



Contents lists available at ScienceDirect

Journal of Vocational Behavior

journal homepage: www.elsevier.com/locate/jvb



A model of stress and coping and their influence on individual and organizational outcomes

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ARTICLE INFO

Article history: Received 20 February 2009 Available online 16 April 2009

Keywords: Job stress Problem-focused coping Emotion-focused coping Self-efficacy Locus of control Role conflict Role clarity

ABSTRACT

A model of coping with stress is proposed in which coping mediates the relationship among organizational stressors and personal characteristics, and job-related strains and organizational outcomes. Study results, based on a sample of professional salespeople, provide overall support for most of the hypothesized relationships among work-related stressors, personal characteristics, and coping styles. Findings also support the influence of emotion-focused coping on the psychological outcomes of emotional exhaustion and job-induced anxiety; which in turn are found to influence job satisfaction and intention to withdraw. While problem-focused coping had no effect on job-induced anxiety, problem-focused coping did effect emotional exhaustion, which in turn influences job satisfaction and intention to withdraw. Minor differences were found when the proposed model was applied to saleswomen versus salesmen. Overall, however, the model was robust across both genders.

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1. Introduction

Job stress is a pervasive problem for workers and employers in today's economy. In particular, stress is endemic to commission-based salespeople as a workplace population (Porter, Kraft, & Claycomb, 2003). Escalating customer expectations, rapidly changing technologies, continuously evolving marketplaces, among other factors, contribute to an increasingly complex and demanding job (Jones, Chonko, Rangarajan, & Roberts, 2007). Inevitably, those employed in commission-based sales must balance the conflicting demands of the customer and the company, and compensation is based on the ability to effectively meet the needs of both (Nonis & Sager, 2003).

Understanding how organizational stressors influence employees' response to stress, as well as how a stress-related response further influences job-related strains and outcomes, is an important challenge to those studying organizational performance. For example, it is estimated that job-related strains like job anxiety and emotional exhaustion cost organizations \$300 billion annually in the United States alone (Chapman, 2005). Further, these job-related strains often result in decreases in job satisfaction and subsequent employee turnover (withdrawal). These negative organizational outcomes frequently lead to reductions in customer satisfaction and concomitant lost revenues, further escalating the negative financial impact (Fornell, Mithas, Morgenson, & Krishnan, 2006; Reichheld & Sasser, 1990).

Efforts to understand these important interrelationships have led several scholars to support the notion of mediational models of stress (e.g., Lazarus & Folkman, 1984; Lewin & Sager, 2008; Thoits, 1986). Within these mediational models, certain coping styles/strategies are posited to mediate the impact of antecedent organizational work stressors

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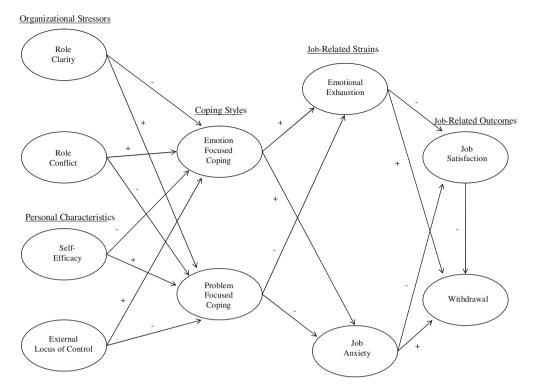


Fig. 1. A mediational model of stress and coping.

and individual worker characteristics on employees' felt levels of job-related strains and subsequent job-related outcomes (see Fig. 1).

Two frequently cited sources of workplace stress are role ambiguity and role conflict (e.g., Brookings, Bolton, Brown, & McEvoy, 1985; Schwab & Iwanicki, 1982). Within the mediational framework, it is proposed that the coping strategies employees utilize to cope with job-stressors (i.e., role ambiguity and role conflict) have the potential to either diminish or amplify the detrimental effects of these stressors on work-related outcomes (e.g., Lewin & Sager, in press; Thoits, 1986; Wilk & Moynihan, 2005). These potential mediating effects have been proposed in the psychology, sociology, and occupational literatures (e.g., Sand & Miyazaki, 2000; Terry, Rawle, & Callan, 1995; Thoits, 1995). However, empirical support for these hypothesized relationships among, for example, nurses, police officers, teachers, and salespeople remain mixed (e.g., Daniels & Harris 2005; Singh, 2000; Thoits, 1995).

