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WHY DOESN'T SOCIAL SUPPORT ALWAYS WORK? EVALUATING
THE EFFECTS OF SUPPORT SOURCE, SUPPORT TYPE, AND
INDIVIDUAL DIFFERENCES ON WORKPLACE STRAIN

A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Science
in
Psychology:
Industrial/Organizational

by
Alyx E'lan Kahler

June 2008

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Approved by:



Dr. Janet Kottke, Chair, Psychology



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4/25/2008

Date

ABSTRACT

In the current study, I sought to evaluate the effects of social support on the stress-strain relationship and factors that may impact the effectiveness of social support in reducing workplace strain. The type of social support provided, the source of the support, the recipient's gender, and the personality characteristic of neuroticism were hypothesized to affect the perceptions of social support. Bivariate correlations, ANOVA, and regression analyses were conducted to determine whether social support was related to environmental stressors and the experience of strain. A direct relationship was found between social support and stress, and social support and strain in that social support was significantly correlated with stress and with strain. Only minimal evidence was found for social support serving as a buffer against strain. Despite this lack of buffering, the importance of social support in reducing strain should not be overlooked. Greater social support predicted lower levels of strain, regardless of the stressors present in the environment. However, the type of support provided and neuroticism were not found to significantly impact strain. The findings for the support source and gender, although only partially supported, were suggestive for future research.

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CHAPTER ONE

INTRODUCTION

In a survey of the US workforce, one third of respondents indicated that their jobs were "often" or "always" stressful (Murphy & Sauter, 2003). The experience of stress in the workplace is becoming an increasing concern for employees and organizations alike as research indicates that consistent exposure to stress is associated with negative physical and psychological reactions such as insomnia, depression, (Conti, Angelis, Cooper, Faragher, & Gill, 2006) and high blood pressure (Caplan, Cobb, & French, 1975). Job characteristics and organizational practices, such as lean management, have been implicated as contributors to employee work stress (Conti et al., 2006).

To reduce operating costs and increase competitiveness in the global market, organizations and their employees are now expected to produce more with fewer resources and less time than ever before. As a result, many organizations have adopted a lean business model which focuses on eliminating waste in the production process (Conti et al., 2006). Techniques such as just-in-time delivery systems and total quality management

have replaced the traditional practices of keeping inventories and cutting costs through economy of scale (Bendell, 2006). These new techniques eliminate surplus items that do not generate profits, but also increase the intensity of job demands due to the decreased margin for error or delay (Conti et al., 2006). While employees have experienced stressful circumstances under the traditional business model, lean management practices may result in greater experience of strain as layers of management are removed, the pace of work becomes more intense, and jobs become more complex and enlarged. The detrimental effects of work stress affect both the individual and the organization in terms of employee health and productivity. As illustrative of these detrimental effects, Cox, Griffiths, and Rial-Gonzales (2000) reported that 50 to 60 percent of all lost working days are stress related. In a survey of employees in various industries, 72.2% of respondents reported not exercising regularly due to job demands, 69.2% reported putting on weight, and 36.6% reported that the job demands contributed to long-term health conditions (Cummings, 2001). In response to such research findings, some organizations are now seeking ways to counteract strain experienced by their employees. One means available to organizations is to harness the power

of social support in the workplace to combat stress. While initial research on social support in the organizational context has been very promising, recent findings suggest a more detailed understanding of the social support process is necessary for social support to be used effectively in the workplace.

Stress and Strain

Stress is defined by Caplan et al. (1975) as any characteristic of the job environment that poses a threat to the individual's well being. Stress occurs when there are demands that can not be met by the individual or the resources available are insufficient to meet the demand or complete the task. *Strain* is defined as an outcome of chronic stress that results in a deviation from an individual's normal responses (Caplan et al., 1975). The detrimental effects of strain can manifest both physically and psychologically (Caplan et al., 1975). Physical symptoms of strain can include increased blood pressure (Caplan et al., 1975; Wellens & Smith, 2006), fatigue (Wellens & Smith, 2006), sleep problems, chronic headaches (Aasa, Brulin, & Angquist, 2005), and elevated serum cholesterol levels (Caplan et al., 1975). The psychological symptoms of strain include job

dissatisfaction, anxiety, and low self-esteem (Caplan et al., 1975).

Uncovering means to lessen the detrimental effects of stress has become important for researchers and organizations alike. The detrimental effects of role stress have been the subject of over 300 journal articles since the 1970s (Ortqvist & Wincent, 2006), indicating general interest within the research community. Over the past few decades, this research has helped organizations recognize the costs of chronic employee stress, including decreased productivity, lost time due to illness, burnout, and turnover (Chang, Hancock, Johnson, Daly, & Jackson, 2005). Webster and Bergman (1999) found that the median number of days employees were absent for illness was four times longer if the case was related to job stress. Additionally, the costs of health care for employees reporting high levels of stress was 50% higher than for employees who were considered risk free (Goetzel, Anderson, Whitmer, Ozminkowski, Dunn, & Wasserman, 1998). To best understand work stress, it must first be broken down into source components which include environmental factors, personal characteristics of the individual, and the person-environment interaction (Beehr & Newman, 1978).

Environmental Factors

Environmental factors are the characteristics of the work environment that contribute to an individual's experience of stress; these factors are often referred to as stressors (Beehr & Newman, 1978). These stressors include aspects of the individual's job such as task characteristics, role demands, ambiguity in expectations, and time pressures. Organizational characteristics that may serve as stressors include policies and procedures, the structural hierarchy, lean management practices, reward systems, and organizational climate. Factors external to the organization, such as competition, market and consumer patterns, relations with suppliers, and government regulations can also be considered stressors. The stressors present in the individual's work environment serve as antecedents to his or her experience of strain.

Personal Factors

Personal characteristics, such as personality and gender, can affect an individual's susceptibility to stressors and the experience of strain. Of the Big 5 personality traits, neuroticism has been shown to be the most strongly related to work strain. Individuals high in neuroticism are more likely to perceive stressors in the environment and react negatively to those stressors making

them more susceptible to experiencing strain (Knussen & Niven, 1999). Gender is also an important consideration in research on work strain. Several studies suggest that men and women may perceive stressors differently and employ different coping strategies in response to similar environmental stressors (Dunkel-Schetter, Folkman, & Lazarus, 1987; González-Morales, Peiro, & Rodriguez, 2006).

Person-Environmental Interaction

The person-environment interaction encompasses the physiological and psychological processes that link the environmental and personal factors (Beehr & Newman, 1978). These processes include the use of coping strategies to handle the strain experienced at work. This interaction factor in the stress-strain relationship is of particular interest because it is the most malleable to change. Although many of the organizational characteristics, such as policies and procedures, are under the control of the organization, other environmental factors that lead to strain are often beyond the scope of organizational control, such as time pressures to produce in a competitive market. Personal factors are also difficult to address. Personality characteristics may be selected for in the hiring process; however, this does not address

current employees experiencing strain. To gain some advantage in the fight against work stress, attention has been turned to this interaction component in the stress-strain relationship. Social support is one of the means of coping available that may buffer the effects of stress. Before addressing the social support process, it is necessary to define the organizational stressors more precisely to provide a clear picture of the environmental factors that contribute to strain.

Stressors

When assessing the stressful environmental factors that lead to the experience of strain, it is important to consider the social context of an organization. Within the organization, individuals occupy roles which can be defined as the behavioral expectations for one's position within the social system. In the organizational context, a stressor is defined as a work related cause of or input to stress. Role stress is experienced by employees when the behavioral expectations of their work roles are perceived as conflicting, ambiguous or overwhelming (Ortqvist & Wincent, 2006).

There are three distinct forms of role stress which include role conflict, role ambiguity, and role overload.

While all three types of role stress are related to experienced strain, each facet has unique antecedents and is differentially related to strain outcomes, such as job satisfaction, organizational commitment, and turnover intentions.

Role Conflict

Role conflict arises when the expectations of various parties are inconsistent or incongruent with role demands, values, or personal needs (Leigh, Lucas, & Woodman, 1988). This conflict creates tension within the individual, leading to the experience of strain. In a recent meta-analytic study of job stress, role conflict was related to outcomes such as physical tension and propensity to quit (Ortqvist & Wincent, 2006). Role conflict has also been negatively related to job satisfaction and organizational commitment (Netemeyer, Johnston, & Burton, 1990) and positively related to turnover intentions (Ngo, Foley, & Loi, 2005)

Role Ambiguity

Role ambiguity is defined by a lack of necessary information about the expectations of one's given role in the organization (Rizzo, House, & Lirtzman, 1970). When job responsibilities and tasks are not clearly defined, the individual may experience uncertainty about what

behaviors fulfill his or her role obligations. Role ambiguity is related to outcomes such as organizational commitment and job satisfaction (Ortqvist & Wincent, 2006; Ngo et al., 2005). Specifically, role ambiguity has been shown to have a direct negative effect on job satisfaction, so as role ambiguity increases, job satisfaction decreases. The experience of job satisfaction is positively related to organizational commitment and negatively related to turnover intentions. Role ambiguity, therefore, has an indirect effect on organizational commitment and turnover intentions through job satisfaction. As role ambiguity increases, the individual's level of job satisfaction decreases, which in turn decreases commitment to the organization and increases intentions to turnover (Netemeyer et al., 1990).

Role Overload

Role overload occurs when there is inadequate time and resources available to meet the expectations and obligations of one's role. Role overload is most closely related to the outcomes of burnout, which include emotional exhaustion, cynicism, and decreased professional efficacy (Maslach & Jackson, 1981). In a study of role overload in nurses, increased workload was correlated with increased cynicism, anger, and emotional exhaustion

(Greenglass, Burke, & Moore, 2003), which closely reflect the facets of burnout. The two components in role overload, inadequate time and insufficient resources, relate differently to each facet of burnout. Increased job demands, which leads to inadequate time to complete tasks, have been related to the emotional exhaustion facet of burnout. Decreased resources, on the other hand, have been related to increased cynicism and decreased professional efficacy (Bakker, Demerouti, & Euwema, 2005). Fewer studies have been conducted on the effects of role overload than on role conflict and role ambiguity. It is important to note that role overload has not been demonstrated to have a direct effect on job satisfaction or tension. Role overload does, however, affect organizational commitment and turnover intentions through burnout, meaning that those suffering from burnout due to role overload are less committed to the organization and are more likely to express intentions to quit (Netemeyer, Burton, & Johnston, 1995).

When assessing the stressors present in the organizational environment it is important to account for all three types of role stress. For organizations wishing to decrease employee strain, it is imperative to identify the type of stressors present in the environment due to

their different antecedents and strain outcomes. For example, attempting to clarify instructions to employees would be ineffective in reducing strain if the employees are experiencing role overload rather than role ambiguity. Such actions may actually increase strain because the employees' already scarce time is being used for unneeded role clarifications. By understanding the role stressors present in the environment and the outcomes associated with those stressors, organizations can seek to use social support effectively within the workplace to decrease employee strain.

Social Support

In the current global organizational environment, addressing the source of the role stress, whether conflict, ambiguity, or overload, may not be possible. If the stressors in the environment can not be reduced, then other methods at the individual and organizational levels must be used to help employees cope with stress and reduce the negative effects of strain. Social support has been of particular interest because it is a low cost method that has the potential to have significant impact on the level of strain experienced by employees. Social support from one's supervisor and the organization has been shown to

have positive effects for employees (Ganster, Fusilier, & Mayes, 1986). Social support from organizational sources is also of interest because these sources are within the scope of organizational control, as opposed to co-worker or non-work sources of support such as family and friends. Further, studies have shown that supervisor support is more effective in reducing work-related strain than co-worker or family support (Fenlason & Beehr, 1994). Supervisor support involves receiving information, resources, or emotional support from one's direct supervisor to cope with stressful situations that occur in the workplace (Rhoades & Eisenberger, 2002). Research on organizational support has often viewed supervisor support as synonymous with organizational support; however, recent findings have brought this idea into question (Stinglhamber, de Cremer, & Mercken, 2006). Before addressing this issue, a clear definition of social support and its effects on the stress-strain relationship must be established.

Social support is defined as the degree of consideration, information, and task assistance available to an individual from his or her personal network (Iverson, Olekalns, & Erwin, 1998). Social support can come from numerous sources including the organization,

one's supervisor, co-workers, and individuals outside of the organization. The social support that one receives from any of these sources can be categorized into two types: emotional and instrumental.

Emotional support involves receiving love, acceptance, or respect from others in times of stress (Lindorff, 2005). Emotional support is most frequently received from non-work sources including family and friends (Beehr, 1985), but it can be received from co-workers and supervisors as well. In times of stress, emotional support provides understanding and acceptance to the individual which may subsequently reduce strain. This form of support does little, however to address the actual source of the stress (Fenlason & Beehr, 1994). Emotional support is useful in situations where few resources or options are available to address stressors and a high level of strain is being experienced by the individual.

The second type of social support is *instrumental* support, which involves receiving information, advice, materials, and assistance from others (Lindorff, 2005). This type of support is most often associated with workplace sources, such as supervisors and coworkers because they are more readily able to provide the information and resources necessary for the individual to

cope with the workplace stressor (Beehr, 1985). Instrumental support can be used to combat directly the source of the workplace stressor. For example, information from one's supervisor can be used to clarify role requirements, thereby decreasing role ambiguity (Fenlason & Beehr, 1994). In situations that the available resources and information are insufficient to affect stressors, instrumental support can not be used. Attempting to provide support with inadequate resources only highlights their ineffectiveness, which may actually increase strain (Knussen & Niven, 1999). Selecting the appropriate type of support may be important for decreasing employee strain. The distinction between the types of support, however, is not as clear as past research suggests. Fenlason and Beehr (1994) found a moderate correlation between measures of emotional and instrumental support that stem from the same source, such as the supervisor. This finding implies that a supervisor may give emotional support while providing the resources necessary to resolve the problem causing the stress. An alternative explanation is that employees do not actively distinguish between the two forms of support. Many social support scales include items that assess both forms of social support. Consequently, much of the prior research on work stress does not explicitly distinguish

emotional from instrumental support when multiple components of the stress-strain relationship are being assessed. Due to the different circumstances in which instrumental and emotional support can be effective in reducing strain, not distinguishing these two forms of support could lead to conflicting or misleading findings. Distinguishing emotional support from instrumental support also may be important in assessing gender differences in the effects of social support on strain.

Social support can affect the stress-strain relationship in three different ways. First, social support may directly reduce the individual's level of strain regardless of the stressors present in the environment (Beehr, 1985). Individuals who receive social support have reported lower levels of strain independent of the stressor present in the workplace. The direct effect of social support implies that environmental stressors, such as role ambiguity, role conflict, and role overload, are not necessary to elicit social support from others in the workplace (Viswesvaran, Sanchez, & Fisher, 1999). Second, social support may have a mediating effect on stress-strain relationship. Rather than acting on strain directly, social support can reduce the level or intensity of perceived stressors, which then reduces the

strain experienced by the individual (Viswesvaran et al., 1999). Third, social support may serve as a buffer, meaning when social support is high, the relationship between stress and strain is weaker than when social support is low (Kirmeyer & Dougherty, 1988). In a meta-analysis conducted by Viswesvaran, Sanchez, and Fisher (1999) evidence was found for all three pathways of social support on the stress-strain relationship.

Inconsistencies still remain however, in the research on the buffering effects of social support with some studies finding a marginal effect, others finding no effect, and still others finding a reverse buffering effect (Beehr, Farmer, Glazer, Gudanowski, & Nair, 2003). The reverse buffering effect occurs when receiving social support is correlated with higher levels of reported strain, which implies that social support may actually increase strain rather than reduce it (Beehr et al., 2003). Several hypotheses regarding the reverse buffering effect have been proposed. One explanation is that the receipt of social support may affect an individual's perception of the stressors present in the environment. The offer of social support may prompt the recipient to reappraise the situation and conclude that the stressor is actually worse than initially thought; thereby increasing

his or her experienced strain (Fenlason & Beehr, 1994). Testing this hypothesis is difficult, however, given the questionable reliability of such retrospective assessments of individual perceptions. Another hypothesis is that receiving social support may conflict with established social and gender roles. This conflict creates discomfort and thereby increases strain (Lindorff, 2005). An additional consideration in the reverse buffering effect is individual differences. Personality characteristics, such as neuroticism, have been implicated as an important factor in assessing the buffering effect of social support (Iverson et al., 1998).

The inconsistent findings in the social support literature have prompted researchers to consider other variables that may impact the effectiveness of social support as a buffer against stress. The source of the social support, gender differences in perception of support, and personality should all be considered when evaluating the usefulness of social support in organizations. The potential differential impact of these three factors on the stress-strain relationship is discussed below, beginning with the source from which the employee receives support.

