moderate the mentoring-personal accomplishment relationship as found previously. This may be due to issues with power and the generally small effect sizes associated with interactions.

Predicting Mentoring Behavior

The second set of hypotheses (Hypotheses 9-15) dealt with predictors of mentoring behavior. To test these hypotheses, organizational variables (workload, time of day of shift and type of shift) were first entered into a logistic regression. These organizational variables likely have a more proximal impact on mentoring behavior than individual perceptions and predispositions. For this reason, their role in predicting mentoring behavior was examined first followed by individual variables. All organizational predictor variables were entered into a logistic regression predicting mentoring behavior. The -2LL (195.815) of this equation indicated significantly improved fit over the -2LL of a null model (212.695) for an R^2 of .921 or an effect size of .079. This indicates that these organizational variables explain 7.9% of the variance in mentoring behavior. To determine the unique effect of each of the three variables, each variable was removed from the equation one at a time and the chi-squared difference was used to determine significance. Quantitative work load (χ^2 difference = 41.16, $p < .05$) and type of shift fixed or rotating (χ^2 difference = 3.973, $p < .05$) were both significant in the prediction of mentoring. Time of day of shift did not reach significance (χ^2 difference = 3.11, $p > .05$).

Those who worked a fixed shift had a 45% probability of serving as a mentor while those who worked a rotating shift had only a 28.9% probability of serving as a mentor. In other words, those who worked a fixed shift were 16% more likely to serve as a mentor than those who worked a rotating shift supporting Hypothesis 15. This is logical

since rotating shifts make it less likely that one would have the continuity in interpersonal relationships that one needs to develop and foster a mentoring relationship.

While it was hypothesized that those who had a lower workload would be more likely to serve as a mentor due to having the additional resources to do so, the opposite was found to be the case. Nurses who reported high quantitative workload were actually the most likely to serve as a mentor contrary to Hypothesis 12. High quantitative workload was associated with a 52.9% probability of serving as a mentor while low quantitative workload was associated with only a 22.8% probability of serving as a mentor. It may be the case that those with higher workloads simply had more extensive contact with potential protégés and therefore had more opportunity to develop mentoring relationships with younger nurses.

Next, the individual variables (perceived importance, need and consequences of mentoring, generativity and burnout) were added to the logistic regression. None of these variables were found to be significant in the prediction of mentoring behavior (see Table 5). Contrary to hypotheses 9, 10, 11, and 13, these individual variables did not predict mentoring above and beyond organizational variables.

Discussion

The present study sought to replicate and extend previous research on mentoring and burnout. A significant relationship between positive and negative mentoring and burnout dimensions was still not supported. Previous research (Schaffer & Taylor, 2010) found a significant correlation between positive and negative mentoring and emotional exhaustion although significant relationships were not supported through path analysis. The present study found correlations between mentor quality variables and burnout dimensions close to zero.

One potential explanation for these findings stems from the relationship between mentoring and preceptorship in the nursing occupation. A large portion of nurse mentors in the present study also served as preceptors. In fact, 81% of mentors identified in the study were also preceptors. Preceptorship is very similar to mentoring in many respects. Although it is a more formal, required, teaching relationship, it involves a more senior nurse passing on knowledge and guiding a less experienced nurse. In a sample of nurses who also serve as preceptors, it may be difficult to detect the incremental effects of informal mentoring since proteges are able to experience some of the benefits of mentoring through the preceptor relationship.

Furthermore, the definition of mentoring used in the study does not differentiate between peer to peer mentoring or a more hierarchical relationship. The nature of the mentoring relationships examined in the study is unknown. It is possible that peer to peer mentoring may not have the same benefits for the mentor as relationships that are more hierarchical in nature. It seems likely that these peer-based relationships are formed out

of more collegial or social concerns and would have less impact on the three dimensions of burnout. In contrast, hierarchical mentoring relationships, as noted earlier, may attenuate burnout particularly when the mentoring relationship is positive in nature.

While the present study also assessed overall impressions of quality of the mentoring relationship, this variable was not found to offer additional predictive power beyond the measures of positive and negative mentoring experiences. This suggests that an overall index of mentoring quality may not be as informative as measures of negative and positive mentoring and may not be necessary when these variables are assessed. Given the greater specificity associated with measuring negative and positive aspects of mentoring rather than simply using a global measure of the construct, a two-dimensional measure may be preferable in research. Assessing the negative mentoring aspect may be challenging since nurses may simply withdraw from those protégés who are performing poorly. This may have been a contributing factor to the non-significance of negative mentoring in the current study.

The present study replicated previous research (Schaffer & Taylor, 2010) by supporting the importance of generativity in buffering against burnout. More generative nurses were less likely to experience burnout across dimensions. If hospitals can encourage nurses to see the benefit in passing on information to less experienced nurses, they may not only encourage more of this behavior, but may also see reduced burnout in older nurses. While often viewed as an individual difference variable, generativity appears to be a factor that can be influenced by outside sources. Hospitals may have the ability to promote a workforce of more generative nurses by encouraging mentoring and

sharing success stories reflecting the value that mentoring provides to the hospital. Further research is needed to examine how and if generativity can be influenced through intervention.