It also has been proposed that certain individual (personal) characteristics likely will influence the choice of coping style; and through the coping style chosen, influence subsequent strains and outcomes. Frequently cited personal characteristics affecting job-related strains and outcomes include employees' self-efficacious beliefs and their orientation toward locus of control: internal/external attribution (e.g., Lewin & Sager, 2007; Stajkovic & Luthans, 1998). Cooper, Dewe, and O'Driscoll (2001) observe that although evidence exists that both self-efficacy and locus of control play a role in the way individuals respond to stress, only limited research examines the influence these two variables exert on coping styles. Among the limited extant studies investigating these relationships, findings also have been mixed (e.g., Dixon & Schertzer, 2005; Golembiewski & Muzenrider, 1984; Goodman & Boss, 2002).

Given the limited empirical efforts surrounding these specific interrelationships, coupled with the mixed results across prior studies, additional research is needed to help better understand these important workplace phenomena. Further, we can find no prior study that has simultaneously investigated these important interrelationships within the context of a single model. Therefore, utilizing a sample of commission-based salespeople, the purpose of this study is to examine these interrelationships within the context of the model depicted in Fig. 1, while at the same time contributing to a better understanding of how these relationships interact. Accomplishing these goals should help supervisors assist their employees' efforts toward coping with job-stressors, as well as improve organizational outcomes by diminishing employees' felt levels of job-related strains.

The remainder of this work is organized in the following manner. First, a review of the related literature leads to the formation of the study hypotheses. Following this, the methodology section offers information on the sample and methodological procedure, as well as provides the source of the measurement items and the methods used for scale validation. Next the hypotheses are tested and the results summarized. Finally, the findings are discussed, study limitations are delineated, and conclusions and suggestions for future research are offered.

2. Organizational stressors, personal characteristics, and coping styles

2.1. Organizational stressors: role conflict and role clarity

Rizzo, House, and Lirtzman (1970) define role conflict in terms of the congruency–incongruency or compatibility–incompatibility in the requirements of the role, relative to a set of standards which impinge upon role performance. These same authors define role clarity in terms of the existence of clarity of behavioral requirements which serve to provide knowledge that the behavior is appropriate. We adopt these definitions and associated measures in this work.

Within the extant literature role clarity and role conflict have been examined extensively as important antecedents to salesperson behaviors and organizational outcomes (see Brown & Peterson, 1993 for a review). These same role stressors have been proposed and studied as important antecedents of job-related strains among, for example, teachers, nurses, and telemarketing personnel. In their review of the occupational burnout literature, Cordes and Dougherty (1993) describe emotional exhaustion as a unique response to demand stressors placed upon employees, including role conflict and role ambiguity. Citing studies involving teachers, human service, and health care professionals, these authors observe that repeated exposure to these stressors cause employees to feel emotionally anxious and exhausted.

Singh, Goolsby, and Rhoads (1994) posited that the tasks required of boundary spanners (e.g., customer service representatives) are highly susceptible to role stressors. These authors point out, for example, that (1) when boundary spanners face tasks that are unique and require innovative solutions, lack of role clarity arises; and (2) role conflict occurs when boundary spanners are expected to satisfy incompatible demands from multiple role partners. Among field salespeople, Babakus, Cravens, Johnston, and Moncrief (1999) and Boles, Johnston, and Hair (1997) modeled role ambiguity and role conflict as important antecedents of job-related strains, and hypothesized that these role stressors, together with job anxiety and emotional exhaustion, significantly influence salespersons' performance, commitment, and satisfaction.

2.2. Personal characteristics: self-efficacy and external locus of control

Self-efficacy is defined here as an employee's perception of his or her own level of mastery within a task domain. Employees who perceive themselves as self-efficacious believe they can execute the actions required to be successful in their work-related role. Self-efficacy has been posited to be an important antecedent of workers' perceptions of job-related accomplishment (Lee & Ashforth, 1990; Leiter, 1991). This assertion is supported by Stajkovic and Luthans' (1998) meta-analysis focusing on the relationship between self-efficacy and work-related performance across 114 published studies in a wide variety of academic areas including management, psychology, sociology, marketing, and organizational behavior. Across these studies, Stajkovic and Luthans' (1998) found a strong positive correlation between work-related performance and perceived self-efficacy. Within the sales and marketing literatures, several studies have found a positive relationship between self-efficacy and sales-related performance (e.g., Brown, Cron, & Slocum, 1998; Hunter, 2004; Krishnan, Netemeyer, & Boles, 2002).