Source of Social Support

Two of the most influential and prevalent sources of support available to an employee are organizational support and supervisor support. While support from co-workers and significant others outside of the organization is important, previous studies have shown that a supportive relationship with one's supervisor is more closely related to lower levels of reported work strain than support from other sources (Fenlason & Beehr, 1994; Lim, 1996). Supervisors may have access to resources and information that co-workers and significant others do not, and therefore support from this level may be more effective in addressing stressors and decreasing strain. Based on the Organizational Support Theory (Eisenberger, Huntington, Hutchison, & Sowa, 1986), many of these studies assume that the supervisor is considered a representative of the organization. The supervisor's support is construed by the employee as message of caring from the organization; however, this characterization may not always be the case. Recent research suggests that amount of support individuals perceive as stemming from the supervisor is distinguishable from the perceived level of organizational support (Stinglhamber et al., 2006).

Perceived Organizational Support

According to Eisenberger's Organizational Support Theory (1986) employees tend to assign humanlike characteristics to the organization. Actions taken by those within the organization are viewed as indicators of the organization's intent. Employees develop beliefs about the extent to which the organization values their contributions and cares for their well-being by assessing the organization's readiness to provide support and distribute rewards (Eisenberger et al., 1986). According to Eisenberger, the supervisor is considered an agent of the organization rather than an individual and any support provided to employees is viewed as representative of the goodwill of upper management. Perceived Organizational Support (POS) is the extent to which employees believe aid is available from the organization when needed to carry out their jobs effectively and to deal with stressful events (Rhoades & Eisenberger, 2002). Organizational actions such as promotions, pay, job enrichment, and fair treatment, also termed procedural justice, can contribute to the development of POS if these actions are viewed as discretionary rather than the result of policy or legislation (Eisenberger, Cummings, Armeli, & Lynch, 1997). POS may weaken the relationship between stressors

and strain by reducing the adverse effects of stressors. POS has also been shown to be negatively related to measures of strain including burnout (Cropanzano, Howes, Grandey, & Toth, 1997), turnover intentions (Rhoades, Eisenberger, & Armeli, 2001), and withdrawal behavior (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001).

Perceived Supervisor Support

A study conducted by Stinglhamber, de Cremer, and Mercken (2006) has challenged the idea that supervisor support is synonymous with organizational support by demonstrating that while highly related, perceived supervisor support (PSS) and POS are separate constructs with different antecedents and outcomes. To measure PSS, the authors substituted the word "supervisor" for "organization" in the POS scale (cf., Kottke & Sharafinski, 1988). POS was related to procedural justice and trust in the organization, while PSS was related to interactional justice and trust in one's supervisor (Stinglhamber et al., 2006). This finding highlights the importance of distinguishing the perception of supervisor support from the perception of organization support when assessing the buffering effect of social support. This distinction implies that an employee may experience social support from his or her supervisor without attributing it

to the organization as stated by the Organizational Support Theory. If the measure of social support does not distinguish between supervisor and organizational support, individuals may be responding based on different assumptions. For example, if the social support measurement scale includes language that references the supervisor and the organization, employee A may respond based on the support provided by his or her supervisor while employee B responds based on the perception of organizational support. These differing perspectives may result in very different levels of reported support and strain, making social support appear ineffective in buffering against strain when in fact the issue lies in the methodology rather than the construct.

The outcomes associated with POS and PSS may also be different. In a study of social exchange theory and POS by Settoon, Bennett, and Liden (1996), POS and Leader-Member Exchange were found to be related to different employee attitudes. The concept of the Leader-Member exchange dyad shares many similarities with the concept of PSS. Employees in the LMX dyad are provided with more resources, more information, more loyalty, and greater opportunities for advancement which may be considered forms of supervisor support. In the Settoon et al. (1996)

study, POS was related more strongly to measures of organizational commitment, while LMX was related more strongly to organizational citizenship behaviors and in-role behaviors. Additionally, Kottke and Sharafinski (1988) found that PSS showed a stronger relationship to absenteeism than POS. These findings suggest that POS and PSS may produce different attitudinal and behavioral outcomes. Due to the differences in perceptions and outcomes, separating supervisor support from organizational support is imperative when assessing the buffering effects of social support. In addition to accounting for the outcomes of different sources of social support, it is also important to consider how the support is perceived which is impacted by personal factors such as gender and personality.

Gender

In investigating the inconsistent effects of social support on strain, particularly the reverse buffer effect, gender is often related to the differential effects of social support (González-Morales et al., 2006). Typically, social support has been found to be more beneficial for women than for men in organizations; however, this difference by gender is not always found. Some studies

have shown no gender difference in the buffering effect of social support (Fusilier, Ganster, & Mayes, 1986; Lindorff, 2005; Loscocco & Spitze, 1990). Assessing the proportion of studies that found significant gender differences in social support is difficult due to the different conceptions of social support and strain. Some authors have focused on coping styles and perceptions (Dunkel-Schetter et al., 1987; González-Morales et al., 2006), while others have focused on the interaction between the supervisor and the employee (Beehr et al., 2003; Fusilier et al., 1986; Lindorff, 2005). Some authors also did not explicitly differentiate the source of support (Loscocco & Spitze, 1990), making comparison to other studies difficult. Of the articles reviewed for this study, approximately one-half found significant gender differences in social support. Several explanations for the gender difference or lack of gender difference in workplace strain have been proposed, which I present below. These hypotheses have important implications for organizational practices and policies.

One explanation for the reverse buffer effect is that men and women use different coping strategies, which in turn affects their receptivity to social support (Dunkel-Schetter et al., 1987). Men tend to use an active,

problem-focused coping style which is aimed at eliminating or reducing the perceived threat (González-Morales et al., 2006). This coping style is more conducive to the instrumental form of social support because information and resources are provided to solve problems. Women, on the other hand, tend to use a more passive and emotionally focused coping style that involves receiving social and emotional support from others that may not directly solve the problem (González-Morales et al., 2006). This coping style matches the emotional form of social support which may allow women to use this type of support more effectively (Greenglass & Burke, 1988). Women, however, have demonstrated the use of both the active and passive coping styles, while men predominately use the active style (González-Morales et al., 2006). By relying primarily on one form of coping, men may not be using the full range of social support that is available to them, which in turn decreases the effectiveness of the support. The greater versatility in coping methods may also explain why social support may serve as a better buffer against stress for women than for men.

Another explanation for the differential effects of social support on stress is that the acceptance of social support interacts with gender roles. In several studies,

men have shown an increase in stress when social support is received while women show the opposite pattern. Lindorff (2005) suggested that the acceptance of emotionally based social support is inconsistent with the male gender role and therefore leads to increased stress (Beehr et al., 2003). As defined by Bem (1974), the masculine gender role is characterized by instrumentality, competence, assertiveness, and independence. The feminine role is characterized by an emphasis on warmth, nurturance, and compassion. By accepting support from others, the male employee has violated the gender role. The violation of a socially held view of masculinity may decrease the male employee's self-efficacy and lead to higher levels of strain (Barbee, Cunningham, Derlega, Gulley, Yankeelov, & Druen, 1993).

An additional hypothesis for the gender discrepancy in the reverse buffering effect is that men may seek social support only in very stressful situations, whereas women may seek out support in moderately stressful as well as very stressful situations (Lindorff, 2005). This explanation implies that the social support itself is not the reason for the reverse buffering effect, but rather the differences in the circumstances under which the support is received. Men who report receiving social

support would be encountering a higher level of stressors which would likely elicit a higher level of strain than women reporting the receipt of social support. Social support, therefore, may still have a buffering effect for men, but due to the high level of strain when the social support is sought, the effects may not be detected in cross sectional research studies.

Gender differences in coping styles, social roles, and circumstances under which support is received warrant the consideration of gender when assessing the effects of social support on strain. These differences may be crucial to understanding the conditions under which social support is effective. There are also several implications for organizational implementation of social support practices. For example, if women more readily perceive the availability of social support than men and show lower levels of strain when role stressors are present than men, perhaps increased awareness of the availability of support for men may be necessary. Alternatively, if men perceive social support is available but still show increased levels of strain when receiving social support, then the form of social support being offered may need to be assessed. Providing instrumental forms of support for men may be more acceptable for the male gender role, which

would increase the likelihood of reducing strain. Some individuals may experience high level of strain and be unresponsive to social support regardless of the methods used by organizations. For this reason personality characteristics must also be taken into account when implementing social support policies.

Personality

Given similar role stressors and social support, individuals may yet experience vastly different levels of strain. One explanation for this difference is that personality characteristics, particularly neuroticism, affect the perception of stressors, social support, and one's susceptibility to strain. The five factor model of personality is often used to classify personality characteristics into a meaningful taxonomy that can be used to assess individual differences (Erdheim, Wang, & Zickar, 2006). There are well established relationships in the work stress literature between the personality dimension of neuroticism, the perception of stressful situations, and symptoms of strain (Knussen & Niven, 1999). Neuroticism is defined as a relatively stable disposition to experience negative, distressing emotions (Eysenck, 1967). Individuals high in neuroticism are

characterized by high levels of anxiety, hostility, depression, and self-consciousness (Seibert & Kraimer, 2001). Individuals low in neuroticism are characterized by emotional stability, flexibility, and resilience (Parkes, 1990).

Neuroticism's impact on the stress-strain relationship is threefold: Neuroticism affects an individual's perception of stressors in the environment, the coping strategies used to deal with stressors, and reactions to strain (Code & Langen-Fox, 2001). Individuals who are high in neuroticism are more likely to appraise situations negatively and perceive stressors to be present in the environment. These individuals view role demands as stressful and report higher levels of role conflict, role ambiguity, and role overload than employees low in neuroticism (Parkes, 1990). In a study of student nurses, Parkes (1990) found that when facing an increase in workload, individuals who were high in neuroticism reported greater distress than individuals low in neuroticism. Neuroticism not only affects the level of stress perceived in the environment, but also how the individual chooses to cope with the stress. Neuroticism may lead to choosing less adaptive coping strategies, such as self-blame, avoidance, or confrontation, rather than

more adaptive, problem focused coping strategies (DeLongis & Holtzman, 2005). Social support may not be utilized by those high in neuroticism due to their negative perceptions of situations and other individuals. Highly neurotic individuals may question the motives of a co-worker or supervisor offering social support. These individuals may feel that by offering social support, the supervisor or co-worker is communicating that the recipient is viewed as incompetent (Lynch, Eisenberger, Armeli, 1999). A fear of exploitation in future circumstances due to the expected reciprocation may also prevent individuals high in neuroticism from accepting social support (Lynch et al., 1999). Neuroticism's impact on strain may occur directly as well. The negative emotionality of this personality trait may predispose the individual to the physical and psychological outcomes of strain (Parkes, 1990). For example, in a study of the physiological manifestations of strain in nurses, neuroticism was a significant predictor of both mild and severe symptoms (De Gucht, Fischler, & Heiser, 2003). Individuals high in neuroticism also experience less job and career satisfaction (Seibert & Kraimer, 2001).

For organizations seeking to decrease the stress levels of employees, personality is an important

consideration. If the source of strain is largely dispositional in nature, organizations should consider the energy and resources they are willing to expend on intervention efforts. Because neuroticism impacts each stage of the stress-strain relationship, making the effects of social support minimal, organizations may wish to consider implementing selection procedures that screen for high levels of neuroticism in potential employees.

Strain Outcomes

The outcomes of prolonged exposure to stress in the workplace are both physical and psychological (Caplan et al., 1975). While many measures of strain exist, current research has identified burnout, organizational commitment, and turnover intentions as particularly relevant indicators of employee strain for organizations seeking to reduce employee stress through social support.

Burnout

Work related burnout occurs when job demands are high and resources are perceived to be limited. Role demands exhaust the individual's mental and physical resources which may decrease motivation and lead to a state of exhaustion (Bakker et al., 2005). Burnout is measured

through three components: emotional exhaustion, cynicism, and reduced professional efficacy.

Emotional exhaustion is defined as feeling emotionally depleted and exhausted by one's work (Maslach & Jackson, 1981). Emotional exhaustion is a key component in the burnout process resulting from chronic stress. Emotional exhaustion has been shown to be negatively related to job satisfaction and job performance (Jackson, Schwab, & Schuler, 1986). High job demands exhaust the employee's mental and physical resources, which deplete energy and can lead to health problems (Bakker et al., 2005). Role overload and role conflict have been found to be antecedents of the emotional exhaustion component of burnout (Ortqvist & Wincent, 2006).

Cynicism is defined as a cool, distant attitude towards one's work and others on the job (Ortqvist & Wincent, 2006). When high levels of role stress are present, individuals may distance themselves to create an emotional buffer as means of coping (Maslach & Goldberg, 1998). Both role ambiguity and role overload have demonstrated a strong positive relationship with cynicism (Ortqvist & Wincent, 2006), meaning that higher levels of ambiguity and overload were related to greater reported cynicism. Cynicism is detrimental to both the organization

and the individual. More cynical employees are less motivated to implement change, expect less personal success from work, and perceive fewer rewards (Wanous, Reichers, & Austin, 1994). Cynicism also reduces the creativity and energy expended in generating solutions to work related problems (Schaufeli & Leiter, 1996).

Reduced professional efficacy is defined as a decline in feelings of competence and achievement in performing one's role. This decline can occur when individuals recognize a discrepancy between their expected level of performance and what they can actually achieve given their time and resources. Reduced professional efficacy has been shown to be related to role ambiguity (Ortqvist & Wincent, 2006) and role overload (Brown, Jones, & Leigh, 2005). In situations of high overload the goal setting processes and self-efficacy that contribute to professional efficacy are no longer related to employee performance (Brown et al., 2005).

Organizational Commitment

Organizational commitment is defined as the strength of an individual's identification with the organization and his or her involvement in the organization. Individuals who are highly committed to their organization express a strong belief in the organization's goals and

values, a willingness to engage in considerable efforts on behalf of the organization, and a strong desire to maintain membership in the organization (Morrow, 1983). In a meta-analytic study of role stress, role ambiguity, role conflict, and role overload were all negatively related to organizational commitment, with role ambiguity showing the strongest relationship (Ortqvist & Wincent, 2006). Organizational commitment is an important strain outcome for organizations because studies have indicated that organizational commitment is related to turnover intentions (Meyer, Stanley, & Herscovitch, 2002; Rhoades, Eisenberger, & Armeli, 2001).

Turnover Intentions

Turnover intentions are defined as an individual's intention to withdrawal from the job (Ortqvist & Wincent, 2006) and can include thoughts of leaving one's position at one end of the continuum to searching for alternative job opportunities at the other (Ngo et al., 2005). Turnover intentions have been shown to be related to several outcomes including job satisfaction (Tett & Meyer, 1993), emotional exhaustion (Maslach & Jackson, 1986), absenteeism, and actual turnover (Rhodes & Eisenberger, 2002). The high cost of actual turnover makes this an important strain outcome for organizations.

Prolonged experience of role stress has been associated with turnover intentions in several studies (Ortqvist & Wincent, 2006; Ngo et al., 2005). Role ambiguity, role conflict, role overload were shown to be indirectly related to turnover intentions through their effects on job satisfaction (Ngo et al., 2005). The experience of role stressors may cause an individual to reevaluate his or her current position which may lead to job dissatisfaction and subsequently, to turnover intentions (Ortqvist & Wincent, 2006). Social support may serve as means for reducing turnover intentions. POS and PSS have been shown to be negatively related to turnover intentions (Eisenberger et al., 2001; Kottke & Sharafinski, 1988), which implies that individuals who receive social support from their supervisor and organization may evaluate their situation as less stressful than those who do not receive social support and therefore have fewer turnover intentions.

Health Strain

The effects of role stress in the work environment can manifest in ways other than work related outcomes, such organizational commitment and turnover. The experience of stress has been related to physical health outcomes such as high blood pressure, elevated cholesterol

levels (Caplan et al., 1975), and chronic headaches (Aasa et al., 2005). There are many other factors, however, beyond work stress that can influence these physical outcomes, such as heredity and lifestyle. Additionally, measuring these outcomes requires the individual to provide personal information that he or she may not wish to share with the organization; therefore, the effects of stress on mental health may be a more beneficial and accessible indicator of strain.