While the main effect of generativity on burnout was replicated in the present study, the moderating effect of generativity in the mentoring-burnout relationship found in the Schaffer and Taylor (2010) study was not replicated. These differences in findings may be due in part to differences in the samples of nurses examined in the two studies. The present study included nurses who reported lower quality mentoring relationships and higher burnout than nurses in the Schaffer and Taylor (2010) study. For example, nurses in the Schaffer and Taylor (2010) study had a mean emotional exhaustion score of only 2.6 compared to 3.1 in the present sample. Similarly, nurses in the Schaffer and Taylor (2010) study had a positive mentoring score of 5.6 compared to only 5.1 in the present sample. Negative mentoring was also stronger in the present sample (2.3 vs. 1.9). It is possible that generativity may have stronger effects at higher levels of stress or that generativity may do more to buffer against more negative relationships. High generativity may not be able to overcome the negative impact of lower quality relationships in conjunction with greater burnout.

Surprisingly, generativity was not found to be a predictor of actual mentoring behavior. Given that one established motivator for mentoring is the desire to pass on information (Allen et al., 1997a), and the generativity measure used in the present study focused exclusively on items related to the desire to pass on information, the lack of significant findings is surprising. It appears that factors which motivate individuals to

mentor or factors related to intentions to mentor may not be the same factors that drive actual mentoring behavior. There may be other variables not measured in the present study the inhibit intentions and motivation from translating into actual behavior. Organizations must take care to ensure that they do not create barriers to mentoring intentions translating into actual mentoring behavior. Results from the present study suggest that shift work may be one such barrier.

The current study extended previous work by including workload as both a predictor of burnout and a moderator of the mentoring burnout relationship. As expected, quantitative workload emerged as a significant predictor of all three burnout dimensions. When nurses experience high workload, they tend to experience more burnout. In support of COR and JD-R, workload was more strongly related to emotional exhaustion than either depersonalization or personal accomplishment. Information regarding hours worked a week as well as patients seen in a week was gathered in an attempt to capture a more objective measure of workload. Of these variables, only patients seen per week predicted burnout. Not surprisingly, those nurses who see the most patients in a week were the most likely to depersonalize. The content of the workload predictor and burnout outcome appear to be well matched. Given that quantitative workload was not correlated with either hours worked a week or patients seen per week, it appears that both types of measures add value. A nurse's overall perception of the amount of work they perform in addition to the patients they see during a week are both predictive of the level of burnout they experience. Nurses' perceptions of both subjective and more objective workload are strongly linked to their experienced burnout.

An unanticipated relationship emerged between workload and mentoring in that when workload is high, positive mentoring is related to more emotional exhaustion. It may be the case that the emotional and cognitive investment involved in mentoring, even in positive mentoring situations, poses an additional demand. Even given the beneficial nature of such mentoring relationships, high investment in a protégé when job demands are high may operate as a drain on the emotional reserves of the mentor.

The present study also extended previous research by attempting to establish factors that predict actual mentoring behavior. While a good deal of previous research has assessed predictors of mentoring intentions, the present study looked to distinguish between those who actually engaged in mentoring from those who did not. Interestingly, those who experienced the most workload were the most likely to serve as mentors. Perhaps these nurses are more involved in the workplace in general and have a greater opportunity for mentoring. It is also possible that these more active nurses are more likely to attract protégés. Similarly, the greater perceptions of workload experienced by mentors could be a reflection of their very mentoring behavior. As the study was only correlational in nature, it is impossible to determine whether workload influences mentoring behavior, mentoring behavior influences workload, or if they are both impacted by a third variable. This finding of a relationship between quantitative workload and mentoring behavior is especially important given that those who experience the greatest workload were found to be less likely to benefit from mentoring and even reported lower quality mentoring relationships. While nurses who experience high workload may be inclined to take on a protégé, and potentially more likely to attract a

protégé, this mentoring could lead to even more work and potentially greater emotional exhaustion. This finding emphasizes the importance of reducing workload when possible for nurses who take on protégés. While these types of nurses could have the most to share with potential protégés, compensating for their time may be wise.

A host of additional organizational and individual variables were examined as potential predictors of mentoring behavior. Only quantitative workload and shift type emerged as significant predictors of actual mentoring behavior. Contrary to expectations, nurses who experienced greater workload were more likely to mentor. As expected, those who worked a fixed shift were more likely to mentor than those who work a rotating shift. Nurses who work a rotating shift experience less continuity which may contribute to the inability to form mentoring relationships. Hospitals who wish to encourage informal mentoring may wish to reduce the number of more experienced nurses who work a rotating schedule. Creating schedules in which less experienced nurses consistently work with the same more tenured nurses may help to create an environment in which nurses are better able to foster relationships and could foster greater mentoring.