Spector (1988) defines locus of control in organizational settings as the generalized expectancy that promotions, salary increases, and favorable circumstances are controlled either by one's own actions (internality) or by other forces (externality). Individuals who tend to attribute their successes or failures to sources other than themselves often view these external forces as being random or uncontrollable. This, in turn, leads them to feel that success or failure is a matter of luck (Churniss, 1980). In a sales setting, these external forces might include customers, supervisors, competitors, or other factors beyond the salesperson's control.

When salespeople believe that external forces determine some or all their job-related failures, these external attributions often manifest in characteristics associated with job anxiety and emotional exhaustion. For example, they will become cynical toward the offending external entity (Cordes & Dougherty, 1993), and will try to distance themselves from and/or avoid similar stressful interactions (Teas & McElroy, 1986). This assertion is supported by Dixon and colleagues' (2003, 2005) findings that salespeople who attribute their failures to external sources intentionally avoid future similar sales interactions. It is further supported by Verbeke (1997) who found a negative relationship between salespersons' perceptions of failure and their ability to continue to interact with their customers. Further support for these relationships can be found in the work of Roberts, Lapidus, and Chonko (1997) and Sager, Strutton, and Johnson (2006).

2.3. Organizational stressors as determinants of coping style

Latack (1986) defines coping as a person's response to either uncertain situations or situations involving important consequences. Coping strategies are cognitive and behavioral efforts to manage specific stressors that are assessed as taxing or exceeding the resources of an individual, and are perceived as potentially leading to negative consequences (Lazarus & Folkman, 1984). Individuals generally adopt a coping style based on a determination of whether or not they believe the situation may be changed. A cognitive style often is used when a situation is viewed as changeable, while an emotional or escape-based style is used when a situation is viewed as chronic. Some researchers suggest that the coping style or strategy used may be more important to individual well-being than the presence of the stressor itself (e.g., Perrewe & Zellars, 1999).

Over the years, a range of constructs has been used to assess coping style. However, after investigating the various coping dimensions identified in the extant literature, Latack and Havlovic (1992) concluded that the major distinction common across these various dimensions is that most individuals respond to stress using either a problem-focused or

emotion-focused coping strategy. Problem-focused coping is directed at taking action to alter the stressor in such a way as to manage the situation, while emotion-focused coping is directed at regulating and reducing emotional distress through, for example, avoidance or fantasy (Latack, 1986).

In the model proposed in Fig. 1, coping style constitutes a salesperson's response to perceived role conflict and the presence or absence of role clarity. Coping style is further influenced by characteristics of the individual, including the self-efficacious beliefs the salesperson holds and his or her perceptions of external (as opposed to internal) locus of control. The proposed model utilizes problem-focused coping and emotion-focused coping styles to represent coping as a mediator between sources of stress and job-related strains, and ultimately job-related outcomes. While the problem-focused/emotion-focused coping conceptualization has been used to examine stress in varied work environments, no single study has examined the complex interrelationships among the constructs exhibited in Fig. 1 simultaneously.

For example, Parkes (1990) found that problem-focused coping buffered the negative effects of job stressors on the emotional well-being of teachers. Koeske, Kirk, and Koeske (1993) found that problem-focused coping diminished the negative effects of job stressors on burnout among welfare case workers. Both Pines, Aronson, and Kafry (1981) and Etzion and Pines (1986) found problem-focused coping strategies were associated with lower levels of emotional strain, while emotion-focused coping strategies were associated with higher levels of emotional strain among corporate managers and social workers, respectively. Henle and Blanchard (2008) found that employees who experienced both role conflict and role ambiguity were more likely to engage in 'cyber-loafing' as an escapist method of emotion-focused coping. Further, findings by Jex, Bliese, Buzzell, and Primeau's (2001) suggest that coping effectiveness may be related to a combination of factors, including organizational characteristics, personal characteristics, and the coping method utilized.