Positive mental health in the work context, according to Banks, Clegg, Jackson, Kemp, Stafford, and Wall (1980), is defined by the attitudes, behavior, and feelings that represent the individual's level of personal effectiveness, success, and satisfaction. Individuals experiencing stress in the workplace may manifest psychological symptoms of strain including depression, insomnia, low self-esteem, and anxiety (Caplan et al., 1975). Assessment of these mental health outcomes provides a more general view of the strain experienced by employees that may be overlooked with very specific, organizationally focused outcomes.

Hypotheses

Role Stress

Based on the review of the literature, it is hypothesized that role stress present in the work environment in the form of role conflict, role ambiguity, and role overload will be related to the employees' experience of strain.

H1: Role stress will be related to strain

As the amount of role stress present in the work environment increases, employees will experience higher levels burnout and more turnover intentions.

H1a: Role stress will be positively related to burnout

H1b: Role stress will be positively related to turnover intentions

As role stress increases it is also hypothesized that the employees' level of organizational commitment will decrease.

H1c: Role stress will be negatively related to organizational commitment

Role stress is hypothesized to increase the general health strain an individual experiences.

H1d: Role stress will be positively related to health strain

The experience of role stress is also likely increase the awareness of the availability of social support within the organization.

H2: Role stress will be positively related to perceived social support

Social Support

The literature on social support suggests that a direct relationship exists between perceived social support and the experience of strain in the workplace (Viswesvaran et al, 1999); therefore, it is hypothesized that amount of social support perceived to be available in the organization will be related to the employees' reported level of strain.

H3: Perceived social support will be related to measures of strain

Specifically, as the level of perceived social support increases, it is hypothesized that employees will report lower levels of burnout, fewer turnover intentions, and less health strain.

H3a: Perceived social support will be negatively related to burnout

H3b: Perceived social support will be negatively related to turnover intentions

H3c: Perceived social support will be negatively related to health strain

It is also hypothesized that with the greater perception of social support, employees will report greater feelings of commitment to the organization.

H3d: Perceived social support will be positively related to organizational commitment

Recent research in social support suggests that employees may distinguish social support available from their supervisor from social support available from the organization (Stinglhamber et al., 2006). The support source distinction implies that each form of perceived social support may be differentially related to employee strain.

H4: Perceived Organizational Support and Perceived Supervisor Support will be related to measures of strain

Specifically, perceived support from one's organization has been shown to lead to greater organizational commitment (Stinglhamber et al., 2006); therefore, it is hypothesized that perceived organizational support will be more strongly related to the employees' experience of

organizational commitment than to perceived supervisor support.

H4a: Perceived organizational support will show a stronger positive relationship with organizational commitment than will perceived supervisor support

The experience of social support from one's supervisor has been related to trust in the supervisor (Stinglhamber et al., 2006). Supervisor support shares many characteristics with the leader-member exchange dyad, which is associated with receiving more information, more resources, and greater loyalty (Settoon et al., 1996). Instrumental support, which consists of resources and information used to cope with stress, affects the experience of burnout in employees (Fenlason & Beehr, 1994). Instrumental support that leads to a decrease in strain is more likely to be attributed to the supervisor rather than the organization due to the supervisor's proximity to and relationship with the employee. It is therefore hypothesized that supervisor support will be more strongly related to measures of burnout than organizational support.

H4b: Perceived supervisor support will show a stronger positive relationship with burnout than will perceived organizational support

The buffering effect of perceived social support on strain has been demonstrated in several studies (Ganster et al., 1986; Lim, 1996; Viswesvaran et al., 1999). When the perceived level of social support is high, the relationship between role stress and measures of strain is weaker than when perceived social support is low. It is hypothesized that perceived social support serves as a buffer in the relationship between role stress and strain.

H5: Perceived social support will weaken the relationship between role stress and strain

Gender

In research on the buffering effects of social support on workplace stress, gender differences are often implicated as a factor in the inconsistent findings (Lindorff, 2005).

Men and women may perceive different levels of support available within the organization. Loscocco and Spitze (1990) reported that women perceived social support to be available from multiple sources while men perceived social support primarily from their supervisor. It is hypothesized that due to the increased number of potential support sources, women will perceive more social support available in the workplace than men.

H6: Men will perceive less overall social support than will women

The type of social support, either instrumental or emotional, has also been implicated as a factor in the buffering effect of social support. Accepting emotional support may conflict with the male gender role, which may lead to increased stress (Lindorff, 2005). It is hypothesized that men will report lower levels of strain when they perceive the support available as instrumental rather than emotional.

H6a: Strain will be lower for men perceiving instrumental support than for men perceiving emotional support

Women may employ multiple coping styles when encountering a stressful situation which allows them to make use of both instrumental and emotional support (González-Morales et al., 2006). Receiving emotional or instrumental support from others also does not conflict with the female gender role; therefore, it is hypothesized that women will report lower levels of strain when perceiving social support to be available regardless of the type of support.

H6b: There will be no significant differences in strain between women perceiving instrumental and women perceiving emotional support

Neuroticism

Studies on personality and stress have shown that neuroticism affects the interpretation of the environment and its stressors (Parkes, 1990). Therefore, it is hypothesized that individuals high in neuroticism will report more role stressors present in the organizational environment than individuals low in neuroticism.

H7: Neuroticism will be positively related to role stress

Neuroticism also affects how an individual relates to others in the workplace. Attempts at providing social support may be perceived as negative or threatening by those high in neuroticism (Lynch et al., 1999). Neurotic individuals are also less likely to provide social support to others, which decreases the chance of future reciprocation of support from supervisors and co-workers (Lynch et al., 1999). It is hypothesized that individuals high in neuroticism will perceive less social support available in the workplace than individuals low in neuroticism

H8: Neuroticism will be negatively related to both perceived organizational support and perceived supervisor support

The negative emotionality associated with neuroticism is thought to predispose individuals to both the physical and psychological effects of strain (Parkes, 1990). This vulnerability to the effects of strain is likely to increase the amount of workplace strain reported. It is hypothesized that individuals high in neuroticism will report higher levels of strain than individuals low in neuroticism.

H9: Neuroticism will be related to strain

Specifically, individuals high in neuroticism are more likely to report the effects of burnout, greater turnover intentions, and more health strain than individuals low in neuroticism

H9a: Neuroticism will be positively related to burnout

H9b: Neuroticism will be positively related to turnover intentions

H9c: Neuroticism will be positively related to health strain

Based on the lack of perceived support, it is also hypothesized that individuals high in neuroticism are less likely to feel committed to the organization.

H9d: Neuroticism will be negatively related to organizational commitment

CHAPTER TWO

METHODS

Participants

Participants for this study were drawn from an aerospace component manufacturing company and a zirconium production plant located in the Western United States. These two organizations were chosen because levels of stress among their employees were expected to be significant due to factors inherent in the industries they serve. These two organizations, though producing clearly different products, have highly specialized markets and extensive government safety regulations. These companies must also compete with other manufacturers both on a national and global level for a relatively small pool of buyers. Efforts to keep production costs and process waste down while maintaining quality requirements has led to the use of lean management practices in both organizations such as six sigma, total quality management, and just-in-time delivery systems. The emphasis on satisfying customer demands, meeting safety requirements, and making production deadlines was expected to create a high stress environment for employees, thus necessitating the use of coping mechanisms such as social support to help combat

the experience of strain. By surveying employees in industries where stressors may be inherent, a clearer picture of the impact of social support on strain may be gained.

A total of 234 surveys were completed, 145 from the zirconium manufacturing plant and 89 from the aerospace manufacturer. The age range of the sample was 23 to 60 years old with a mean age of was 45.6. Tenure with the organization ranged from 3 months to 353 months (29.4 years) with an average of 190 months (15.8 years) with the company. The amount of time employees worked for their current supervisor ranged from .5 months to 300 months (25 years). The average time employees had worked for the current supervisor was 38.87 months (about 3 years). Of the respondents, 173 were male (73.9%) and 33 were female (14.1%). Twenty-eight individuals declined to state their gender (12%). This gender distribution is not surprising given the manufacturing nature of both companies.

According to the Department of Labor, the gender distribution in manufacturing industries nationally is 28.8% female and 71.2% male (Department of Labor, 2008). Job classification was broken down into categories based on the Fair Labor Standards Act (FLSA) status of the position. In the sample, 114 individuals were hourly

employees (48.7%), 69 were salaried non-exempt employees who can receive overtime pay (29.5%), 36 were salaried exempt employees who can not receive overtime pay (15.4%), and 15 respondents declined to state their job classification (6.4%). A wide range of departments were represented in the sample. In the aerospace company, participants reported working in departments ranging from manufacturing, such as Fabrications, Procurement, Assembly and Test, Quality, and Shipping; to administrative, such as Marketing, Finance, Contracts, and Human Resources. The zirconium company also reported a range of departments including Chemical Productions, Melting, Quality Control, Human Resources, Training, Continuous Improvement, Engineering, and Information Technology.

Measures

Surveys were distributed to employees via an internet weblink to the Survey Monkey website or by paper copy in weekly team meetings. The survey included an informed consent statement, demographic questions, and measurement scales for role stress, supervisor social support, organizational social support, neuroticism and agreeableness, burnout, general health strain, organizational commitment, and turnover intentions. A

listing of the items in each measurement scale can be found in the appendix.

Informed Consent

The first section of the survey informed participants that the survey was a study of work stress. The informed consent statement explained that participation in the survey was completely voluntary, individuals may discontinue the survey at any time, and responses would be anonymous. Participants were also assured that only group data and not individual responses would be reported to the organization. Participants who received the internet version of the survey were required to respond to a "consent to participate" question before accessing the remainder of the survey. Individuals who received the paper copy were asked to make a mark on the consent statement indicating their consent to participate.

Demographic Information

The demographic variables assessed included: age, sex, job classification, department, tenure with the organization in months and years, and the time in months and years worked for the current supervisor.

Role Stress

Role stress was measured using the role ambiguity, role conflict, and role overload scales developed by

Peterson and colleagues (1995). Participants indicated their level of agreement with items on a five-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. The role conflict scale consisted of three items that assessed conflicting situations and incompatible requests made of the individual in the workplace. An example item from the role conflict scale is '*I receive incompatible requests from two or more people*'. Higher scores indicated greater levels of role conflict. Possible scale scores ranged from 3 to 15. The Cronbach's alpha in this study for role conflict was .678. The role ambiguity scale consisted of five items that assessed the clarity of goals and responsibilities in the individual's job. To create a composite role stress measure and to be consistent with the meaning of the other role stress scales, the role ambiguity scores were reverse coded so that higher scores on this scale indicated greater role ambiguity. The possible score range for this scale was 5 to 25. An example item from this scale is '*I know exactly what is expected of me*'. The Cronbach's alpha for this scale was .869. The role overload scale consisted of five items that measured the individual's perception of being overburdened with work. Higher scores on this scale indicated greater levels of role overload. An example item

from this scale is *'My workload is too heavy'*. One item from Bacharach, Bamberger and Conley's (1990) role overload scale, *'I don't have enough time to finish my job'*, was added to assess time pressure. Practices such as just-in-time delivery, which are encompassed in the lean management model (Bendell, 2006), create shorter deadlines for production and delivery of products. Time pressure, therefore, is likely to be a factor in the individual's experience of role overload. The Cronbach's alpha for the role overload scale was .889. The range of possible scores for this scale was 6 to 30. A composite score for role stress was also calculated by summing scores on all three scales. Higher composite scores indicated greater role stress, with a possible range of 14 to 70.

Social Support

A workplace social support scale that actively distinguished between instrumental and emotional support was not found in a literature search; therefore, a scale was created and pilot tested for this study. Three items were drawn from the Perceived Organizational Support scale (Eisenberger et al., 1986), two assessing emotional support and one assessing instrumental support. Two items tapping instrumental support were taken from Abbey, Abramis, and Caplan's (1985) social support scale. Nine

emotional support items and eight instrumental support items were written by the author. The newly developed scale was pilot tested using data from students working part-time or full-time for at least six months. The scale was presented twice, once with '*your supervisor*' as the target phrase and once with '*the organization*' or '*those in upper management*' as the target phrase. Measures of Leader Member Exchange (Graen & Scandura, 1987), Resource Adequacy, (Quinn & Staines, 1979), and Leadership Direction (Kottke & Agars, 2005) were included to assess the convergent validity of the scale. A separate factor analysis was conducted for the supervisor and organizational support questions. For the supervisor support scale, eight items loaded on emotional support and five items loaded on instrumental support. These thirteen items were retained as the Supervisor Support Perceptions (SSP) scale. For the organizational support scale seven items loaded on emotional support and eight items loaded on instrumental support. These fifteen items were retained as the Organizational Support Perceptions (OSP) scale.

The emotional and instrumental social support items were related to the convergent validity measures included in the pilot study as expected (Kahler, 2007). LMX was strongly correlated with supervisor emotional support

($r = .735, p < .05$) and supervisor instrumental support ($r = .648, p < .05$), which was expected based on the similarity of the leader-member dyad and the supervisor support construct. The Resource Adequacy Scale (RAS) measures perceptions of the quality and availability of the resources within the organization. Many of the items in this scale identify resources that may be considered instrumental support. As predicted, RAS was strongly correlated with both supervisor instrumental support ($r = .606, p < .05$) and organizational instrumental support ($r = .554, p < .05$). The Leadership Direction Scale (LDS) assesses the perceptions of the quality of leadership within the organization. This concept also includes how the organization is being managed and how resources are being distributed, which relates to instrumental support. LDS was found to strongly correlate with organizational instrumental support ($r = .468, p < .05$) and supervisor instrumental support ($r = .452, p < .05$). Based on these findings it was determined that the SSP and OSP scales were valid measures of emotional and instrumental support within an organizational context.

Supervisor Social Support. Individual perceptions of social support provided by one's supervisor were assessed using the Supervisor Support Perceptions (SSP) scale

described above. This scale included two subscales, emotional support and instrumental support. Participants were asked to indicate their agreement with each statement about their current supervisor using a five-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. Higher scores indicated more perceived support from one's supervisor. Possible scale scores ranged from 13 to 65.

Organizational Social Support. Individual perceptions of the support available from the organization were measured using the Organizational Support Perceptions (OSP) scale also described above. This scale also included emotional and instrumental support subscales. Participants were asked to indicate their agreement with each statement about their organization using a five-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. Scale scores could range from 15 to 75. Higher scores indicated more perceived support from the organization.

Neuroticism and Agreeableness

Neuroticism and Agreeableness were assessed using Saucier's (1994) Mini Marker scale. Participants were presented with a list of adjectives and were asked to indicate how well each word describes them using a nine-point Likert scale ranging from 1 = *extremely inaccurate*

to 9 = *extremely accurate*. The original scale contains forty adjectives that assess the personality dimensions of Extroversion, Agreeableness, Conscientiousness, Emotional Stability (Neuroticism), and Openness. Neuroticism was the only personality trait of interest in this study; however, including only the eight adjectives for the neuroticism scale might have made the measure's purpose too transparent which could have affected participant responding. Adjectives from the agreeableness scale were included to balance the neuroticism adjectives. The adjectives from the neuroticism scale included: *Unenvious, Moody, Jealous, Relaxed, Temperamental, Envious, Touchy, and Fretful*. The scores for the adjectives *Unenvious* and *Relaxed* were reverse coded, so that higher scores on this scale indicated greater levels of neuroticism. Possible scores on the neuroticism scale ranged from 8 to 72. The Cronbach's alpha for this scale was .686. The adjectives from the agreeableness scale included: *Sympathetic, Warm, Kind, Cooperative, Cold, Unsympathetic, Rude, and Harsh*. The adjectives *Cold, Unsympathetic, Rude, and Harsh* were reverse coded so that higher scores indicated greater levels of agreeableness. The Cronbach's alpha for this study was .831. Possible agreeableness scores ranged from 8 to 72.

Burnout

The level of burnout experienced by employees was measured using the Maslach Burnout Inventory-General Survey (Maslach & Jackson, 1981). This sixteen item scale included three subscales that measure exhaustion, cynicism, and professional efficacy. Participants were asked to indicate their agreement with each statement using a seven-point Likert scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. The five-item exhaustion scale assessed the individual's experience of feeling tired and burned out from work. The five-item cynicism scale measured the individual's indifference or distant attitude towards work. The professional efficacy scale contained six items that measured the individual's social and non-social accomplishments at work. The possible scale score ranged from 16 to 112, with higher scores indicating more burnout. Cronbach's alpha for this study was .871.

Organizational Commitment

The commitment of the individual to the organization was assessed using the organizational commitment scale developed by Cook and Wall (1980). This nine item scale assessed the employee's overall commitment to the organization in terms of organizational identification, involvement, and loyalty. Participants were asked to

indicate their agreement with statements on a seven-point Likert scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. Example items include '*I am quite proud to be able to tell people who it is that I work for*' and '*Even if the firm were not doing to well financially, I would be reluctant to change to another employer*'. After reverse coding negatively worded statements, higher scores indicated a greater level of commitment with possible scores ranging from 9 to 63. Cronbach's alpha for this scale was .789.