Measures of the perceptions of the importance and need for mentoring at the hospital as well as the perceived consequences of mentoring were developed for the present study and were assessed as potential predictors of mentoring behavior as well as moderators of the mentoring burnout relationship. These variables were not found to predict actual mentoring behavior. This lack of significant findings is especially surprising given that logically one would expect to find a link between the perception that mentoring is needed in the hospital, important to your career, and actually engaging in

mentoring. Again, this lack of significant findings could indicate that the process by which an individual actually becomes a mentor may be more complicated than anticipated. While a nurse could value and intend to mentor, other factors may prevent this behavior. It could be the case that these nurses don't feel they have the skills necessary to mentor other nurses. They may also feel that by serving as a preceptor they are fulfilling some of the duties that a mentor might perform.

An unanticipated finding was that positive mentoring was most beneficial when perceived consequences were high. The manner in which this variable was measured may account for this finding. First, as noted earlier, the scale reflects the mentor's belief that the protégés behavior reflects on them. In positive mentoring situations, it is more likely that the protégés work performance benefits the mentor and carries positive consequences for them. Second, the "perceived consequences" variable assessed the perception that the protégés work reflected on the mentor, rather than direct consequences of the mentoring relationship. A measure that directly assessed perceived consequences tied to mentoring may serve as a more appropriate mediator of the relationship between mentoring and burnout. Greater research into perceived consequences of mentoring and improved design of a measure assessing this construct is needed.

Perception of the importance and need for mentoring at the hospital did moderate the relationships between positive and negative mentoring and some of the burnout dimensions. Those who felt that mentoring was important for career advancement experienced a reduction in personal accomplishment when mentoring was more negative. If hospitals are going to expect more experienced nurses to serve as mentors, they must

ensure that mechanisms are in place to help nurses build positive relationships. If they do not, mentors may be negatively impacted. Those who do not feel confident as a mentor could potentially have poorer quality relationships, but may also be less likely to engage in mentoring in the first place. More research into mentoring efficacy is warranted.

Mentors who felt that their protégés behavior reflected on themselves saw increased burnout when relationships were not as positive. On the other hand, when relationships were positive, this variable was associated with a reduction in burnout. As discussed previously, while the intent was to measure perceived consequences of mentoring, a more apt definition of this measure is likely perceived responsibility. While having a highly visible, competent protégé may help later career nurses, taking on a protégé who is not as strong may be detrimental. The more visible, recognized and rewarded mentoring is for nurses, the more necessary it is that nurses are adequately equipped to handle poorly performing protégés. As perceptions of protégé competence are related to mentoring intentions (Allen et al., 1997), this is especially important to consider. While poorly performing early career nurses may be most in need of mentoring, mentors may be less willing to mentor these individuals and those who do take on the challenge may be impacted negatively especially if mentoring is highly visible and seen as necessary for advancement. When there is a perception of responsibility on the part of the mentor, quality of the mentoring relationship is particularly important. While the negative mentoring dimensions were highly correlated in the present study and thus were combined into one overall measure, perceived responsibility and protégé performance problems are conceptually strongly related.

The small sample of nurse mentors is a limitation. Only 75 nurse mentors were identified. Furthermore, complete data across measures was only available for 63 of these nurses. This likely impacted the power of the current study in establishing a link between mentor quality and burnout dimensions, particularly when effects of moderators were examined given the subtlety of these effects. A deeper look at mentoring behavior with a larger sample is warranted, however, identifying a large sample of nurse mentors is a challenge.

Further work is needed to address predictors of actual mentoring behavior. While a host of research looks at mentoring intentions, few predictors of mentoring behavior have been identified. While workload and shift type did predict mentoring behavior in the present study, workload did not operate as anticipated. High workload was associated with a greater likelihood of serving as a mentor. It may be the case that under high workload conditions, the mentor is more motivated to seek out protégés as a means to cope with the demands of the environment. Given the nature of the work and the consequences of mistakes, which may be more likely under high workload conditions, nurses may be highly motivated to seek assistance in these conditions.

While guided by the research on mentoring intentions and perceived benefits and consequences of mentoring, hypotheses regarding other individual level variables did not prove to be significant. It appears that there may be a disconnect between intentions to mentor and actual mentoring behavior. It is likely that many other variables not examined in the present study contribute more strongly to actual mentoring behavior. For example, mentoring efficacy may be a variable that is predictive of actual mentoring behavior.

Given the many established benefits of informal mentoring for both mentors and protégés (Eby et al., 2008; Eby & Lockwood, 2005), a better understanding of actual mentoring behavior is needed. While many nurses may speak positively about mentoring and profess intentions to do so, there may be barriers to these intentions resulting in actual mentoring behavior. If hospitals have a better idea of what these barriers are and what factors truly encourage mentoring behavior, they may be able to encourage greater mentorship which may positively impact not only mentors and protégés but the hospitals they work for and the patients that they treat.