While the direct relationships between problem-focused/emotion-focused coping strategies and job-related strains among salespeople have received some limited attention (Nonis & Sager, 2003; Sand & Miyazaki, 2000), no study to date has examined the mediating role of coping strategies on the relationship between job stressors, job-related strains, and job-related outcomes. Notwithstanding this gap in the literature, based on the works outlined above the following hypotheses are suggested:

Hypothesis 1a. Role clarity will be negatively related to emotion-focused coping.

Hypothesis 1b. Role clarity will be positively related to problem-focused coping.

Hypothesis 2a. Role conflict will be positively related to emotion-focused coping.

Hypothesis 2b. Role conflict will be negatively related to problem-focused coping.

2.4. Personal characteristics as determinants of coping style

In the model provided in Fig. 1, the individual core self-evaluation, self-efficacy, as well as the trait variable, external locus of control, also influence coping style. Kinicki, McKee, and Wade (1996) point out that coping strategy is influenced by both environmental variables and personal characteristics. While such factors as role conflict and lack of role clarity reflect perceived characteristics of the work environment, self-efficacy and locus of control are unique to individuals.

Bandura (1986) posits that the level of an individual's self-efficacious belief is a primary determinant of which type of coping strategy s/he will adopt. In cases where strong self-efficacy beliefs exist the individual would be expected to pursue a more problem-solving approach to cope with stress. In contrast, when levels of self-efficacy are low the individual would be more inclined to adopt a more emotion-based approach. A similar viewpoint is offered by Weigel, Wertlieb, and Feldstein (1989) in their assessment of workers' reactions to job loss through layoffs or downsizing. These authors observe that in cases where laid-off workers hold stronger self-efficacious beliefs, these workers are more likely to pursue problem-focused activities aimed at reemployment. In contrast, laid-off workers who hold weaker self-efficacious beliefs are more likely to pursue emotion-focused activities aimed at reassurance and restoration of self-worth.

However, only limited empirical support surrounding these propositions is available. For example, in a study of first-year nursing students, Parkes (1984) found self-efficacy to be positively related to direct (problem-oriented) coping strategies, but found no relationship between self-efficacy and suppression (emotion-oriented) coping strategies. Similarly, Staples, Hulland, and Higgins (1999), in a study of 'remotely managed employees', found a positive relationship between self-efficacy and a problem-focused coping orientation, but did not include an examination of emotion-focused orientation. Equivalent findings have been reported in studies focusing on 'layoff victims' (Bennett, Martin, Bies, & Brockner, 1995) and freshman college students (Phinney & Haas, 2003).

Self-efficacy is particularly relevant to success in commission-based sales where 'customer rejection' is an unavoidable aspect of the profession. When individual salespeople hold strong self-efficacious beliefs, they are better able to cope with frequent rejection and more likely to continue to apply a problem-oriented approach toward making sales and meeting quotas. In contrast, for salespeople who lack confidence in their professional abilities, rejection only further increases their sense of helplessness; moving them more toward emotion-focused coping through escapism and avoidance (Lewin & Sager, 2007).

Within the sales literature, we find only one study examining these relationships with mixed results. In that study, Srivastava and Sager (1999) found a positive relationship between self-efficacy and the use problem-focused coping

strategies among field salespeople, however found no relationship between self-efficacy and the use of emotion-focused coping strategies within the same group. Considering the contribution of each of these prior works, in general the following hypotheses are suggested:

Hypothesis 3a. Self-efficacy beliefs will be negatively related to the use of emotion-focused coping.

Hypothesis 3b. Self-efficacy beliefs will be positively related to the use of problem-focused coping.

Proponents of attribution theory believe that perceived control (internal or external) over the causes of a stressful situation influences behavioral responses to the focal stressor (Latack, Kinicki, & Prussia, 1995). More specifically, when individuals perceive they are able to control or alter the stressor, a problem-focused approach to relieving the stress is expected. In contrast, when individuals perceive the stressor is beyond their control or influence, an emotion-focused approach likely will be used (Folkman & Lazarus, 1985; Sutton & Kahn, 1987). Along these lines, Moore (2000) proposed that when the cause of a stressor is perceived as stable and unchanging (i.e., beyond the individual's control) a more emotion-oriented response is expected (i.e., distancing oneself from the source of stress). In contrast, when the stressor is perceived to be controllable and subject to being changed the more likely a problem-oriented response is expected (i.e., personal improvement through additional training).