Turnover Intentions

The individual's intentions to leave the organization were measured using Cohen's (1998) three-item scale. Participants were asked to rate their agreement with statements on a five-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. These items measured the individual's thoughts of leaving the organization and plans to search for alternate employment. An example item from this scale is '*I think a lot about leaving the organization*'. Cronbach's alpha was .890 for this study. Scale scores could range from 3 up to 15, with higher scores indicating greater turnover intentions.

Health Strain

The amount of strain on employees' general health was measured using the twelve item version of the General Health Questionnaire (GHQ-12). Participants indicated how often in the last six months they had experienced health strain symptoms using a four-point Likert scale. Response options were 0 = *Never*, 1 = *Rarely*, 2 = *Sometimes*, and 3 = *Often*. Example items from this scale include '*Have you recently lost much sleep over worry,*' '*Have you recently felt you couldn't overcome your difficulties*' and '*Have you recently felt constantly under strain?*' Possible scale scores ranged from 0 to 36, with higher scores indicating greater levels of general health strain. Cronbach's alpha for this study was .830.

Procedure

The management of each company was contacted for permission to distribute surveys to their employees. The specific procedure differed slightly for each company and therefore will be described separately in detail.

Aerospace Company Procedure

The aerospace company's Human Resources department generated a list of individuals that represented a cross section of the company in terms of department, job

classification, and tenure. These employees were contacted via an e-mail which stated the purpose of the study, that participation was strictly voluntary, and that all responses would be anonymous. A weblink to the internet-based survey was also included in the e-mail. Employees were instructed to paste the link into their web browser to access the survey. Once the survey was opened, participants viewed an informed consent statement and were required to indicate their consent by clicking on the 'Yes' box to continue the survey. Demographic questions were presented first, followed by each of the measurement scales. Individuals indicated their responses by clicking on the circle that corresponded to their rating on each item. At the end of the survey a debriefing statement was presented that thanked the individual for his or her participation, explained the purpose of the study, and provided contact information of the researcher. All employees were allowed to complete the survey on company time. The survey link was available to employees for two weeks. A reminder e-mail of the survey's closing date was sent to all employees on the survey list four days prior to its closing.

Zirconium Manufacturing Company Procedure

At the zirconium manufacturing company all employees were given the opportunity to participate in the study. An e-mail regarding the purpose of the study, the voluntary nature of participation, and the weblink to the survey was sent to employees by the Human Resources Department. Procedures for accessing and completing the survey were the same as for the aerospace company employees. The survey was available for two weeks and a reminder e-mail was sent to all employees by the Human Resources department four days prior to the survey's closing date. Individuals in the manufacturing departments who did not have regular access to computers were informed of the study in their weekly team meeting. At the end of the meeting paper copies of the survey were distributed along with an addressed envelope. The paper version of the survey was identical to the internet-based survey in terms of the demographic questions and measurement scales. Employees were instructed to mark an 'X' on the informed consent statement attached to the front of the survey to indicate their consent to participate in the study. Employees were also instructed to seal the completed survey in the envelope provided. Those who did not wish to participate were asked to simply seal the blank survey in

the envelope. The team lead or supervisor left the meeting to ensure that anonymity was maintained and responses were not influenced by the presence of the supervisor. The envelopes containing the surveys were left on a table as the employees exited the meeting room and were collected later by a member of the Human Resources department. All the envelopes were mailed to the address of the researcher at the expense of the organization. No participant was required to pay postage.

Statistical Analysis

Data for the stated hypotheses were analyzed using bivariate correlations, t-tests (all t-test were two tailed), or regression. Bivariate correlations were used to test hypotheses about role stress, strain, and neuroticism (H1a, H1b, H1c, H1d, H2, H3a, H3b, H3c H3d, H4a, H4b, H7, H8, H9a, H9b, H9c, and H9d). Sequential regression was used to analyze the social support hypothesis (H5) and determine if social support serves as a buffer for strain. To assess whether significant differences existed between men and women in the perception of social support, a t-test was conducted (H6), followed by standard regression (H6a and H6b).

CHAPTER THREE
RESULTS AND DISCUSSION

Results

Data Screening

The data from the internet-based surveys were downloaded from SurveyMonkey and imported into SPSS for analysis. Responses from the paper-and-pencil version of the survey were entered into the SPSS data file. Respondents were coded by both company and survey format. Prior to testing the hypotheses, the data were screened for entry errors and a missing value analysis was conducted. All of the variables were missing some data, with the percentage ranging from 7.7% missing for age to 19.7% missing for the Neuroticism items. Despite the percentage of data missing, no significant patterns were observed; therefore, the data were deemed missing at random. Only complete cases were used in further analyses, bringing the sample size to 202. To create scale scores and make further analyses interpretable, select variables and items were recoded. The gender variable was recoded to 0 for males and 1 for females. The appropriate items in the Organizational Commitment scale, Maslach Burnout Inventory, GHQ-12, and the Neuroticism and Agreeableness

scales were reverse coded so composite scale scores could be created. Item scores for each of the following scales were then summed to create a scale score for each individual: Role Conflict, Role Overload, Role Ambiguity, Supervisor Support Perceptions (SSP), Organization Support Perceptions (OSP), Organizational Commitment, Turnover Intentions, Burnout, GHQ-12, Neuroticism, and Agreeableness. A composite variable of the Role Overload, Role Conflict, and Role Ambiguity scale scores was created to provide an index of role stress. Possible scores on this index ranged from 14 to 70.

The measures of social support were specifically created for this study and therefore, were evaluated for their reliability and validity. Both measures demonstrated very strong reliabilities with alphas of .946 for the Supervisor Support Perceptions (SSP) and .969 for the Organizational Support Perceptions (OSP). No significant correlation was found between tenure with the organization and OPS ($r = -.095, p > .05$) or tenure with the current supervisor and SSP ($r = .029, p > .05$). A principal axis factor analysis with a varimax rotation was conducted on each scale to determine if emotional and instrumental support items could be distinguished into two separate factors. For the SSP scale only one general factor was

found which accounted for 61.426% of the variance in perceived supervisor support. The OSP scale also consisted of one general factor that accounted for 68.882% of the variance in perceived organizational support. This result suggests that the OSP and SSP scales are not measuring the perceptions of emotional and instrumental support separately, but rather a general perception of support available to the individual.

Each measurement scale was assessed for the normality of the sampling distribution and the presence of outliers using a frequency analysis. A single outlier was found in the Agreeableness scale. This individual was significantly less agreeable than other individuals in the distribution ($z = -3.61$, $p < .001$) and therefore was deleted from the sample. The skewness and kurtosis of each distribution was calculated. None of the distributions were significantly kurtotic; however, the Role Conflict and Agreeableness scales were deemed to be negatively skewed ($z = -3.83$, $p < .001$, $z = -6.797$, $p < .001$), and the Turnover Intentions distribution was deemed to be positively skewed ($z = 3.653$, $p < .001$). Even after deleting the outlier within the Agreeableness distribution, the distribution remained significantly skewed ($z = -6.112$, $p < .001$). A reflective transformation was used to normalize the

distribution. Results from subsequent tests using the Agreeableness scale are reported with untransformed as well as transformed data. All other statistical assumptions were met (Tabachnick & Fidell, 2007).

Before collapsing the samples from the two companies, an independent sample t-test was conducted using each of the measurement scales as the dependent variable to ensure that respondents from the two companies were not significantly different. No significant differences were found based on the company surveyed, with the exception of the Role Ambiguity Scale, $t_{(206)} = 2.076$, $p < .05$. The mean rating for role ambiguity was 1.35 points higher for employees in the aerospace company. This difference may be related to a recent Reduction in Force (RIF) that occurred one week prior to the distribution of the survey.

Employees unaffected by the RIF were likely expected to take on the tasks formerly completed by others, which may have increased feelings of ambiguity if proper direction and support were not provided. Based on these statistical findings, the data from the two companies were combined in the remaining analyses.

To determine if responses to the survey items were different as a function of the job classification, an ANOVA was conducted using job classification as the

independent variable and the measurement scale score as the dependent variable. Significant differences based on job classification were found for Role Overload, $F_{(2, 202)} = 4.899, p < .05$; Organization Commitment, $F_{(2, 198)} = 7.421, p < .05$; and Role Ambiguity, $F_{(2, 202)} = 7.861, p < .05$. Post hoc comparisons using Tukey's HSD to control for Type 1 error inflation indicated that for Role Overload, salary exempt employees reported significantly more overload ($M = 19.44$) than hourly employees ($M = 16.62$). There was no significant difference between salary exempt employees and salary non-exempt employees ($M = 18.84$) or between hourly employees and salary non-exempt employees. For the Organizational Commitment scale a significant difference was observed only between the hourly employees and salary non-exempt employees. Hourly employees reported less organizational commitment ($M = 42.22$) than salary non-exempt employees ($M = 47.16$). This finding is somewhat surprising since it is intuitively expected that those higher in the organizational hierarchy, the salary exempt employees, would show greater levels of commitment. This, however, was not the case. The salary non-exempt employees had the greatest level of commitment with salary exempt employees close behind ($M = 45.88$). This pattern was also

seen in the Role Ambiguity scale. Salary non-exempt employees reported significantly more ambiguity ($M = 14.254$) than hourly employees ($M = 11.509$). Salary exempt employees were not significantly different from either group ($M = 13.563$). This finding was again surprising since it was expected that as position in the hierarchy increased so would role ambiguity. When Role Ambiguity was assessed by classification and organization, it was found that the significant difference between salary non-exempt and hourly employees only occurred in the zirconium manufacturing sample. In this particular company the salary non-exempt classification also includes professional level technicians and craftsmen who oversee the production process, which may explain the increase in role ambiguity (D. Kahler, personal communication, March 13, 2008). Another possible explanation for this finding could be that those in the highest positions (the salary exempt) may be the individuals making decisions about the company's future direction. This could provide a sense of control that the salary non-exempt positions may not have and thus decrease feelings of ambiguity. This difference, while intriguing, is not central to the hypotheses of this study; therefore, further data analyses were not separated by job classification.

Role Stress Hypotheses

Hypotheses 1, 1a, 1b, 1c, and 1d predicted that role stress would be related to measures of strain. A bivariate correlation analysis was conducted to assess the relationship between the measures of role stress (role conflict, role ambiguity, and role overload) and strain outcomes (organizational commitment, turnover intentions, burnout, and general health strain). Results from all correlational analyses conducted in this study are presented in Table 1. Support was found for hypothesis one, in that high role stress was associated with the measures of strain. Each measure of strain was assessed individually for its relationship to role stress. Burnout was significantly related to role overload ($r = .403$, $p < .01$), role conflict ($r = .320$, $p < .01$), and role ambiguity ($r = .198$, $p < .01$). As predicted in hypothesis 1a as role stress scores increased, so did burnout. Support was also found for hypothesis 1b which predicted a positive relationship between role stress and turnover intentions. Significant correlations were found between turnover intentions and role overload ($r = .480$, $p < .01$), role conflict ($r = .257$, $p < .01$), and role ambiguity ($r = .229$, $p < .01$). Organizational commitment demonstrated significant negative correlations with role

Table 1. Measurement Scale Cronbach's Alpha Reliabilities and the Correlations between Measurement Scale Scores

	Role Conflict	Role Amb	Role Over	OSP	SSP	Burnout	Org Commit	Turn Int	Health Strain	Neuroticism	Agreeableness
Role conflict	.678										
Role Ambiguity	.219*	.869									
Role Overload	.465*	.097	.889								
OSP	-.310*	-.300*	-.229*	.969							
SSP	-.300*	-.343*	-.198*	.538*	.946						
Burnout	.320*	.198*	.403*	-.510*	-.364*	.871					
Organizational Commitment	-.175*	-.210*	-.254*	.559*	.451*	-.621*	.789				
Turnover Intentions	.257*	.229*	.480*	-.450*	-.381*	.490*	-.635*	.890			
Health Strain	.117*	.076	.368*	-.410*	-.273*	.562*	-.349*	.363*	.830		
Neuroticism	.102	-.026	.132	-.167*	-.106	.313*	-.166*	.000	.471*	.686	
Agreeableness	-.192*	-.104	-.096	.056	.263*	-.124	.121	-.079	-.162*	-.130	.831
Scale Mean	10.231	12.625	17.701	43.603	45.500	34.116	44.470	6.539	10.874	25.500	53.548
Standard Deviation	2.640	4.659	5.668	14.795	11.689	15.599	8.734	3.406	5.639	9.187	11.778
Minimum Score	3	4	5	16	13	0	16	3	0	7	9
Maximum Score	15	25	30	80	65	81	63	15	27	59	71

Notes. Values in diagonal are alpha coefficients.

* $p < .05$

overload ($r = -.254, p < .01$), role conflict ($r = -.175, p < .05$), and role ambiguity ($r = -.210, p < .01$), supporting hypothesis 1c. The measure of general health strain, the GHQ-12, was significantly correlated only with role overload ($r = .368, p < .05$), providing partial support for hypothesis 1d. Because the role stress measures were similarly correlated with the strain measures, a composite role stress score will be used in subsequent analyses for economy of presentation.

Hypothesis 2 predicted that role stress would increase the perception of social support resources being available within the organization. This hypothesis was not supported for Supervisor Support Perceptions (SSP) or Organizational Support Perceptions (OSP). SSP was negatively related to role ambiguity ($r = -.343, p < .01$), role conflict ($r = -.3, p < .01$), and role overload ($r = -.198, p < .01$). Therefore, employees perceived less social support available from their supervisor when role stress was high. OSP was also negatively related to role ambiguity ($r = -.3, p < .01$), role conflict ($r = -.31, p < .01$), and role overload ($r = -.229, p < .01$). During times of high role stress employees perceived less social support available from the organization.

Perceived Social Support Hypotheses

A negative relationship between perceived social support and measures of strain was predicted in hypothesis three. Support was found for this relationship with both forms of social support and all four measures of strain. SSP was negatively related to burnout ($r = -.364$, $p < .01$), turnover intentions ($r = -.381$, $p < .01$), and the GHQ-12 ($r = -.273$, $p < .01$) and positively related to organizational commitment ($r = .451$, $p < .01$). Employees who perceived social support being available from their supervisor were more committed to the organization, had fewer turnover intentions, less burnout, and fewer health strain symptoms. OSP was negatively related to burnout ($r = -.51$, $p < .01$), turnover intentions ($r = -.45$, $p < .01$), and the GHQ-12 ($r = -.41$, $p < .01$), and positively related to organizational commitment ($r = .559$, $p < .01$). Employees who perceived that social support was available from the organization were more committed, had fewer turnover intentions, less burnout, and fewer health strain symptoms.

For strain outcomes experienced by employees, perceived organizational support appeared to be more strongly related than perceived supervisor support, suggesting that social support from the organizational

level may be more effective in reducing the experience of strain. To investigate the specific effects of the source of the social support, the correlations between the supervisor and organizational levels of social support were compared to determine if they had different effects on the strain outcomes. Hypothesis 4a predicted that organizational support would be more strongly related to organizational commitment than supervisor support. To compare the strength of the correlations, a Fisher's r to z transformation was used. The correlation between OSP and organization commitment was not significantly greater than the correlation between SSP and organizational commitment ($z = 1.45, p > .05$). Hypothesis 4a was not supported in that social support had a similar effect on the commitment an employee felt to the organization, regardless of the source. Hypothesis 4b predicted that supervisor support would be more strongly related to measures of employee burnout than organizational support. The Fisher's r to z transformation was used to compare the relative strength of each relationship. Hypothesis 4b was not supported. The correlation between burnout and SSP was not significantly stronger than the correlation between burnout and OSP ($z = 1.787, p > .05$).

Sequential regression analyses were used to determine if perceived social support weakened the relationship between role stress and strain as predicted in hypothesis five. The role stress composite score and the social support measures of SSP and OSP were used as independent variables. The dependent variable was one of the four strain measures: turnover intentions, burnout, organizational commitment, and the GHQ-12. Before conducting the analysis, interaction terms had to be created between role stress and social support. The scores for role stress, OSP, and SSP were first centered to avoid multicollinearity. Separate interaction terms were created for supervisor support and organizational support by multiplying the centered role stress score by the centered SSP or OSP score. The regression analysis was conducted on each strain outcome using first OSP and then SSP. In the first step of the analysis, the role stress and social support variables were entered. The interaction between role stress and social support was added in the second step. The regression analyses were conducted in the same manner for each of the four strain outcomes. The results for each regression analysis can be found in Table 2. The analyses are presented below by the strain outcome predicted.