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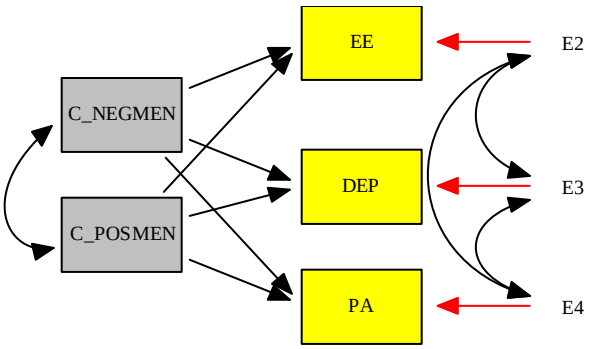

Figure 1. *Initial Path Model*

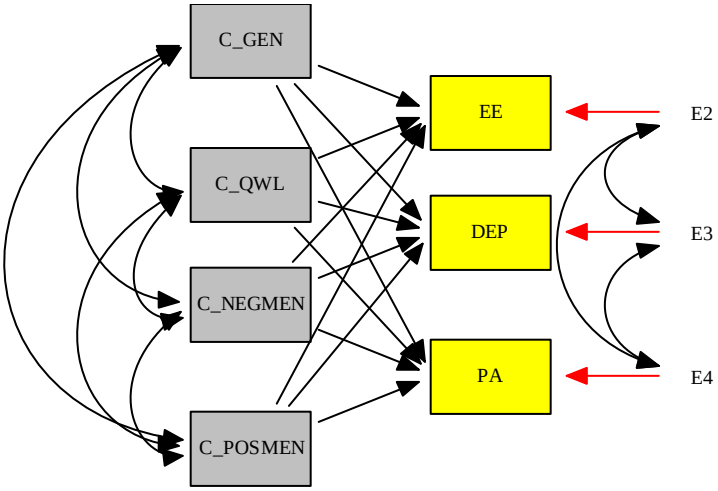

Figure 2. *Path Model-All Main Effects*

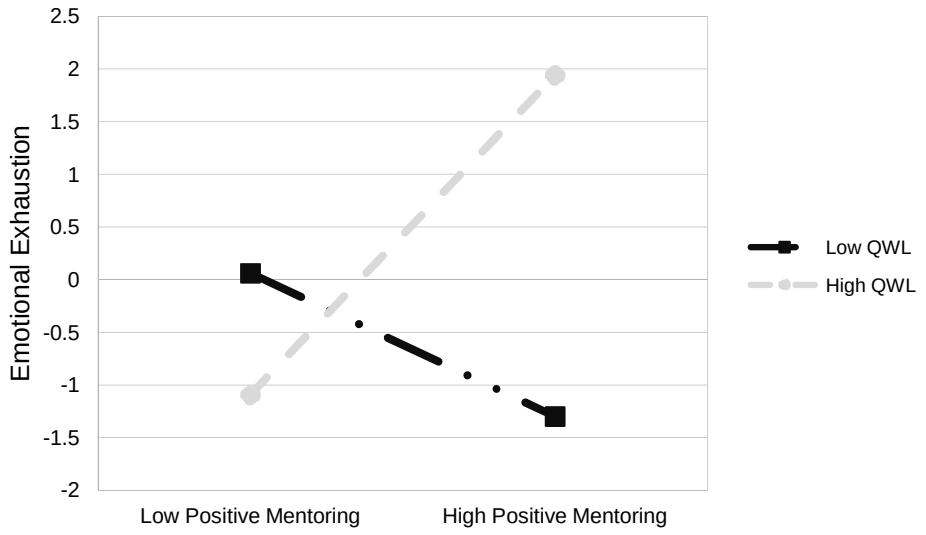

Figure 3. *Moderating effect of Quantitative Workload and Positive Mentoring on Emotional Exhaustion*

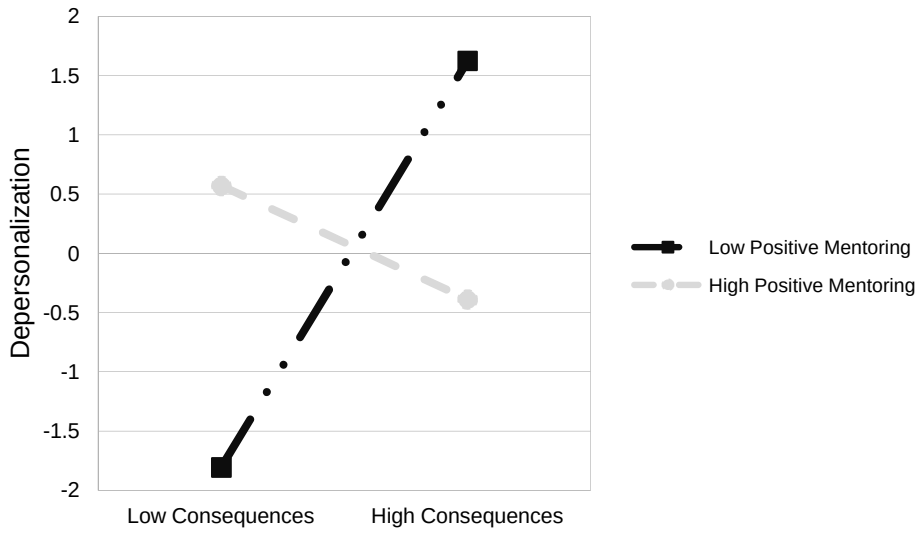

Figure 4. *Moderating effect of Perceived Consequences of Protégé Mistakes and Positive Mentoring on Depersonalization*