Most of the empirical research in this area supports these propositions. For example, Anderson, Hellriegel, and Slocum (1977), in a study of businesspeople in a Federal Disaster (flood) Area, found businesspeople with a more internal locus of control (those who believed they had control over recovery) utilized more problem-focused coping strategies in response to environmental stressors. In contrast, those with a more external locus of control (those who believed that recovery was beyond their control) utilized more emotion-focused coping strategies. Similar results were reported by Scheck and Kinicki (2000) in a study of employees working in a high-tech company that recently had been taken over, and as a result, was planning significant staff reductions. Further, Daniels and Guppy (1994) found that in stressful circumstances accountants who were high in their perception of internal locus of control, and who also utilized problem-focused coping strategies, successfully buffered the negative effects of stress on their personal well-being.

For commission-based salespeople, failure to close deals, or even move negotiations forward, is a common occurrence. In some cases, the cause lies with the salesperson in that s/he has insufficient sales training, poor mastery of the product or the technology, and/or s/he simply cannot handle the stress associated with the profession. In other cases, nimble competitors, innovative new technologies, or weaknesses associated with the salesperson's own employer organization can be the cause of their lost sales. In either event, when salespeople attribute the cause of their difficulty and stress to external factors (as opposed to themselves), based on the attribution theory discussed above they would be expected to adopt emotion-focused coping strategies; and avoid problem-focused strategies as they view the source of their difficulties beyond their own control.

We find only one study that examines these propositions in a sales setting. In that study Srivastava and Sager (1999) found that while an internal locus of control was positively related to the use of problem-focused coping strategies, locus of control (internal and external) was not related to the utilization of emotion-focused coping strategies. Notwithstanding these findings, the extant literature suggests the following:

Hypothesis 4a. External locus of control will be positively related to the use of emotion-focused coping.

Hypothesis 4b. External locus of control will be negatively related to the use of problem-focused coping.

3. Coping style and job-related strains

3.1. Coping style and emotional exhaustion

Emotional exhaustion and job-induced anxiety have implications for individual well-being (e.g., Koeske et al., 1993; Parkes, 1990), as well as job-related outcomes Babakus et al., 1999; Boles et al., 1997). Consistent with the mediational model of stress (Lazarus & Folkman, 1984; Thoits, 1986), and as illustrated in Fig. 1, coping style mediates the effects of organizational stressors and personal characteristics on job-related strains. Thus, employees' felt levels of emotional exhaustion and job anxiety are influenced by the coping style utilized by the individual.

Emotional exhaustion is one of three components of employee burnout as conceptualized by Maslach and Jackson (1981). While this three-component conceptualization of burnout has become widely accepted, many believe emotional exhaustion is the core dimension in the burnout process (e.g., Boles et al., 1997; Gaines & Jermier, 1983). As a result, the emotional exhaustion component has become the surrogate construct for burnout in many studies (e.g., Babakus et al., 1999; Lee & Ashforth, 1993; Leiter, 1991). Emotional exhaustion, as defined here, occurs as a response to job-related demand stressors placed upon employees (e.g., role stressors). Common symptoms include dread at the prospect of returning to work, increased absenteeism, and ultimately, withdrawal from the organization (Cordes & Dougherty, 1993).

Before proceeding, it is important to note that various forms of coping resources have been found to have *direct* effects on job-related strains in various workplace contexts (e.g., Leiter, 1991; Nonis & Sager, 2003; Sand & Miyazaki, 2000). In contrast,

other studies have argued and found some limited support for coping resources as *buffering* the effects of role stress on jobrelated strains (e.g., De Rijk, Le Blanc, Schaufeli, & de Jonge, 1998; Thoits, 1986). As a result of these somewhat conflicting approaches, the question has arisen as to whether coping resources in-and-of-themselves, *even in the absence of stress*, have an overall direct effect on employee well-being per se (main effect model). Or, do coping resources primarily work to mediate the potentially adverse effects of stress (buffering model).

In an excellent examination of the issues and extant literature surrounding this debate Cohen and Wills (1985) conclude that in the absence of stress, coping resources have limited impact on felt levels of strain and/or individual well-being. In the presence of stress, however, coping resources can act as a stress buffer in two distinct ways. First, coping may intervene between the stressful event and a stress reaction by attenuating or preventing a stress appraisal. Second, if the event is appraised as stressful, coping may mediate between the stress appraisal and the associated adverse outcome by either reducing or amplifying the stress reaction. In this study, the buffering model of the relationship between stress, coping, and job-related strains is adopted and tested. This is consistent with the position taken in several more recent works (e.g., de Rijk et al., 1998; Folkman & Lazarus, 1988; Lewin & Sager, 2007).