Table 2. Regression Coefficients for the Organizational and Supervisor Social Support Hypotheses

Perceived Organizational Support					
Dependent Variable	Predictor	b	SE b	β	t
Turnover Intentions					
	Role Stress	1.235	0.224	0.346	5.698**
	Organizational Support	-1.262	0.221	-0.359	-5.876**
	Role Stress*Org support	-0.699	0.183	-0.217	-3.83**
Organizational Commitment					
	Role Stress	-1.041	0.572	-0.114	-1.819
	Organizational Support	4.624	0.564	0.516	8.197**
	Role Stress*Org support	-0.004	0.483	-0.001	-0.009
Health Strain					
	Role Stress	0.982	0.409	0.171	2.402*
	Organizational Support	-1.773	0.402	-0.314	-4.413**
	Role Stress*Org support	-0.187	0.343	-0.036	-0.545
Burnout					
	Role Stress	4.416	1.035	0.273	4.269**
	Organizational Support	-6.557	1.016	-0.412	-6.451**
	Role Stress*Org support	-1.214	0.865	-0.083	-1.403

Perceived Supervisor Support					
Dependent Variable	Predictor	b	SE b	β	t
Turnover Intentions					
	Role Stress	1.386	0.234	0.389	5.927**
	Supervisor Support	-0.786	0.225	-0.229	-3.496**
	Role Stress*Supervisor support	-0.344	0.214	-0.097	-1.608
Organizational Commitment					
	Role Stress	-1.423	0.617	-0.156	-2.307*
	Supervisor Support	3.408	0.593	0.39	5.746**
	Role Stress*Supervisor support	0.155	0.568	0.017	0.273
Health Strain					
	Role Stress	1.257	0.425	0.219	2.957**
	Supervisor Support	-1.022	0.41	-0.185	-2.495*
	Role Stress*Supervisor support	0.141	0.388	0.025	0.364
Burnout					
	Role Stress	5.538	1.118	0.342	4.955**
	Supervisor Support	-3.528	1.077	-0.226	-3.276**
	Role Stress*Supervisor support	-1.723	1.014	-0.107	-1.699

*p < .05

**p < .01

Turnover Intentions. The impact of social support on strain was first assessed using turnover intentions and OSP. In the first step of the analysis, role stress and OSP significantly predicted turnover intentions, $F_{(2, 199)} = 47.940, p < .05$. Role stress and OSP accounted for 32.5% of the variance in turnover intentions, Multiple $R = .570$, Multiple $R^2 = .325$, Adjusted $R^2 = .318$. The prediction of turnover intentions was significantly improved by adding the interaction of role stress and OSP to the model, $F \text{ change}_{(1,198)} = 14.671, p < .05$. An additional 4.7% of the variance in turnover intentions was accounted for by adding the interaction of role stress and OSP to a model that already contained role stress and OSP, $R^2 \text{ change} = .047$. A line graph was created in order to interpret the interaction (see Figure 1). To be able to interpret the interaction, the OSP scale had to be reversed to indicate a lack of organizational support, so that higher numbers indicated more detrimental conditions as in the role stress scale. The lack of organizational support scores were placed along the x-axis with the cut points being set at one standard deviation below the mean (low lack of support), the mean for lack of support (average lack of support), and one standard deviation above the mean (high lack of support). The turnover

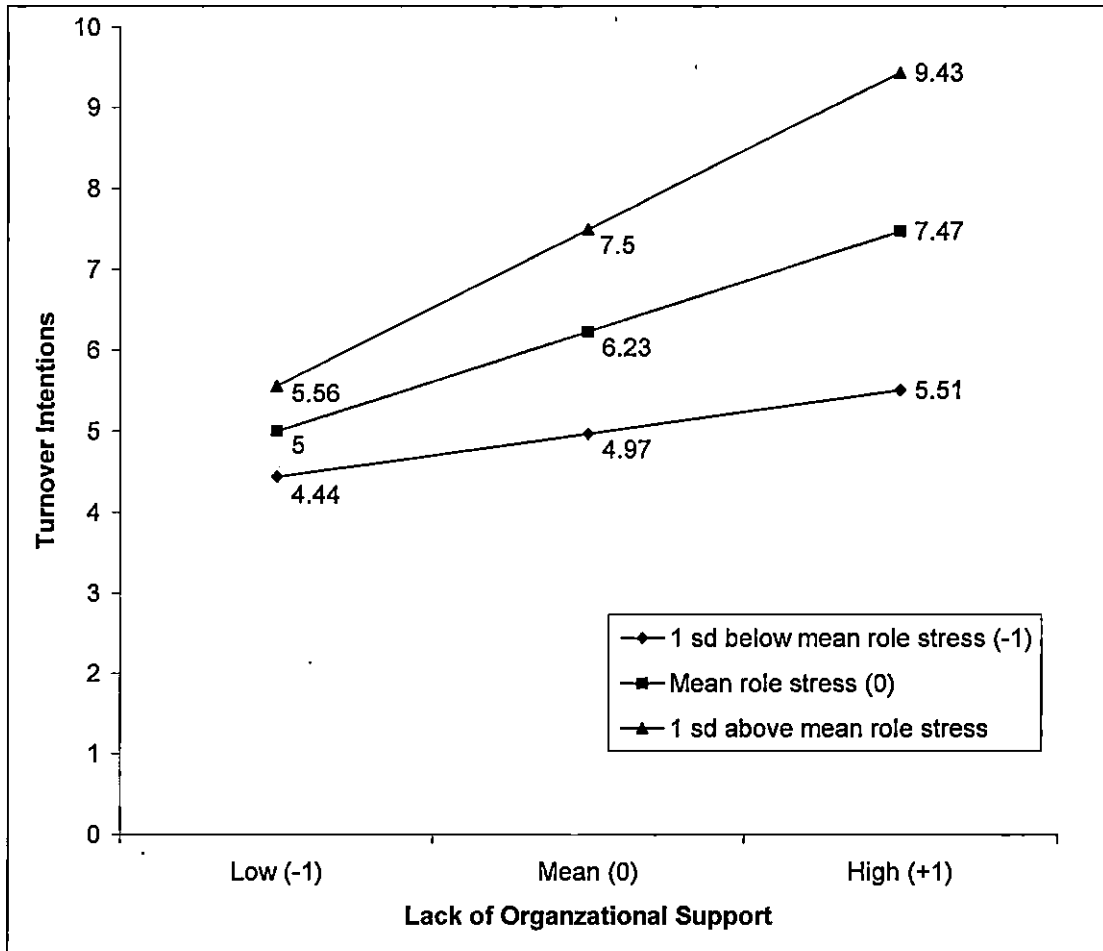


Figure 1. Reported Turnover Intentions as a Function of Role Stress and Level of Perceived Lack of Organizational Support

intentions scale scores were placed on the y-axis. Role stress was graphed as three separate lines representing one standard deviation below the mean, the mean for role stress, and one standard deviation above the mean. The results indicate that organizational support weakens the relationship between role stress and turnover intentions.

When role stress was one standard deviation below the mean, individuals who experienced high lack of support had the most turnover intentions ($Y' = 5.56$). Individuals with the average lack of support reported more turnover intentions ($Y' = 5$) than individuals with low lack of support ($Y' = 4.44$). As roles stress increased to the mean level, individuals who experienced low lack of support had fewer turnover intentions ($Y' = 4.97$) than individuals who experienced the average lack of support ($Y' = 6.23$). Individuals who experienced high lack of support reported the most turnover intentions ($Y' = 7.5$). As role stress increased to one standard deviation above the mean, the effects of organizational support were even more pronounced. Individuals who reported low lack of support had fewer turnover intentions ($Y' = 5.51$) than individuals reporting the average level of lack of support ($Y' = 7.47$). The highest level of turnover intentions were again reported by individuals who experienced high lack of support ($Y' = 9.43$). Turnover intentions increased more slowly as a function of role stress when organizational support was perceived as high rather than average or below average.

The effects of SSP on turnover intentions were also assessed and it was found that turnover intentions were

significantly predicted from role stress and SSP, $F_{(2, 199)} = 37.885, p < .05$. Role stress and SSP accounted for 27.3% of the variance in turnover intentions, Multiple $R = .523$, Multiple $R^2 = .273$, Adjusted $R^2 = .266$. Adding the interaction of role stress and SSP did not significantly improve prediction, $F \text{ change}_{(1, 198)} = 2.587, p > .05$, and only .9% additional variance in turnover intentions was accounted for by adding the interaction of role stress and SSP to the model, $R^2 \text{ change} = .009$. SSP was not found to weaken the relationship between role stress and turnover intentions. Based on these findings only the model containing role stress and SSP was interpreted. Role stress significantly predicted turnover intentions, $t_{(199)} = 5.926, p < .05$. Individuals with the average level of role stress reported fewer turnover intentions ($M = 6.502$) than individuals who reported one standard deviation above the average for role stress ($M = 7.888$). SSP also significantly predicted turnover intentions, $t_{(199)} = -3.496, p < .05$. As scores on the SSP scale increased to one standard deviation above the mean, turnover intentions decreased ($M = 5.716$).

Organizational Commitment. It was predicted that OSC would weaken the relationship between role stress and organizational commitment. This pattern, however, was not

observed in the data. Organizational commitment was significantly predicted from both role stress and OSP, $F_{(2, 199)} = 47.593, p < .05$. Role stress and OSP accounted for 32.4% of the variance in organizational commitment, Multiple $R = .569$, Multiple $R^2 = .324$, Adjusted $R^2 = .317$. The prediction of organizational commitment was not significantly improved however, by adding the interaction of role stress and OSP to the model, $F \text{ change}_{(1, 198)} = .00, p > .05$. These findings suggest that OSP does not weaken the relationship between role stress and organizational commitment. No additional variance in organizational commitment was accounted for by adding the interaction of role stress and OSP to the model, $R^2 \text{ change} = .00$; therefore, the model containing only role stress and OSP was interpreted. Organizational commitment was not significantly predicted by role stress, $t_{(199)} = -1.819, p > .05$. OSP, however, did significantly predict organizational commitment, $t_{(199)} = 8.197, p < .05$. Individuals who reported one standard deviation above the mean on OSP were more committed to the organization ($Y' = 49.227$) than individuals who reported the mean level of OSP ($Y' = 44.604$). In assessing the impact of supervisor support on commitment, role stress and SSP significantly predicted organizational commitment,

$F_{(2, 199)} = 28.707, p < .05$. Role stress and SSP accounted for 22.4% of the variance in organizational commitment, Multiple $R = .473$, Multiple $R^2 = .224$, Adjusted $R^2 = .216$. The prediction of organizational commitment was not significantly improved by added the interaction of role stress and SSP to the model, $F \text{ change}_{(1, 198)} = .074, p > .05$. No additional variance in organizational commitment was accounted for by the interaction of role stress and SSP, $R^2 \text{ change} = .00$. This suggests that SSP does not weaken the relationship between role stress and organizational commitment. Based on this lack of significance, step one of the model containing only role stress and SSP was interpreted. Role stress significantly predicted organizational commitment, $t_{(199)} = -2.307, p < .05$. Individuals with the average level of reported role stress were more committed ($Y' = 44.519$) than those reporting one standard deviation above the mean for role stress ($Y' = 43.096$). SSP also significantly predicted organizational commitment, $t_{(199)} = 5.746, p < .05$. Individuals who reported one standard deviation above the mean for SSP were more committed to the organization ($Y' = 47.927$) than those reporting the average level of SSP ($Y' = 44.519$).

Burnout. It was hypothesized that the perception of social support would decrease the amount of burnout experienced. When assessing the impact of organizational support, burnout was significantly predicted by role stress and OSP, $F_{(2, 193)} = 47.913$, $p < .05$. Role stress and OSP accounted for 33.2% of the variance in burnout, Multiple $R = .576$, Multiple $R^2 = .332$, Adjusted $R^2 = .325$. Prediction of burnout was not significantly improved by adding the interaction of role stress and OSP, F change $_{(1, 198)} = 1.969$, $p > .05$. An additional .7% of the variance in burnout was accounted for by the interaction of role stress and OSP, R^2 change = .007. These findings suggest that OSP does not weaken the relationship between role stress and burnout; therefore, the first step in the regression model was interpreted. Role stress significantly predicted burnout, $t_{(193)} = 4.269$, $p < .05$. Individuals with the average level of role stress reported less burnout ($Y' = 33.939$) than individuals who were one standard deviation above the mean on role stress ($Y' = 38.355$). OSP also significantly predicted burnout, $t_{(193)} = -6.451$, $p < .05$. Individuals who reported one standard deviation above the mean for OSP experienced less burnout ($Y' = 27.382$) than individuals reporting the average level of OSP ($Y' = 33.939$). A similar pattern of

results were observed with SSP. Burnout was significantly predicted from a model containing role stress and SSP, $F_{(2, 193)} = 28.907, p < .05$. Role stress and SSP accounted for 23.1% of the variance in burnout, Multiple $R = .48$, Multiple $R^2 = .231$, Adjusted $R^2 = .223$. The addition of the interaction of role stress and SSP to the model did not significantly improve prediction of burnout, $F \text{ change}_{(1, 192)} = 2.888, p > .05$. SSP does not appear to weaken the relationship between role stress and burnout. An additional 1.1% of the variance in burnout was accounted for by the interaction between role stress and SSP, $R^2 \text{ change} = .011$. The model containing only role stress and SSP was interpreted. Role stress significantly predicted burnout, $t_{(193)} = 4.955, p < .05$. Individuals who experienced more role stress also reported more burnout ($Y' = 39.682$) than individuals reporting the average for role stress ($Y' = 34.144$). SSP also significantly predicted burnout, $t_{(193)} = -3.276, p < .05$. As SSP increased to one standard deviation above the mean, reported burnout decreased ($Y' = 30.616$).

Health Strain. It was predicted that social support would help reduce the effects of role stress on general health strain, which were assessed using the GHQ-12. The results indicated that health strain could be

significantly predicted from a model that contained role stress and OSP, $F_{(2, 193)} = 19.744$, $p < .05$. Role stress and OSP accounted for 17% of the variance in health strain, Multiple $R = .412$, Multiple $R^2 = .17$, Adjusted $R^2 = .161$. The prediction of health strain was not significantly improved by adding the interaction of role stress and OSP to the model, $F \text{ change}_{(1, 192)} = .297$, $p > .05$, and only an additional .1% of the variance in general health symptoms was accounted for by the interaction of role stress and OSP, $R^2 \text{ change} = .001$. The results indicate that OSP does not weaken the relationship between role stress and health strain, therefore step one of the model was interpreted. Health strain was significantly predicted by role stress, $t_{(193)} = 2.402$, $p < .05$. Individuals who reported an average level of role stress experienced less health strain ($Y' = 10.974$) than those who reported role stress at one standard deviation above the mean ($Y' = 11.956$). OSP also significantly predicted health strain, $t_{(193)} = -4.413$, $p < .05$. As OSP increased to one standard deviation above the mean, reported health strain decreased ($Y' = 9.201$). In assessing the effects of SSP on general health, a similar pattern of results emerged. Health strain was significantly predicted by a model that contained role stress and SSP, $F_{(2, 193)} = 12.496$, $p < .05$.

Role stress and SSP accounted for 11.5% of the variance in health strain, Multiple $R = .339$, Multiple $R^2 = .115$, Adjusted $R^2 = .105$. The addition of the interaction of role stress and SSP to the model did not significantly improve prediction, $F \text{ change}_{(1, 192)} = .133$, $p > .05$. The interaction of role stress and SSP accounted for only an additional .1% of the variance in health strain. Step one of the model was interpreted due to this lack of significance, suggesting that SSP does not weaken the relationship between role stress and health strain. Health strain could be significantly predicted from role stress, $t_{(193)} = 2.957$, $p < .05$. When individuals experienced the average level of role stress, health strain was lower ($Y' = 10.98$) than when individuals experienced a level of role stress that was one standard deviation above the mean ($Y' = 12.237$). SSP also significantly predicted health strain, $t_{(193)} = -2.495$, $p < .05$. As SSP increased to one standard deviation above the mean, reported health strain decreased ($Y' = 9.958$).

Overall, no support was found for the buffering effects of social support as predicted in hypothesis five, with the exclusion of the effects of organizational support on turnover intentions. Role stress and social support did serve as individual predictors of strain

however, suggesting that each may have a direct impact on the strain experienced by employees.