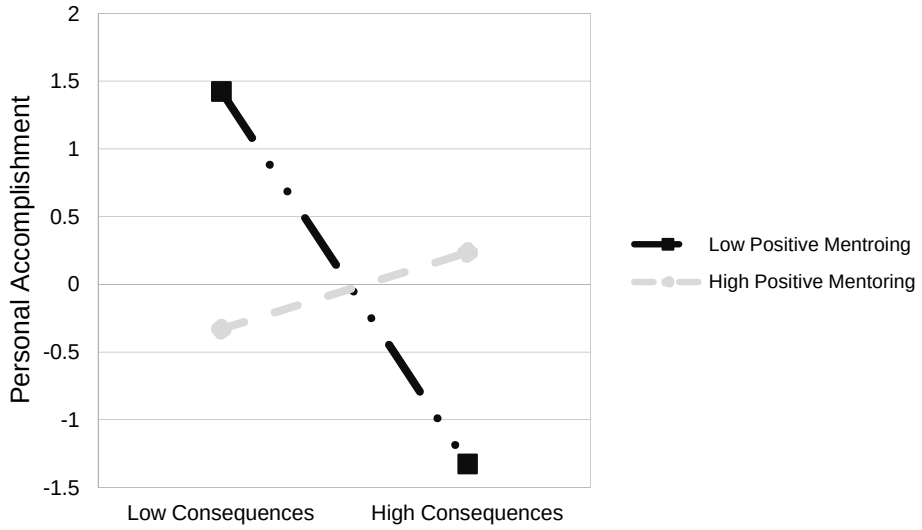

Figure 5. *Moderating effect of Perceived Consequences of Protégé Mistakes and Positive Mentoring on Personal Accomplishment*

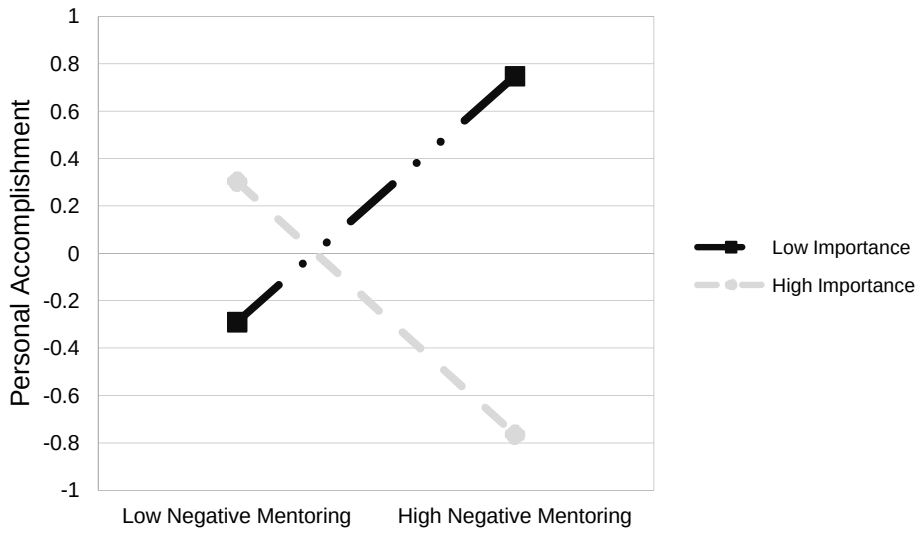

Figure 6. *Moderating Effect of Perceived Importance of Mentoring to Career and Negative Mentoring on Personal Accomplishment.*

Table 1

Correlations Between Variables, Means and Standard Deviations for Mentors

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Emotional Exhaustion	3.10	1.24												
2. Personal Accomplishment	6.02	.85	-.47**											
3. Depersonalization	2.00	1.04	.66**	-.50**										
4. Positive Mentoring	5.05	.95	-.13	.01	-.03									
5. Negative Mentoring	2.28	.88	.10	-.01	.01	-.44**								
6. Mentor Quality	5.40	1.35	-.02	-.01	-.04	.60**	-.37**							
7. Quantitative Workload	5.42	.99	.58**	-.13	.31*	-.26*	.02	.01						
8. Hrs/week	37.28	9.09	.20	-.15	.05	.13	.02	-.07	.14					
9. Patients/week	18.55	15.42	.21	.02	.35**	-.11	.15	-.08	.16	-.01				
10. Consequences	4.01	.90	.02	-.06	.04	.08	.20	-.22	-.05	.04	.16			
11. Importance	3.74	1.16	-.27*	-.08	-.26*	.08	-.10	-.05	-.28*	.27*	-.31*	.10		
12. Need	5.71	.93	.08	-.13	.07	.46**	-.38**	.57**	.14	.06	.01	-.03	-.15	
13. Generativity	5.49	.84	-.04	.32**	-.16	.17	-.12	.22	.24*	-.02	-.10	-.02	-.05	.22