Within the sales literature, coping strategies have been discussed by several researchers. For example, Porter et al. (2003) theorized that the use of problem-focused coping strategies by salespeople should help hold stress in check and lead to more positive outcomes; whereas salespersons' use of emotion-focused coping strategies will lead to more negative outcomes. Sand and Miyazaki (2000) found that salespeople who primarily utilized active (problem-focused) coping strategies had lower overall burnout as compared to salespeople who primarily utilized inactive (emotion-focused) coping strategies. Similarly, Nonis and Sager (2003) found that salespersons' use of problem-focused coping was negatively related to emotional exhaustion, while salespersons' use of emotion-focused coping was positively related to emotional exhaustion. Additional works examining problem-focused/emotion-focused coping strategies in the sales literature include Strutton and Lumpkin (1993), Strutton and Lumpkin (1994) and Strutton, Pelton, and Lumpkin (1995). In sum, the prior discussion suggests the following:

Hypothesis 5a. Emotion-focused coping will mediate the effects of (i) role clarity, (ii) role conflict, (iii) self-efficacy, and (iv) external locus of control on salespersons' felt levels of emotional exhaustion.

Hypothesis 5b. Problem-focused coping will mediate the effects of (i) role clarity, (ii) role conflict, (iii) self-efficacy, and (iv) external locus of control on salespersons' felt levels of emotional exhaustion.

3.2. Coping style and job anxiety

Job anxiety is defined as feelings of nervousness, tension, or pressure as a result of job-related requirements; which may negatively affect worker well-being both on- and off-the-job (House & Rizzo, 1972). Maslach (1982) argued that intense or emotionally charged face-to-face client interactions are more demanding and can be expected to lead to higher levels of emotional exhaustion. Cordes and Dougherty (1993) observe that the fatigue associated with emotionally charged interactions often result in workers' feelings of job-related tension. These relationships have been empirically supported in studies focusing on teachers (Jackson, Schwab, & Schuler, 1986) and human resource professionals (Cordes, Dougherty, & Blum, 1997).

Overall, the literature suggests that (1) the way individuals appraise stressful events and then (2) how individuals respond to those events (i.e., cope) influence the consequent level and intensity of experienced psychological strains (Lazarus, 1993; Perrewe & Zellars, 1999). However, studies examining the relationship between stress-related coping and specific jobrelated strains offer mixed results. For example, Deary, Agius, and Sadler (1996), in a study of 188 psychiatrists, physicians, and surgeons, linked the use of coping strategies to felt levels of anxiety and emotional exhaustion. Similarly, using a sample of 264 extension agents for land-grant universities, Sears, Urizar, and Evans (2000) found that the use of emotion-oriented coping strategies was associated with higher levels job anxiety and emotional exhaustion, while task-oriented coping was associated with lower levels of anxiety and emotional exhaustion. In contrast, Michielsen, Croon, Willemsen, De Vries, and Van Heck (2007), utilizing a sample of 755 workers employed in a wide range of industries, failed to find support for these relationships.

Field salespeople experience multiple face-to-face client interactions on a daily basis. Frequently, these interactions are intense and/or emotionally charged. Further, the outcomes of client interactions often have important consequences for the salesperson (commission, bonus, quota) and the firm (revenue, profit). In order to 'win' the business, salespeople must regularly overcome stiff competition from significant competitors. Apart from closing sales, salespeople often have to interact with angry clients who have been disappointed by poor product and/or service performance. The results of these emotionally charged interactions often lead to job anxiety—which has been linked to the sales profession both conceptually and empirically (e.g., Bagozzi, 1980; Dubinsky & Ingram,1984; Singh, 1998; Verbeke & Bagozzi, 2000).

Based on the literature discussed above, salespeople who engage in problem-focused coping will be less likely to experience job-induced anxiety; while salespeople who engage in emotion-focused coping will be more likely to experience job-induced anxiety. This expectation coincides with Folkman and Lazarus' (1988) proposition that coping mediates the relationship between stress and emotional responses to stress. Thus, the following hypotheses are proposed:

Hypothesis 6a. Emotion-focused coping will mediate the effects of (i) role clarity, (ii) role conflict, (iii) self-efficacy, and (iv) external locus of control on salespersons' felt levels of job anxiety.