Gender Hypotheses

The perceptions of social support available from both the organization and the supervisor were predicted to vary based on gender. Hypothesis 6 stated that men would perceive less social support available to them than women. Independent sample *t* tests based on gender were conducted for OSP and SSP. A significant difference was found between men and women on the SSP scale, $t_{(190)} = -2.378$, $p < .05$. On average, men perceived less support available from their supervisor ($M = 45.112$) than women ($M = 50.548$). The gender difference on the OSP scale was not significant, $t_{(186)} = -.947$, $p > .05$. Men did not perceive significantly less social support available from their organization than women. It was further hypothesized that for men, reported strain would be lower when they perceived instrumental support than when they perceived emotional support. No difference was predicted for women in the reporting of strain as a function of whether emotional or instrumental support was perceived. Standard regression was used to test these hypotheses. Items tapping emotional support and instrumental support were identified in both the OSP and SSP scales. The emotional

support items from both scales were summed to create an emotional support index. An instrumental support index was also created by summing the instrumental support items from both the OSP and SSP scales. Both of the new support indexes were then centered. Before conducting the analyses the data file was split by gender, so the regression would be conducted first for only the men in the sample, and then for the women. The split data file contained 157 males and 31 females. The effects of emotional and instrumental support for men and women were assessed for each of the four strain outcomes.

Organizational Commitment. For men, organizational commitment was significantly predicted by a model that contained both emotional and instrumental support, $F_{(2, 154)} = 34.623, p < .05$. The two support scales accounted for 31% of the variance in organizational commitment, Multiple $R = .557$, Multiple $R^2 = .31$, Adjusted $R^2 = .301$. As hypothesized, organizational commitment could be significantly predicted from instrumental support, $t_{(154)} = 2.7, p < .05$, but not from emotional support, $t_{(154)} = 1.026, p > .05$. Men who reported instrumental support one standard deviation above the mean were more committed to the organization

($Y' = 47.895$) than men who experienced the average level of instrumental support ($Y' = 44.299$).

The relationship for women was similar.

Organizational commitment was significantly predicted by the model that contained instrumental and emotional support, $F_{(2, 28)} = 6.043$, $p < .05$. Instrumental and emotional support accounted for 30.1% of the variance in organizational commitment, Multiple $R = .549$, Multiple $R^2 = .301$, Adjusted $R^2 = .252$. Contrary to hypothesis 6b, instrumental support significantly predicted organizational commitment, $t_{(28)} = 2.43$, $p < .05$, while emotional support did not, $t_{(28)} = -.957$, $p > .05$. Women who reported one standard deviation above the average on the instrumental support scale were more committed ($Y' = 54.947$) than women reporting the average instrumental support ($Y' = 48.613$).

Turnover Intentions. For men, turnover intentions were significantly predicted by a model that contained both emotional and instrumental support, $F_{(2, 154)} = 32.675$, $p < .05$. Instrumental and emotional support accounted for 29.8% of the variance in turnover intentions, Multiple $R = .546$, Multiple $R^2 = .298$, Adjusted $R^2 = .289$. As hypothesized, turnover intentions were significantly predicted from instrumental support, $t_{(154)} = -2.143$,

$p < .05$, but not from emotional support, $t_{(154)} = -1.493$, $p > .05$. Men who reported instrumental support at one standard deviation above the mean experienced fewer turnover intentions ($Y' = 5.293$) than men who reported the average level of instrumental support ($Y' = 6.465$). No significant prediction of turnover intentions could be made based on instrumental and emotional support perceived by women, $F_{(2, 28)} = .868$, $p > .05$, thus not supporting hypothesis 6b.

Burnout. Scores on the Maslach Burnout inventory were significantly predicted by instrumental and emotional support for men, $F_{(2, 154)} = 26.717$, $p < .05$. The two support scales accounted for 26.5% of the variance in burnout, Multiple $R = .515$, Multiple $R^2 = .265$, Adjusted $R^2 = .255$. While the model containing both instrumental and emotional support predicted burnout, individually neither measure significantly predicted burnout, emotional support $t_{(154)} = -1.617$, $p > .05$ and instrumental support $t_{(154)} = -1.606$, $p > .05$. Thus, hypothesis 6a was not supported. The lack of individual predictive significance may be due to the high correlation between the instrumental and emotional support scales ($r = .880$). For women, burnout could not be significantly predicted from a model that contained instrumental and

emotional support, $F_{(2, 28)} = .478, p > .05$. This finding does not provide support for hypothesis 6b.

Health Strain. A similar pattern of results was found for scores on the GHQ-12. For men, the reporting of health strain could be significantly predicted from a model containing emotional and instrumental support, $F_{(2, 154)} = 14.074, p < .05$, but the two support measures did not predict individually, emotional support $t_{(154)} = -1.753, p > .05$ and instrumental support $t_{(154)} = -.571, p > .05$. Instrumental and emotional support accounted for 16% of the variance in health strain, Multiple $R = .4$, Multiple $R^2 = .16$, Adjusted $R^2 = .148$. This finding also does not provide support for hypothesis 6a. Health strain could not be significantly predicted from emotional and instrumental support for women, $F_{(2, 28)} = 2.83, p > .05$, which also does not support hypothesis 6b.

Overall, partial support was found for hypothesis six, in that men perceived less social support to be available than women. There was partial support for hypothesis 6a. Men reported fewer turnover intentions and more organizational commitment when they perceived instrumental support rather than emotional support. No support was found for hypothesis 6b. For women, emotional

and instrumental support were not predictive of turnover intentions, burnout, or health strain. While these measures were predictive of organization commitment, instrumental support proved to be a better predictor, contrary to the stated hypothesis.

Neuroticism Hypotheses

In hypothesis seven, neuroticism was hypothesized to be related to the role stress experienced, in that individuals who reported higher levels of neuroticism would also report more role stress. This hypothesis was tested using bivariate correlations. The effects of neuroticism on each form of role stress have not been well established in the research literature; therefore, the separate role stress scales were used in this analysis rather than the composite role stress score. Neuroticism was positively related to role overload ($r = .132$) and role conflict ($r = .102$), but neither of these correlations were statistically significant. Contrary to expectations, the correlation between role ambiguity and neuroticism was actually negative and close to zero, but again it was also not statistically significant ($r = -.026$). While no hypotheses were made regarding the personality characteristic of agreeableness and role stress, a significant negative correlation was found

between agreeableness and role conflict ($r = -.192$, $p < .01$). When the transformed data for agreeableness were used, the correlation with role conflict was non significant ($r = -.076$, $p > .05$). No support was found for hypothesis seven.

Neuroticism was also predicted to be related to the amount of social support perceived to be available from both the organization and the individual's direct supervisor. Specifically, hypothesis 8 stated that individuals high in neuroticism would perceive less social support to be available from supervisors and the organization. This hypothesis was only partially supported. A significant but weak negative correlation was observed between neuroticism and OSP ($r = -.167$, $p < .05$). The correlation between SSP and neuroticism ($r = -.106$) was not statistically significant. This outcome suggests that individuals high in neuroticism are less likely to perceive social support stemming from the organization, while perceptions of supervisor support are unaffected by neuroticism. No predictions were made for agreeableness and perceived social support; however, a significant positive correlation was found between agreeableness and SSP ($r = .263$, $p < .01$), which remained significant when the transformed data were used ($r = .159$, $p < .05$). This

result suggests that individuals who are more agreeable perceive more social support to be available from their supervisor than individuals who are less agreeable.

Measures of strain were predicted to be related to neuroticism in hypothesis nine. Each measure of strain was correlated with neuroticism to determine if neuroticism's effects were different for various indicators of strain. Hypothesis 9a, which predicted that neuroticism would be related positively to burnout, was supported ($r = .313$, $p < .01$). Individuals high in neuroticism were also likely to report high levels of burnout. No relationship was found between turnover intentions and neuroticism ($r = .00$); therefore, hypothesis 9b was not supported. For the employees of these two organizations, the level of neuroticism had no impact on an individual's intentions to leave the organization. Organizational commitment was found to be negatively correlated with neuroticism ($r = -.166$, $p < .05$) as predicted in hypothesis 9c. Those high in neuroticism were less committed to their organization. Neuroticism demonstrated its strongest correlation with the GHQ-12 ($r = .471$, $p < .01$) A Fisher's r to z transformation was conducted to determine if there was a significant difference in the strength of correlations between neuroticism, health strain, and

burnout. The results indicated neuroticism does not have significantly more impact on general health than burnout ($z = 1.803, p > .05$). Agreeableness, while not predicted to be related to any measure of strain, was significantly correlated with the GHQ-12 ($r = -.162$). This correlation remained significant when the transformed data for agreeableness were analyzed ($r = -.151, p < .05$). Individuals high in agreeableness experienced fewer health symptoms than individuals low in agreeableness.

Discussion

The purpose of this study was to investigate some of the factors that may impact the effectiveness of social support in reducing the experience of strain in the workplace. The source of the social support, the type of support perceived, gender differences, and the neuroticism of the individual were examined to determine whether certain types of support from specific sources may be more beneficial for some individuals than others. This study also sought to clarify previous research findings on the buffering effect of social support on the stress-strain relationship.

The main focus of this study was to determine whether social support could serve as a buffer against strain in

environments that are inherently stressful. If social support is indeed a buffer, then it can be used by organizations to compensate for the effects of high role stress that can not be reduced. Gender differences in the perceptions of social support were also of interest as previous research has suggested that men and women may perceive different levels of social support being available within the organization. In particular, it has been suggested that men may not benefit from emotionally based social support. The type of social support perceived by men and women, whether instrumental or emotional, was assessed to determine if support type is a factor in the reverse buffering effect that is sometimes found for men.

To assess the effects of social support on strain, the level of stress in the environment and its relationship with social support and strain had to first be established. Neuroticism was also included in the study to account for individual differences that may affect perceptions of stress and strain. The findings for role stress, social support, gender, and neuroticism are discussed below in the order in which they were hypothesized; however, the primary foci of the study are the social support and gender hypotheses (H5 and H6).

Role Stress

Before assessing the effects of social support on employees' experience of strain in the workplace, the relationship between stressors and strain first had to be examined. As predicted in hypothesis one, increased role stress was related to increased experience of strain. The three role stress measures used in this study, role conflict, role ambiguity, and role overload, all showed a significant positive correlation with turnover intentions, organizational commitment, and burnout. General health strain, the fourth outcome measure, was significantly correlated with role overload. These results are consistent with previous findings in the work stress literature. Ortqvist and Wincent (2006) found that role conflict was related to propensity to quit and physical tensions. Other studies have linked role conflict to organizational commitment, job satisfaction, and turnover intentions (Netemeyer et al., 1990; Ngo et al., 2005). Role ambiguity has previously been related to outcomes such as organizational commitment, job satisfaction (Ngo et al., 2005; Ortqvist & Wincent, 2006) and turnover intentions (Netemeyer et al., 1990). The findings of the current study extend previous research on role overload. Prior studies have established a relationship between

burnout and role overload (Bakker et al., 2005; Greenglass et al., 2003) and an indirect relationship with organizational commitment and turnover intentions through burnout (Netemeyer et al., 1995). The current study demonstrates direct relationships between role overload and organizational commitment, turnover intentions, and general health strain. These direct relationships imply that feelings of overload can impact organizational commitment, turnover intentions, and general health strain even if the individual is not experiencing burnout. Role overload was also the only stressor in this study to be linked to general health strain experienced by employees. This finding may be due to the nature of the GHQ-12 scale, which measures general health symptoms. These symptoms, such as trouble concentrating and difficulty sleeping, may be associated with stressors outside the scope of the work context. The emotional exhaustion often associated with role overload (Greenglass et al., 2003) may permeate beyond the boundaries of the workplace and impact the individual's general health.

In environments where role stressors such as conflict, ambiguity, and overload are present, it was predicted in hypothesis two that employees would seek out social support from others within the organization. Thus,

increased role stress would increase one's perception of the social support available. This hypothesis was not supported by the data. Role stress actually demonstrated a negative correlation with social support rather than the predicted positive correlation. This finding may be due to the fact that perceptions of social support and role stress were collected concurrently and therefore, the directionality of the relationship can not be established. Employees who perceived less social support available to them may have experienced more role stress as a consequence, rather than experiencing stress and then seeking out support. The wording of the role stress items may also have impacted the results. Most of the items in the three role stress scales were descriptive in nature rather than affective, meaning that the items asked about specific demands within the individuals' roles rather than the emotions they experienced as a function of these demands. For example, the role conflict scale contains an item that assesses whether the individual receives conflicting demands from more than one source, but the item does not tap the individual's affective reaction to the conflicting demands. The perception of social support may be more closely related to the affective experience of stress rather than descriptive statements regarding one's

role. To establish the directionality of the role stress-social support relationship, a longitudinal measure is necessary to determine if perceptions of social support change with fluctuations in the stressors present in the environment. Additional scale items that tap the affective experience of stress are also necessary to better capture the individual's experience of role stress.

Social Support

The research findings on social support's effects on strain have been somewhat mixed, with some studies finding social support reduces strain (Beehr, 1985; Fenlason & Beehr, 1994), others finding no effect (Beehr et al., 2003), and still others finding that social support may actually increase strain in some situations (Knussen & Niven, 1999). Disagreement over whether social support directly affects strain or serves as a buffer in the stress-strain relationship exists in the literature. Hypothesis three assessed whether measures of social support stemming from the supervisor and from the organization were related to the four measures of strain. Increased supervisor and organizational support were related to fewer turnover intentions, less burnout, reduced health strain, and greater organizational commitment. These results indicate that a direct

relationship may exist between social support and strain, a finding consistent with a meta-analysis conducted by Viswesvaran and colleagues (1999). The observed relationship between social support and strain makes intuitive sense, in that individuals may experience more or less strain depending on the amount of support they perceive as being available from supervisors and the organization. A definitive statement on this direct relationship can not be made, however, because the directionality of the relationship can not be established due to the correlational nature of the analysis. Therefore, it is possible that those experiencing lower strain may then perceive greater social support available, whether they choose to use it or not.

One of the purposes of this study was to determine if employees distinguish social support provided by their supervisor from support provided by the organization. Previous research in social support has assumed that the supervisor is considered a representative of the organization, and therefore support provided by the supervisor is considered an indicator of caring from the organization (Eisenberger et al., 1986). If employees do distinguish between the sources of the social support, then the impact on different strain outcomes should be

specific to the source of the support. Hypothesis four predicted support perceived as stemming from the organization would be more strongly related to organizational commitment than support stemming from one's supervisor. The difference in the correlation between organizational support and commitment and the correlation between supervisor support and commitment was not statistically significant although the observed difference was in the predicted direction. It had been expected that a difference would suggest that organizational support may boost employees' feelings of commitment to the organization more so than supervisor support. Some supervisors may be viewed as the exception to the personification of the organization that individuals tend to create when perceiving social support (Rhoades & Eisenberger, 2002). If the supervisor is viewed as qualitatively different from the organizational persona, then any support from the supervisor is likely to build commitment to one's supervisor rather than organizational commitment. This idea is consistent with the finding that perceptions of interactional justice were related to trust in one's supervisor rather than trust in the organization (Stinglhamber et al., 2006). Hypothesis four also predicted that supervisor support would be more strongly

related to burnout than organizational support. A difference in the strength of the correlations was again observed in the predicted direction; however, it failed to reach significance. Due to the more frequent interactions between supervisors and subordinates it was thought that supervisors would be able to provide more emotional support. This level of emotional support would likely impact the emotional exhaustion that individuals experience, which is a key factor in burnout (Maslach & Jackson, 1981). Perhaps emotional support, which may be more beneficial in combating burnout, is more readily perceived from one's supervisor than the organization. Emotional support from supervisors may be viewed as sincere by employees because of daily interactions and supervisors' knowledge of the individuals' role demands and work history. Upper management, on the other hand, is likely to have minimal contact with or knowledge of individual employees, which may make emotional support attempts appear shallow or insincere.

The lack of significance for the specific support source in relation to strain may be attributed to the measures used to assess supervisor and organizational support. Because no existing scale actively distinguished different sources of support prior to this study, two

measures were created using existing scales (Abbey et al., 1985; Eisenberger et al., 1986) and items written by the author. Although these revised scales were pilot tested, they did not perform as hoped for in the thesis study. Employees may not conceptualize 'upper management' without being given a clear definition; therefore, they may have responded based on different frames of reference. These scales' utility for individuals in different levels of the organizational hierarchy should also be assessed. There may be many levels that separate a line worker's supervisor from upper management, thus creating a clear distinction between the two sources. For individuals in middle management, however, their supervisors may be upper management, which may blur the distinction between support from one's supervisor and support from upper management. This potential problem in clarity may also have been a factor in the high correlation that was found between the supervisor and organizational support scale scores. In other words, the shared variance between the supervisor and organizational support scales (53.8%) may have been a function of this confusion.