Note: Sample sizes for bivariate correlations for nurse mentors range from 66 to 71

Table 2

Means and Standard Deviations for Full Sample

Variable	Mean	Standard Deviation
Emotional Exhaustion	2.98	1.15
Personal Accomplishment	5.85	.97
Depersonalization	1.96	1.01
Quantitative Workload	5.20	.91
Hours worked per week	34.94	9.29
Patients seen per week	20.84	23.75
Perceived Consequences	4.11	.87
Perceived Need	5.59	.94
Perceived Importance	3.85	1.08
Generativity	5.37	.90
Age	41.09	11.21
Years at Hospital	8.12	7.64
Years in Occupation	15.05	11.19

Table 3

Parameter Estimates, Standard Errors, and Z-scores for Models 1, 2 and 3

	Dependent Variables	Predictors	Unstandardized Estimate (Standardized Estimate)	Standard Error	Z-Score
Model 1	Emotional Exhaustion	Positive Mentoring	-.172 (-.100)	.241	-.714
		Negative Mentoring	.056 (.040)	.198	.284
	Personal Accomplishment	Positive Mentoring	.136 (.117)	.163	.834
		Negative Mentoring	.035 (.037)	.134	.264
	Depersonalization	Positive Mentoring	-.189 (-.133)	.199	-.950
		Negative Mentoring	-.036 (-.031)	.163	-.222
Model 2	Emotional Exhaustion	Positive Mentoring	.272 (.160)	.209	1.300
		Negative Mentoring	.215 (.153)	.157	1.368
		Generativity	-.356* (-.233)	.168	-2.118*
		Quantitative Workload	.856* (.666)	.134	6.406*
	Personal Accomplishment	Positive Mentoring	-.121 (-.105)	.170	-.710
		Negative Mentoring	-.021 (-.022)	.128	-.164
		Generativity	.411* (.394)	.137	3.008*
		Quantitative Workload	-.228* (-.261)	.109	-2.098*
	Depersonalization	Positive Mentoring	.123 (.089)	.200	.612
		Negative Mentoring	.078 (.068)	.150	.520
		Generativity	-.327* (-.262)	.161	-2.033*
		Quantitative Workload	.439 (.419)	.128	3.434*
Model 3	Emotional Exhaustion	Positive Mentoring	.227 (.162)	.150	1.339
		Negative Mentoring	.154 (.113)	.164	.940
		Generativity	-.314* (-.214)	.157	-1.997*
		Quantitative Workload	.763* (.612)	.130	5.867*
		Hrs/Week	.014 (.104)	.012	1.161
		Patients/Week	.008 (.09)	.008	.959
	Personal Accomplishment	Positive Mentoring	-.138 (-.148)	.090	-1.543
		Negative Mentoring	-.028 (-.031)	.101	-.280
		Generativity	.430* (.437)	.150	2.862*
		Quantitative Workload	.-.232* (-.277)	.098	-2.353*
		Hrs/Week	-.008 (-.086)	.010	-.754
		Patients/Week	.005 (.096)	.006	.885
	Depersonalization	Positive Mentoring	.256* (.231)	.119	2.151*
		Negative Mentoring	.007 (.071)	.143	.536
		Generativity	-.370* (-.317)	.146	-2.531*
		Quantitative Workload	.389* (.392)	.130	2.993*
		Hrs/Week	-.002 (-.016)	.010	-.168
		Patients/Week	.018* (.274)	.006	2.856*