Hypothesis 6b. Problem-focused coping will mediate the effects of (i) role clarity, (ii) role conflict, (iii) self-efficacy, and (iv) external locus of control on salespersons' felt levels of job anxiety.

4. Job-related strains and job-related outcomes

A significant body of organizational research supports the relationships between organizational stressors, job-related strains, and job-related outcomes (e.g., Brown & Peterson, 1993; Kelly & Hise, 1980; Kemery, Bedeian, Mossholder, & Touliatos, 1985; Rhoads, Singh, & Goodell, 1994). In general, findings across these studies indicate that organizational stressors significantly decrease employees' performance and job satisfaction, and significantly increase employees' job anxiety and turnover intentions.

Within a separate body of research, role stressors have bee shown to lead to emotional exhaustion and burnout (Maslach & Jackson, 1981). Studies within this stream indicated that the consequences of emotional exhaustion include decreases in job-related performance and withdrawal from clients, the job, and the organization (Kahill, 1988; Lee & Ashforth, 1996; Jackson et al., 1986; Wright & Cropanzano, 1998).

In this study, we focus on two important job-related outcomes: job satisfaction and intention to withdraw. Job satisfaction is defined here as the degree of positive feelings that an individual experiences related to his or her job. Withdrawal intention is defined as an employee's subjective assessment that s/he will leave his/her current employer in the near future.

When salespeople consistently fail to meet performance expectations they often lose confidence in their likelihood for future success (Stajkovic & Luthans, 1998). As a result, they experience a sense of inadequacy in terms of their ability to perform their jobs (Sand & Miyazaki, 2000) leading to increased levels of anxiety and emotional exhaustion. When this occurs salespeople likely will spend less time on-the-job further diminishing performance accomplishments (Babakus et al., 1999). Moreover, as salespeople increasingly question their own professional self-efficacy and/or attribute their failures to sources other than themselves, their view of their situation will deteriorate further, exacerbating their feelings of anxiety and exhaustion (Golembiewski & Muzenrider, 1981). These feelings of anxiety and exhaustion will, in turn, decrease salespersons' feelings of job satisfaction. Further, feelings of anxiety, exhaustion, and dissatisfaction will increase salespersons' likelihood of withdrawal (Boles et al., 1997; Low, Cravens, Grant, & Moncrief, 2001). The results of several studies support these propositions (e.g., Badovick, Hadaway, & Kaminski, 1992; Low et al., 2001; Singh, 1998).

Given these significant negative consequences associated with job anxiety and emotional exhaustion, the organizational and individual costs associated with these job-related strains are substantial (Singh et al., 1994). Based on the preceding discussion, it is expected that salespersons who experience emotional exhaustion and job-induced anxiety will also report lower job satisfaction and greater intention to withdraw from the job. Thus,

Hypothesis 7a. Emotional exhaustion will be negatively related to job satisfaction.

Hypothesis 7b. Emotional exhaustion will be positively related to intention to withdraw.

Hypothesis 8a. Job-induced anxiety will be negatively related to job satisfaction.

Hypothesis 8b. Job-induced anxiety will be positively related to intention to withdraw.

Hypothesis 9. Job satisfaction will be negatively related to intention to withdraw.

5. Method

5.1. Sample and procedure

The sample comprised the US sales force employed by an international manufacturer of specialty chemical products (several lines of industrial maintenance chemicals, specialty lubricants, water purification chemicals, and cleaners). Salespeople targeted building engineers and others authorized to purchase \$5,000–\$10,000 of specialty chemicals per year - without preapproval. The company uses internal systems for recruiting and training salespeople, and fields several sales forces in the same geographic markets attached to several strategic business units. Sales managers interviewed as a part of the base research indicated that it takes a salesperson between three and six months to achieve basic proficiency at the task aspect of the sales job, and twelve to eighteen months to achieve full proficiency. Results of a pilot study corroborated those estimates.