A follow up correlational analysis was conducted to compare the effects of supervisor and organizational support on organizational commitment and burnout based on

the reported job classification. While no statistical differences were found in the strength of the correlations between strain and organizational support and strain and supervisor support at the three job classification levels, the consistency of the correlational direction suggests that source distinction may be observed if a more sensitive measure was used.

The second means by which social support, both from supervisory and organizational sources, has been shown to impact strain is through a buffering effect. Previous research findings have been mixed regarding whether social support weakens the relationship between stress and strain. Hypothesis five predicted that both supervisor and organizational support would buffer employees against strain when stressors were present in the work environment. Minimal support was found for this hypothesis. Organizational support demonstrated a buffering effect only on turnover intentions. No buffering effects were found for supervisor support on any of the four strain measures. The current literature on social support's ability to buffer against stress has been equivocal at best. A few studies have found a buffering effect (Kirmeyer & Dougherty, 1988; Viswesvaran et al., 1999), while others have found no effect or a reverse

buffering effect, implying that social support actually increases strain (Beehr et al., 2003; Fenlason & Beehr, 1994). While minimal buffering effects were found in the current study, role stress and social support were individually predictive of strain outcomes in all analyses, suggesting that stress and support may have direct but separate effects on strain. The separate antecedents imply that stressors can affect individuals regardless of the social support available and social support can affect strain regardless of the stressors present in the environment. The impact of social support, while not a buffer for strain, should not be overlooked. In many of the regression analyses, social support was a stronger predictor of strain than role stress. The exception for buffering may be in the case of organizational support and turnover intentions. Expressing intentions to leave the organization is a more dramatic response to stress than having less commitment to the organization and feeling burnt out or strained. Because this response is somewhat more extreme, a greater level of stress is likely needed to increase turnover intentions. The organization providing the employee support during times of stress may signal that the organization cares

about the individual and therefore, the decision to leave the organization may not be necessary.

Several measurement issues may also have impacted the results of these analyses. The strain outcome measures of burnout and general health strain were problematic in that they could be impacted by factors outside the organization's control, such as family demands, health complications, and personal conflicts. Support provided in the work context may not be sufficient to impact strain generated from multiple sources including one's work. Although the true nature of the relationship between social support, stress, and strain remains unclear, the current study adds to the evidence that perhaps social support acts directly on strain rather than serving a buffering function.

Gender

Discrepant findings for the role of social support in reducing strain, particularly the occurrence of the reverse buffering effect, have implicated gender differences as a factor. The reverse buffering effect is generally found only with men, suggesting that men may perceive and utilize social support differently than women (González-Morales et al., 2006). Hypothesis six predicted that men would perceive less social support to be

available to them than women. This hypothesis was supported for supervisor support, but not for organizational support. The nature of the sample may have been a factor in the findings for supervisor support and the lack of findings for organizational support. In highly regulated industries, such as manufacturing, there may be more policies and procedures at the organizational level that dictate what resources and information are disbursed and to whom they are distributed to ensure the safety and quality of products. This may, to some extent, standardize the perception of the distribution of organizational support, decreasing the likelihood of gender differences in support perceptions. Support from one's supervisor is less likely to be as strictly governed by rules and policies. The level of perceived support from one's supervisor is more likely to be affected by the type of support, quality and quantity of interaction, and other factors that may be influenced by gender. Prior research has implicated gender roles (Beehr et al., 2003) and specific coping styles (González-Moralés et al., 2006) as the basis for the differential findings on social support. The instrumental form of social support, which includes information, resources, and advice, may be more consistent with the male gender role, which is characterized by

instrumentality, competence, assertiveness, and independence (Bem, 1974). Men often use an active coping style which is also more consistent with instrumental support (González-Morales et al., 2006). It has been suggested that the reverse buffering effect occurs when men receive emotional support that conflicts with their gender role, which in turn generates increased tension (Beehr et al., 2003). Because of the greater number of interactions between supervisors and employees, emotional support is more likely to be perceived when offered by a supervisor rather than the organization, regardless of employee gender. If support from the organization is not actively perceived as emotional, then it is unlikely to elicit a conflict with the male gender role. Support from a supervisor, if perceived as emotional, may be threatening and either disregarded or cause an emotional reaction on the part of the employee. This threat may be especially powerful if the support is being offered by another male, because this implies that the recipient of the support is weak and incompetent (Barbee et al., 1993). Conversely, supervisors may assume that men need less support due to gender stereotypes and therefore provide more social support to female employees.

Based on previous research and the implication of gender roles in the experience of strain, it was predicted that men would experience less strain when they perceived support as instrumental rather than emotional. Partial support for this hypothesis was found in the analyses. For the strain outcomes of organizational commitment and turnover intentions, men experienced less strain with instrumental support than with emotional support. Emotional support was not predictive of either turnover intentions or organizational commitment. Strain in the form of burnout and general health strain were significantly predicted by emotional and instrumental support together; however, neither form of support predicted strain individually. This lack of predictive power could be due to several measurement issues. As previously mentioned, burnout and health strain can be affected by factors outside the work context. Because these strains on the employee may not be job or task related, accepting emotional support may not conflict with the male gender role. The scales used to measure emotional and instrumental support are also problematic. These scales were developed specifically for this study due to the fact that existing social support scales do not distinguish between emotional and instrumental support.

When the supervisor and organizational social support scales were factor analyzed, however, only one general support factor was found. These findings suggest that employees do not distinguish emotional support from instrumental support; alternatively, the measurement may not be sensitive enough to capture this distinction. A very high correlation was found between the emotional and instrumental items in both the OSP and SSP scales. The overlapping variance likely explains the ability of emotional and instrumental support to predict strain together, but the failure of either to individually predict outcome variables. The results of this study suggest that men may benefit more from instrumental support when the strain outcomes are more directly related to the work context. While emotional support did not appear to be particularly beneficial to men for any of the strain outcomes, it also was not detrimental, which would be implied if a reverse buffering effect had been found.

Social support research has found that women tend to perceive more support than men, and are able to utilize different coping strategies to deal with strain (González-Morales et al., 2006). Emotional support is more consistent with the female gender role, which is nurturing and caring (Bem, 1974), and the passive coping style more

often used by women. The instrumental form of support does not conflict with women's gender role or coping strategies, as emotional support conflicts with men's gender role. Therefore, it was predicted that women would use both forms of support and neither form would be more predictive of strain. No support was found for this hypothesis. Neither emotional nor instrumental support was predictive of turnover intentions, burnout, or health strain for women. The only statistically significant finding was that instrumental support predicted greater organizational commitment. The lack of significant findings might be attributed to the small number of women in the sample. There were a total of 31 women between the two companies surveyed, as compared to 157 males. This proportion is fairly representative of the manufacturing industry, which on a national level is over 70% male. The analyses conducted in this study lacked power due to the small sample size, which makes the probability of a type II error likely. In light of the finding that instrumental support rather than emotional support predicted organizational commitment, it is also possible that women who choose to work in this male dominated industry are qualitatively different from other women. Women working in manufacturing organizations may experience social support

that is consistent with the male gender role from both the supervisor and the organization because that is the more likely form of support provided to employees. Conversely, women in these organizations may seek instrumental support rather than emotional support to conform to the environment or due to dispositional factors that may have drawn them to the manufacturing industry in the first place. To further investigate the relationship between gender and social support, a larger sample of women from manufacturing industries is needed. These women should also be compared to women in other industries that are more female dominated, such as the service industry, to see if women's use of instrumental support is due to the work environment, dispositional differences, or a combination of personality and environment.

Neuroticism

Individual differences in neuroticism have been found to impact the perceptions of stressors and support, and the experience of strain in previous research (Code & Langen-Fox, 2001). Individuals who are high in neuroticism tend to report higher levels of role conflict, role ambiguity, and role overload (Grant & Langan-Fox, 2007; Parkes, 1990); therefore, it was predicted in hypothesis seven that high neuroticism would be related to high role

stress. This hypothesis was not supported by the data. While lacking significance, the positive direction of the correlations is consistent with prior research on neuroticism and stress (Grant & Langan-Fox, 2007; Parkes, 1990) with the exception of role ambiguity. The negative correlation between role ambiguity and neuroticism was contrary to the findings of prior studies (Parkes, 1990). The implication is that individuals who are less neurotic experience greater role ambiguity than those who are more neurotic. One potential explanation is that individuals who experience a high level of ambiguity are generally in salary exempt and salary non-exempt positions which are higher in the organizational hierarchy than hourly positions. Highly neurotic individuals may choose not to work in positions that contain a high level of ambiguity or conversely, may be unable to advance to such positions within the organization.

An important factor that may have contributed to the inconclusive findings was the amount of data missing for the neuroticism measure, a factor which may have reduced statistical power. Many individuals either failed to respond to the scale, or did so incorrectly, making their data unusable. Despite the assurances of anonymity, individuals may have been uncomfortable or unwilling to

fill out a personality measure in a work related survey. A large number of non-respondents may have led to bias in the resulting data. Individuals who responded to the scale may have done so in a way they deemed as appropriate for the work context. This potential response bias may not be problematic, however, in that individuals may conform their behavior at work to this work appropriate perception. Therefore, the responses would be reflective of the level of neuroticism displayed in the work context. To increase responding to a neuroticism measure and strengthen the suggestive, but non-significant findings, personality measures could be given to individuals separate from other measurement scales. This would help boost the perception of anonymity and hopefully increase responding. A neuroticism measure with less transparency could also be employed to circumvent the negative reaction to assessing personality in the workplace.

Agreeableness items were added to the neuroticism scale used in this study to balance the transparency of the neuroticism items, which may have biased responding. Because these items were added for the sole purpose of preventing individuals from determining the personality characteristic of interest, no hypotheses were generated about the relationship between agreeableness and role

stress. A significant negative correlation was observed between agreeableness and role conflict, but when the transformed data were used for the agreeableness scale to correct for the non-normality of the distribution, the correlation was no longer significant. Previous research has found that individuals who are low in agreeableness reported a higher frequency of conflict in the workplace (Dijkstra, van Dierendonck, Evers, & De Dreu, 2005). Perhaps individuals who are higher in agreeableness manage the various demands of their jobs more effectively and therefore experience less conflict. Conversely, individuals who are experiencing a high level of role conflict may perceive themselves as less agreeable due to the conflict they are experiencing. It seems more plausible that high levels of agreeableness lead to less role conflict rather than vice versa. Individuals low in agreeableness have also been shown to react with greater negative affectivity to conflict (Graziano, Jensen-Campbell, & Hair, 1996), suggesting that the individual's level of agreeableness may contribute to the amount of conflict he or she experiences. Additional research is necessary, however, to verify the strength and directionality of the relationship between agreeableness and role conflict.

The perception of the amount of social support available within the organization has also been shown to be affected by neuroticism (Lynch et al., 1999). It was predicted in hypothesis eight that those high in neuroticism would perceive less social support available from both the supervisor and the organization. The analyses provided partial support for this hypothesis. A significant, albeit weak, correlation was found between neuroticism and organizational support. Individuals who were high in neuroticism were less likely to perceive social support being available to them from the organization. No significant correlation was observed between neuroticism and supervisor support. One explanation for the lack of significance may be that individuals who are high in neuroticism perceive information, resources, and emotional outlets offered by the organization and their supervisor not as support, but rather as favors that must be reciprocated at some point (Lynch et al., 1999). It is also possible that individuals high in neuroticism are actually offered less support by supervisors and the organization. These individuals may not be well liked by others in the organization due to the behaviors that accompany neuroticism including moodiness, jealousy, fretfulness, and being temperamental.

Supervisors and the organization are less likely to offer support to individuals who are disliked or may be difficult to work with. The lack of strong findings may again be attributed to the issue of missing data and response bias associated with the neuroticism scale.

Predictions were not made for agreeableness and social support, but a significant positive correlation was found between agreeableness and supervisor support. This relationship remained significant after the analysis was conducted with the transformed data. Individuals who were more agreeable perceived more social support to be available from their supervisor. As discussed with the neuroticism findings, those who are more agreeable may perceive instances when information and resources are provided by the supervisor as social support. It is also possible that individuals who are more agreeable may have a better working relationship with their supervisor and therefore may actually receive more support than individuals who are less agreeable. Previous studies have linked agreeableness to the giving and receiving social support in the work context (Bowling, Beehr, & Swader, 2005), rather than just the perception that support is available. Research in leader-member exchange has also demonstrated that individuals who are part of the leader's

ingroup receive more resources than other subordinates. A similar process may be occurring with agreeableness, in that those who are well liked by the supervisor receive more social support. Further studies need to be conducted to test the basis of this observed relationship.

The final avenue by which neuroticism is thought to affect the stress-strain relationship is through its impact on the level of strain experienced by individuals. Negative emotionality, which is characteristic of neuroticism, has been linked to physiological and psychological strain (De Gucht et al., 2003; Parkes, 1990), as well as reduced job and career satisfaction (Grant & Langan-Fox, 2007; Seibert & Kraimer, 2001). Partial support was found for hypothesis nine, which predicted that neuroticism would be related to each of the four strain measures. Neuroticism had a significant positive correlation with burnout and general health strain. Individuals who were more neurotic were more likely to also experience burnout and general health strain. A significant negative correlation was observed between organizational commitment and neuroticism. Individuals who were high in neuroticism were also less committed to the organization. No relationship was found between turnover intentions and neuroticism; therefore,

employees who reported more intentions to leave the organization were not more or less neurotic than employees who reported fewer turnover intentions. The results for burnout and general health strain are consistent with previous research that suggests neurotic individuals experience more strain than other individuals in a similar environment (Grant & Langan-Fox, 2007; Parkes, 1990). Neuroticism has also been related to depressive symptoms and the perception of inadequate rewards for one's efforts (Vearing & Mak, 2007). The relationship between neuroticism and organizational commitment has not often been reported in prior research, but neuroticism has been shown to be negatively related to job satisfaction (Seibert & Kraimer, 2001), which is linked to commitment. Individuals who are more neurotic may feel less commitment to the organization due to a fear of being exploited by the organization (Lynch et al., 1999). Neurotic individuals may perceive that any offer of support or demonstration of commitment by the organization is accompanied by expectations of reciprocation sometime in the future. Uncertainty about the organization's motives for providing support is likely to have a negative impact on the commitment the individual feels towards the organization. The lack of relationship between neuroticism

and turnover intentions is surprising given neuroticism's impact on other measures of strain. Several factors beyond the individual's personality characteristics and the organization itself may contribute to intent to turnover, including current job market conditions, financial obligations, and family demands. The deficiencies in the neuroticism measure may also be a factor in the lack of expected findings.

Agreeableness was not predicted to be related to any of the strain outcomes, but a significant negative correlation was found between agreeableness and general health strain. This relationship remained significant when the transformed data were used in the analysis, suggesting that individuals who are more agreeable experience fewer health strain symptoms than individuals who are less agreeable. Agreeable individuals are likely to experience less conflict and more social support, as previously discussed. These factors may in turn reduce the level of strain experienced which can manifest in the form of sleep problems, lack of concentration, and general depression. Agreeableness has been related to the cynicism and professional efficacy components of burnout in previous studies (Bakker, Van Der Zee, Lewig & Dollard, 2006; Kim, Shin, & Umbreit, 2006), so it was surprising that

agreeableness was not related to burnout in the current study. Other studies, however, have found no relationship between agreeableness and stressors and strain (Grant & Langan-Fox, 2007), indicating that the relationship between agreeableness and strain is not entirely clear.

Implications

Little consensus has been reached in the literature on the effects of social support on stress and strain experienced in the workplace. Some studies argue for a buffering effect, others imply a direct effect of support on strain, and still others suggests that under certain conditions, social support may in fact be detrimental to the employee. While definitive answers to the paths through which social support impacts the stress-strain relationship and the contingencies that surround its effects remain elusive, the current study does provide additional evidence for a direct relationship between social support and strain rather than a buffering effect. Social support can reduce strain experienced in the workplace regardless of the stressors present in the environment. Social support can be beneficial to employees in environments that contain fluctuating levels of stress. Alternatively, perhaps social support can not compensate for high levels of stress and organizations must seek to

decrease the stressors present in the environment as well as provide social support if they wish to decrease strain and its outcomes.