Table 4

Parameter Estimates, Standard Errors, and Z-scores for Interaction Terms

		Unstandardized Estimate (Standardized Estimate)	Standard Error	Z-Score
Positive Mentoring by Quantitative Workload	Emotional Exhaustion	.481* (.276)	.203	2.365*
	Personal Accomplishment	-.222 (-.188)	.161	-1.381
	Depersonalization	.091 (.057)	.187	.433
Negative Mentoring by Quantitative Workload	Emotional Exhaustion	.339 (.220)	.242	1.403
	Personal Accomplishment	-.134 (-.129)	.143	-.938
	Depersonalization	-.089 (-.071)	.210	-.423
Positive Mentoring by Need	Emotional Exhaustion	.170 (.103)	.272	.625
	Personal Accomplishment	-.143 (-.127)	.238	-.599
	Depersonalization	-.266 (-.197)	.258	-1.031
Negative Mentoring by Need	Emotional Exhaustion	.295 (.200)	.205	1.463
	Personal Accomplishment	.001 (.001)	.119	.012
	Depersonalization	.063 (.052)	.190	.329
Positive Mentoring by Importance	Emotional Exhaustion	.196 (.166)	.237	.828
	Personal Accomplishment	-.230 (-.289)	.155	-1.487
	Depersonalization	.264 (.274)	.153	1.725
Negative Mentoring by Importance	Emotional Exhaustion	.303 (.280)	.190	1.592
	Personal Accomplishment	-.303 (-.414)*	.119	2.556*
	Depersonalization	.146 (.166)	.126	1.162
Positive Mentoring by Consequences	Emotional Exhaustion	-.186 (-.140)	.151	-1.238
	Personal Accomplishment	.291 (.324)*	.117	2.479*
	Depersonalization	-.385 (-.356)*	.150	-2.566*
Negative Mentoring by Consequences	Emotional Exhaustion	-.159 (-.108)	.226	-.702
	Personal Accomplishment	.032 (.032)	.134	.237
	Depersonalization	-.144 (-.121)	.179	-.809
Positive Mentoring by Generativity	Emotional Exhaustion	-.032 (-.019)	.244	-.132
	Personal Accomplishment	.228 (.196)	.210	1.081
	Depersonalization	.152 (.108)	.226	.669
Negative Mentoring by Generativity	Emotional Exhaustion	.126 (.079)	.214	.587
	Personal Accomplishment	-.125 (-.115)	.118	-1.059
	Depersonalization	.302 (.232)	.184	1.639

Table 5
Organizational Predictors of Mentoring Behavior

Predictor	*B*	*SE*	$\Delta\chi^2_{removal}$	95% CI for Odds Ratio	
				Lower	Upper
Constant	-4.069	1.109	--	--	--
Shift Type	-.360	.368	3.973*	.247	.997
TOD Shift	-.360	.368	3.11	.339	1.436
Quantitative Workload	.768	.213	41.16*	1.421	3.273

Notes: * $p < .05$, $\chi^2 = 16.881$, $R^2_L = 0.921$. Initial -2 Log Likelihood (-2LL) = 212.695, Model -2 LL = 195.815

Table 6
Individual Predictors of Mentoring Behavior

Predictor	*B*	*SE*	$\Delta\chi^2_{removal}$	95% CI for Odds Ratio Lower	Upper
Constant	-6.013	2.393	--	--	--
Shift Type	-.590	.393	2.289	.256	1.198
TOD Shift	-.486	.393	0.0	.285	1.329
Quantitative Workload	.683	.257	-7.555*	1.196	3.275
Emotional Exhaustion	.027	.228	-.014	.657	1.605
Depersonalization	.069	.241	.082	.668	1.719
Personal Accomplishment	.234	.242	0.0	.940	.2119
Need	.344	.207	2.818	.940	2.119
Importance	-.173	.172	1.018	.534	1.297
Consequences	-.184	.226	.753	.534	1.297
Generativity	.051	.224	.051	.678	1.633

Notes: * $p < .05$, $\chi^2 = 22.331$, $R^2_L = 0.892$. Initial -2 Log Likelihood (-2LL) = 206.904, Model -2 LL = 184.573

APPENDICES

Appendix A

Demographic Information

1. Age
2. Gender
3. Race/Ethnicity
4. How long have you been working in your current job at the Hospital? (round to the nearest year)
5. How long have you been working in the same occupation either at this Hospital or elsewhere? (round to the nearest year)
6. Do you supervise others in your job at the Hospital? Yes/No
7. Do you serve as a preceptor? Yes/No
8. Do you work with less experienced nurses at the hospital? Yes/No

Appendix B

Assessment of Mentoring Behavior

We would like to know if you have ever served as a mentor. When we use the term "mentor" we are asking if there has been an individual who you have taken a personal interest in at work; someone who you have guided, sponsored, or otherwise had a positive and significant influence in their professional career development. This individual may or may not be in your unit and s/he may or may not be your immediate subordinate. The term used to refer to the person you mentor is "protégé".

1. During the past year, have you served as a mentor to another nurse at the hospital? (This should go beyond serving as a preceptor). Yes/NO
2. Is this mentoring relationship (please choose one)
    a. Ongoing
    b. Ended in the last 1-3 months
    c. Ended in the last 4-6 months
    d. Ended in the last 7-9 months
    e. Ended in the last 10-12 months
    f. Ended more than a year ago
3. In general, how often do you/did you interact with the employee that you mentor?
    a. A few times a year
    b. Once a month
    c. Once a week
    d. Daily
4. What is/was the duration of this mentoring relationship?

a. 1-3 months

b. 4-6 months

c. 6 months-1 year

d. Over 1 year

e. 2 years or more

5. Have you served as a mentoring prior to this mentoring relationship? Yes/No
6. If you have served as a mentor in the past, approximately how many people have you mentored over the course of your career?
7. During the past year have you had a mentor? Yes/No