This study sought to identify some of the factors that may impact the ability of social support to reduce strain, including the type of support perceived, its source, and personality differences of the recipient. The current findings suggest that individuals do not actively distinguish between instrumental and emotional support; social support of either form may be viewed as beneficial. These findings suggest that different forms of social support are not separate constructs, but rather different facets of a general social support construct. Although individuals did not actively distinguish emotional from instrumental support, the findings suggest that instrumental support may be somewhat more effective in reducing strain for men and women, especially for organizationally specific strain outcomes such as organizational commitment. The source of the social support did not differentially affect the reduction strain in this study, but the consistent differences observed in the correlations between supervisor support and strain outcomes and the correlations between organizational support and strain outcomes suggest that individuals may

differentiate supervisor support from organizational support. This finding is contrary to the assumption of many social support measurements which consider the supervisor as merely a representative of the organization (Eisenberger et al. 1986). The differentiation of support sources suggests that even though both forms of support are beneficial, for some outcomes, such as organizational commitment or burnout, support from a particular source may be more effective (Kottke & Sharafinski, 1988).

Individual differences, in this case neuroticism, also seem to affect the perception of social support and the experience of strain. Neuroticism impacted the strain experienced by the employee, but it did not seem to impact the stressors perceived in the environment. Individuals high in neuroticism experienced more general health strain and burnout than individuals low in neuroticism. The strain outcomes that were most strongly related to neuroticism were also the outcomes that were the least specific to the work context (i.e. general health strain). Neuroticism, therefore, may impact strain in a broader sense. The organization may be less able to help reduce the strain of individuals high in neuroticism because the strain is experienced outside of the work context (Parkes, 1990). Social support may be less effective for neurotic

individuals, as demonstrated by the observation that only organizational support was related to strain. Organizations may wish to consider the impact of personal differences, such as neuroticism, when evaluating the effectiveness of social support provided to their workforce.

Gender differences in the perception and utilization of social support have been implicated in many prior studies (Beehr et al, 2003; González-Morales et al., 2006; Greenglass & Burke, 1988). The current study demonstrates that while there is a gender difference in the amount of social support perceived, there were few differential effects based on the type or source of the social support. No reverse buffering effect was found for either gender, suggesting that social support is useful in general for reducing strain. Emotional support was not detrimental to men's level of strain, which implies that it may not conflict with the male gender role as has been previously suggested. Instrumental support did tend to be more effective, but this outcome was true for women as well as men. The context in which the support is given (i.e. the work environment) may be more relevant to its effectiveness than gender. Given the lack of distinction between emotional and instrumental support, men and women

may utilize both forms of social support when provided these resources. Unfortunately, the current study does not provide insight into why the reverse buffering effect occurs with some samples and not others.

CHAPTER FOUR

LIMITATIONS AND FUTURE DIRECTIONS, AND CONCLUSION

Limitations and Future Directions

There were several limitations in this study that should be considered when interpreting the results, including sampling issues, measurement deficiencies, and the statistical analyses conducted. The sample for this study was drawn from only two organizations in the Western United States. It is unclear how well the findings would generalize to other manufacturing organizations on the national or international level. There may be regional or cultural differences that are unaccounted for in the current study which may impact the effectiveness of social support in the workplace. Social support from the organization or one's supervisor may be perceived as more (or less) beneficial by the employee based on cultural norms and expectations. For example, if the cultural norm emphasized individualism and personal success, social support is likely to be less beneficial than in a culture where collectivism is emphasized. Social support is likely to be more readily accepted and have greater power in reducing strain when the focus is on the group rather than on individual achievement. Even the culture within an

organization may impact the effects of social support perceptions. In an organization where receiving support from others is considered a sign of weakness or failure, the perception of social support being offered by others would be detrimental to the employee because it signals that the support giver views the recipient as incompetent. In an organizational culture where support is viewed as an integral resource that individuals use to complete their objectives, the perception that social support is available is likely to reduce the experience of stain. Future studies should incorporate samples from different regions of the United States, as well as other countries, to determine if cultural differences play a role in the perceptions of social support. Such studies would require an assessment of culture norms regarding work behavior, achievement orientations, and giving and receiving help from others to determine the cultural impact of social support in the workplace.

Another limitation of the sample was that individuals were asked to complete the survey on work time, which may have produced a biased sample. The individuals who chose to respond to the survey may have been qualitatively different than those who chose not to participate. These individuals may have had more positive (or negative)

feelings towards the organization than other employees, and therefore may not be representative of the employees as a whole. In the aerospace company, a list of contacts was provided rather than allowing all employees to participate. There is the potential that the sample was biased based on the individuals chosen by the Human Resources department. The sample also was predominately men, which makes the gender hypotheses difficult to interpret. The small percentage of women in the manufacturing industry in general makes obtaining a sufficient sample size to test gender differences challenging. Additionally, the manufacturing industry is a male dominated environment; therefore, the women who choose to work in this area may be qualitatively different than women in other industries, making the generalizability of the gender findings questionable. The nature of the manufacturing industry may also make the social support findings difficult to generalize to other populations. Manufacturing companies, especially in the two industries sampled, must adhere to very specific government safety restrictions. These restrictions may impact the social support that supervisors and organizations can provide to their employees by limiting the types of resources, assistance, and additional time

employees could be provided to combat strain. An additional sample limitation was extenuating circumstances that may have altered employees' thoughts and perceptions just prior to the survey distribution. For example, in the aerospace company, a Reduction in Force (RIF) occurred one week prior to the survey. This RIF may have increased employees' perceptions of stressors and strain and decreased the perceptions of support.

Future studies should seek to gather more diversified and gender balanced samples to improve the interpretability and generalizability of findings. Women from multiple industries should be compared to assess whether social support for women in the manufacturing industry is similar to support provided to women in more female dominated industries, such as service oriented companies. How dispositional differences may affect the perceptions of support and strain for women who work in male dominated industries verses female dominated industries should also be investigated. Other non-manufacturing industries could be sampled as well to determine if the results of this study are specific to manufacturing organizations or can be generalized to other industries and occupations. Comparing industries with varying the levels of governmental restrictions should

also be considered to determine if social support is more or less effective when the work process is very defined and controlled.

The measurement issues which may have impacted the findings of this study include missing data and scale deficiencies. For many of the measurement scales used in this study, a portion of the sample chose rather to not respond, or answered in an incorrect manner making the data unusable. For the neuroticism scale in particular the percentage of missing data (almost 20%) was problematic. Although no patterns were observed in the other responses from individuals who were missing the neuroticism data, it is unknown whether individuals who did not respond may have been more or less neurotic than individuals who did respond. If individuals who were more neurotic were uncomfortable with responding to the scale, then the sample would appear less neurotic than the actual population. This sample bias could reduce the observed impact of neuroticism on stress, strain, and social support. A relationship between neuroticism and stressors may exist, but those high in neuroticism may have viewed the measurement scale as a stressor and thus chose not to respond. The resulting range of scores would have been restricted, making the effects of neuroticism on stressors

less clear. Future studies should seek to clarify the effects of neuroticism on stress, strain, and support. Alternative measures of personality that may be less transparent to employees should be used to help combat the missing data problem. Researchers should also consider the effects of other individual differences, such as agreeableness, locus of control, and extroversion.

The current study found unexpected relationships between agreeableness, strain, and support which suggest that agreeable people may experience less strain and perceive more support than those who are less agreeable. Locus of control could be an important factor in the perception of stressors, as well as the experience of strain. Individuals who feel they have control over their surroundings and circumstances (internal locus of control) may perceive fewer stressors and less strain. Individuals high in extroversion may be more likely to seek out social support when needed than introverted individuals, which may reduce strain. Identifying the individual differences that impact the effectiveness of social support is important not only because they provide boundaries for social support's impact, but also these differences provide organizations with a greater understanding of the

social support process and its contingencies which may be used to guide the distribution of scarce resources.

Deficiencies in the measurement scales may have led to the non-significant findings for gender and the buffering effects of social support. The social support scale developed for this study was intended to measure two types of social support, emotional and instrumental. When the scale was factor analyzed, however, only one general factor was found. Due to the fact that emotional support was not differentiated from instrumental support, the interpretation of the gender based differences in the perception of support and the experience of strain is questionable. It is unclear whether the single general factor found for support is due to a lack of sensitivity in the measurement scale or because social support may be one general construct not differentiated into two separate types.

Future research should attempt to further clarify the construct of social support. Items in existing scales, such as the scale created for this study, could be revised to more clearly indicate the perception of either emotional or instrumental support. Studies using revised scales would help determine whether social support has appeared as one factor in the previous studies due to

measurement problems or because social support is in fact comprised of a general factor. These revised scales should also be tested in different industries to ensure that the distinction (or lack thereof) between the forms of social support is not industry specific. The antecedents and outcomes of different types of social support, such as emotional support and instrumental support, could also be researched to help clarify the social support construct. If different antecedents lead to emotional support than instrumental support and different outcomes resulted from each form of support, then the social support construct may indeed be multi-faceted.

Additional research should be conducted to determine the strength and importance of the distinction between supervisor and organizational support. If each form of support impacts strain outcomes differently, then this would suggest that there may be different antecedents for supervisor and organizational support. For organizations seeking to build the perceptions of support, knowing the differences in the antecedents and outcomes for each source of support may help tailor the support provided to specific needs of the individuals and the organization.

The correlational nature of this study prevents strong, casually based inferences from being drawn about

stress, support, and strain. The survey approach also prevented the manipulation of any of the variables or the use of a control group for comparison. The data were gathered concurrently, which does not allow the directionality of any correlation to be established. To determine the directionality and impact of the relationships found in this study, a longitudinal study would be required along with a much larger sample. Future studies could gather data over the course of several months or years to determine the direction of the correlational relationships observed in this study and how perceptions of support may or may not change based on the fluctuation of stressors in the environment.

Conclusion

Overall, the findings of this study indicate that the experience of strain can be predicted by both the stressors present in the environment and the social support that is perceived to be available. Social support, however, does not appear to buffer individuals from strain. Gender differences in the amount of social support perceived were observed, with women perceiving more social support available than men. This finding should be interpreted with caution, however, given the large

difference in the sample sizes between men and women. The type of support and its source did not differentially predict the experience of strain. Individuals experienced less strain when social support was available from either the supervisor or the organization. Instrumental support seemed to be slightly more beneficial to men and women than was emotional support. Neuroticism was not related to the amount of role stress experienced by employees, but it was related to strain in the forms of burnout, organizational commitment, and health strain. Support from the organization was also impacted by the individual's level of neuroticism, although supervisor support was not. In organizations, regardless of individual differences in certain personality characteristics, it appears that the perception of support being available to employees when needed is the most important factor in decreasing the experience of strain in a stressful environment.

APPENDIX
MEASUREMENTS FROM SURVEY

Role Stress (Peterson et al., 1995)

Please indicate your level of agreement with each statement about your current work environment on a scale of 1 = *strongly disagree* to 5 = *strongly agree*

Role Conflict items:

1. I often get involved in situations in which there are conflicting requirements
2. I receive incompatible requests from two or more people
3. I have to do things that should be done differently under different conditions

Role Ambiguity items:

1. I have clear planned goals and objectives for my job
2. I know exactly what is expected of me
3. I know what my responsibilities are
4. I feel certain about how much responsibility I have
5. My responsibilities are clearly defined

Role Overload items:

1. There is a need to reduce some parts of my role
2. I feel overburdened in my role
3. I have been given too much responsibility
4. My workload is too heavy
5. The amount of work I have to do interferes with the quality I want to maintain

(Bacharach, Bamberger, & Conley, 1990)

6. I don't have time to finish my job

Supervisor Social Support

Please indicate your agreement with each statement regarding your current supervisor on a scale of 1 = *strongly disagree* to 5 = *strongly agree*

1. My supervisor provides me with the information I need to solve the problems I encounter at work
2. My supervisor provides me with the information I need to solve the problems I encounter at work
3. My supervisor provides me with information that is important in my decision making on work tasks or projects
4. My supervisor cares about my well being
5. If I need a special favor my supervisor is willing to help
6. My supervisor honestly listens to my grievances
7. My supervisor helps me clarify which tasks in my job take priority
8. My supervisor uses the information that he or she has available to help me perform my job adequately
9. I feel I can discuss with my supervisor any issues that I encounter with my coworkers
10. My supervisor understands how demanding my job can be sometimes
11. My supervisor understands when I occasionally have a bad day at work
12. My supervisor understands the pressures that may be associated with my job
13. When I have too many things to do at work my supervisor helps me out

Organizational Social Support

Please indicate your agreement with each statement about the upper management of your organization on a scale of 1 = *strongly disagree* to 5 = *strongly agree*

1. When I have too many things to do at work those in upper management help me out
2. Those in upper management understand when I occasionally have a bad day at work
3. Those in upper management understand how demanding my job can be sometimes
4. I feel I can discuss with those in upper management any issues that I encounter with my coworkers
5. Those in upper management help me clarify which tasks in my job take priority
6. Help is available from the organization when I have a work-related problem
7. The organization provides me with the resources I need to solve problems
8. Those in upper management understand the pressures that may be associated with my job
9. Those in upper management honestly listen to my grievances
10. The organization really cares about my well being
11. The organization provides me with information that is important in my decision making on work tasks or projects
12. Those in upper management give me useful work advice when I ask for it
13. The organization provides me with the information I need to solve the problems I encounter at work
14. The organization shows appreciation for the work that I do
15. I feel that the organization accepts me as a person
16. I feel I can talk to those in upper management about situations at work that upset me

Burnout (Maslach & Jackson, 1981)

The following statements are of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, write a "0" (zero) in the space before the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way

1. I feel emotionally drained from my work
2. I feel used up at the end of the workday
3. I feel tired when I get up in the morning and have to face another day on the job
4. Working all day is really a strain for me
5. I can effectively solve the problems that arise in my work
6. I feel burned out from my work
7. I feel I am making an effective contribution to what this organization does
8. I have become less interested in my work since I started this job
9. I have become less enthusiastic about my work
10. In my opinion, I am good at my job
11. I feel exhilarated when I accomplish something at work
12. I have accomplished many worthwhile things in this job
13. I just want to do my job and not be bothered
14. I have become more cynical about whether my work contributes anything
15. I doubt the significance of my work
16. At my work, I feel confident that I am effective at getting things done

Organizational Commitment (Cook & Wall, 1980)

Please indicate your level of agreement with each statement on a scale of 1 = *strongly disagree* to 7 = *strongly agree*

1. I am quite proud to be able to tell people who it is that I work for
2. I sometimes feel like leaving this employment for good (reverse scored)
3. I'm not willing to put myself out just to help the organization (reverse scored)
4. Even if the firm were not doing so well financially, I would be reluctant to change to another employer
5. I feel myself to be part of the organization
6. In my work I like to feel I am making some effort, not just for myself, but for the organization as well
7. The offer of a bit more money with another employer would not seriously make me think of changing my job
8. I would not recommend a close friend to join our staff (reverse scored)
9. To know that my own work had made a contribution to the good of the organization would please me

Neuroticism and Agreeableness (Saucier, 1994)

Please use the list of common human traits to describe yourself as accurately as possible. Please describe yourself as you at the present time, not as you wish to be in the future. Describe yourself as you are generally or typically, as compared to other persons you know of the same sex and of roughly the same age. Next to each trait please indicate how accurately it describes you using the number scale of 1 = *very inaccurate* to 9 = *very accurate*

Envious

Fretful

Jealous

Moody

Relaxed (reverse scored)

Temperamental

Touchy

Unenvious (reverse scored)

Sympathetic

Cold (reverse scored)

Cooperative

Kind

Harsh (reverse scored)

Rude (reverse scored)

Warm

Unsympathetic (reverse scored)

Turnover Intentions (Cohen, 1998)

Please rate your agreement with the following statements on a scale of 1 = *strongly disagree* to 5 = *strongly agree*

1. I think a lot about leaving the organization
2. I am actively searching for an alternative to the organization
3. As soon as possible, I will leave the organization

General Health Questionnaire-12 item version (Goldberg, 1972)

Please indicate how often you experience the following in the last six months:

0 = Never 1 = Rarely 2 = Sometimes 3 = Often

1. been able to concentrate on whatever you're doing
2. lost much sleep over worry
3. felt that you are playing a useful part in things
4. felt capable of making decision about things
5. felt constantly under strain
6. felt you couldn't overcome your difficulties
7. been able to enjoy your normal day-to-day activities
8. been able to face up to your problems
9. been feeling unhappy and depressed
10. been losing confidence in yourself
11. been thinking of yourself as a worthless person
12. been feeling reasonably happy all things considered

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