Appendix C

Positive Mentoring Experience

1. I get a sense of fulfillment by passing on wisdom on to others.
2. Serving as a mentor has been one of the most positive experiences in my career.
3. Mentoring makes me feel better about myself.
4. My protégé has enhanced my reputation.
5. I have gained a sense of satisfaction by passing on my insights to another.
6. My creativity has increased from mentoring others.
7. Mentoring has had a positive impact on my job.
8. My job has been rejuvenated by this relationship.
9. Mentoring has been a catalyst for innovation.
10. Mentoring has had a positive impact on my job performance.
11. My protégé is a positive reflection on my competency.
12. I have obtained positive recognition in my organization for assuming a mentoring role.
13. I have received recognition from my superiors for developing the talent of my protégé.
14. I have gained status amongst my peers for mentoring.

Appendix D

Negative Mentoring Experience

Protégé Performance Problems.

1. My protégé has performance problems on the job.
2. My protégé's performance does not meet my expectations.
3. My protégé does not seem interested in learning better ways to do things.
4. My protégé is reluctant to change his/her behavior in response to feedback.

Interpersonal Problems.

1. This protégé and I have conflicting personalities.
2. Our relationship suffers because of interpersonal conflicts.
3. I feel that our relationship is not as satisfying as it used to be.
4. I feel that my protégé is no longer as loyal to me as he/she once was.
5. My protégé uses flattery to make me like him/her more.
6. My protégé engages in political game-playing.
7. My protégé is too dependent on our mentoring relationship.
8. My protégé has trouble doing things without a lot of guidance from me.

Appendix E

Maslach Burnout Inventory

1. I feel emotionally drained from my work. (EE)
2. I feel used up at the end of the workday. (EE)
3. I feel fatigued when I get up in the morning and have to face another day on the job. (EE)
4. I can easily understand how my patients feel about things. (PA)
5. I feel I treat some patients as if they were impersonal objects. (D)
6. Working with people all day is really a strain for me. (EE)
7. I deal very effectively with the problems of my patients. (PA)
8. I feel burned out from my work. (EE)
9. I feel I'm positively influencing other people's lives through my work. (PA)
10. I've become more callous toward people since I took this job. (D)
11. I worry that this job is hardening me emotionally. (D)
12. I feel very energetic. (PA)
13. I feel frustrated by my job. (EE)
14. I feel I'm working too hard on my job. (EE)
15. I don't really care what happens to some patients. (D)
16. Working with people directly puts too much stress on me. (EE)
17. I can easily create a relaxed atmosphere with my patients. (PA)
18. I feel exhilarated after working closely with my patients. (PA)
19. I have accomplished many worthwhile things in this job. (PA)

20. I feel like I’m at the end of my rope. (EE)

21. In my work, I deal with emotional problems very calmly. (PA)

22. I feel patients blame me for some of their problems. (D)

Appendix F

Perceived Quantitative Workload

1. How often does your job require you to work very fast?
2. How often does your job require you to work very hard?
3. How often does your job leave you with little time to get things done?
4. How often is there a great deal to be done?
5. How often do you have more work than you can do well?
6. How many hours do you work in the typical week?
7. How many patients do you provide care for in the typical week?

Appendix G

Perceived Consequences of Protégé Mistakes

1. When a protégé makes errors or mistakes, it is a poor reflection on their mentor.
2. As a mentor, I would worry about potential errors or mistakes my protégé might make.
3. As a mentor, I would feel personally responsible for errors or mistakes my protégé made.
4. Being affiliated with a protégé who performs poorly would be bad for the reputation of the mentor.
5. When a protégé performs well, it has a positive influence on the way their mentor is viewed at work.

Appendix H

Perceived Value of Mentoring

1. I think there is a strong need for mentoring at the hospital.
2. There are many younger/less experienced nurses at the hospital in need of mentoring.
3. Mentoring is something that the hospital rewards.
4. I feel that serving as a mentor is critical to my advancement in the hospital.
5. I feel that serving as a mentor is critical to my job security at the hospital.

Appendix I

Loyola Generativity Scale

1. I try to pass along the knowledge I have gained through my experiences to my coworkers.
2. I have made and created things at my job that have had an impact on other people.
3. I have important job skills that I try to teach those I work with.
4. In general, my actions have a positive effect on others I work with.
5. I feel as though I have made valuable contributions to those I work with.
6. I have a responsibility to improve the hospital in which I work.
7. People at work come to me for advice.

Appendix J

Shift Work

1. Do you work a fixed or rotating schedule?
    a. Fixed (I work the same schedule everyday)
    b. Rotating (I have a different schedule every day or every week)
2. On average, how many hours do you work each shift?
3. When do you most commonly work?
    a. Day Shift (Begin work in the morning)
    b. Evening Shift (Begin in the afternoon or evening but do not work overnight)
    c. Night Shift (Work overnight)