At the time of the study the domestic sales organization employed 1200 salespeople and 100 sales managers across several sales groups, arrayed into several geographic divisions. Twenty-seven percent of salespeople were females, although females represent about 40% of new hires. Eighty percent of the salespeople employed by the sample firm held a college degree or had partially completed college. Annual retention rate was slightly below 50% at the time of the study.

A survey questionnaire was mailed to salespeople's homes. The survey booklet incorporated letters from the senior vice-president in charge of sales and the lead researcher. The content of the letters summarized the rationale for the survey and assured respondents of confidentiality. Participants returned the survey in a postage-paid envelope addressed to a university post office box.

The sample comprised responses of 495 of the 1200 salespeople (41% of those surveyed) of whom 364 were males and 131 were females. Demographics of the respondents (i.e., education, organizational tenure, income, gender, and race) were compared with those of the entire sales force. Also, demographic characteristics of late responders were contrasted with those of early responders. In both cases, no statistically significant differences were found with the exception of tenure with the firm. Fifty-four percent of respondents had worked for the subject company for five or more years, which was longer than the 'average' tenure of all sales employees.

5.2. Measures

Role conflict (α = .77) and role clarity (α = .84) were measured using items developed by Rizzo et al. (1970). Examples of items for role conflict are "I receive incompatible requests from two or more people" and "I have to buck a rule or policy in order to make sales." Sample items for role clarity are "Clear, planned goals and objectives exist for my job" and "I know exactly what is expected of me." Likert scales (1 = very inaccurate to 5 = very accurate) were used to assess role conflict and role clarity. High scores indicate high levels of role conflict and high levels of role clarity.

Self-efficacy (α = .73) was measured using items from Chowdhury (1993). Sample items include "I know the right thing to do in selling situations" and "I am good at finding out what customers want." A Likert scale (1 = strongly disagree to 5 = strongly agree) was used to assess this construct. High scores indicate higher levels of selling self-efficacy, while low scores indicate lower levels of selling self-efficacy.

Locus of control (α = .86) was measured using items from Spector (1988). This instrument examines individual locus of control from a job-related perspective. Sample items include "Sales success is usually a matter of good fortune" and "To make a lot of money you have to know the right people." A Likert scale (1 = strongly disagree to 5 = strongly agree) was used to assess this construct. A high score on the measure signifies a more external locus of control.

Coping styles were measured using items adapted from Latack's (1986) three-dimension coping scale. Problem-focused coping was adapted from Latack's 'control' dimension (Cronbach α = .72). Examples of items included are "I come up with several alternative solutions to the problem," "I try to work more efficiently," and "I make a plan and follow it." Emotion-focused coping was adapted from Latack's 'escape' and 'symptom management' dimensions (α = .67). Examples of items include "I avoid being with people in general," "I refuse to believe it has happened," and "I have fantasies about how things will work out." Likert scales (1 = almost never to 5 = almost always) were used to assess these two coping styles. High scores on both scales indicate reliance by respondents on each respective coping style.

Emotional exhaustion (α = .80) was measured using items from Singh et al. (1994). Sample items include "I feel emotionally drained by the pressure my sales manager puts on me" and "Working with customers is really a strain for me." A Likert scale (1 = strongly disagree to 5 = strongly agree) was used, with high scores indicating higher levels of emotional exhaustion. Job-induced anxiety (α = .86) was measured using items developed by House and Rizzo (1972). Example items for job-induced anxiety include "I work under a great deal of pressure" and "Problems associated with my job have kept me awake at night." A Likert scale (1 = strongly disagree to 5 = strongly agree) was used to assess job-induced anxiety; where high scores indicate higher levels of job-induced anxiety.

Overall job satisfaction (α = .89) was measured using items from Brayfield and Rothe (1951). Examples of items include "I find real enjoyment in my job" and "I feel fairly well satisfied with my job." A Likert scale (1 = strongly disagree to 5 = strongly disagree) was used to assess this construct. High scores indicate higher levels of job satisfaction, while low scores indicate lower levels of job satisfaction. Items adapted from Hom and Griffeth (1991) were used to assess withdrawal intent (α = .90). These items tap thinking of quitting, intention to search for another job, and intention to leave. Examples of items include "I regularly think of quitting my job" and "During the next six months, I intend to search for another full-time job." A Likert scale (1 = strongly disagree to 5 strongly agree) was used to assess this construct, and high scores indicated a higher intent to withdraw.

Finally, as previously mentioned, respondents provided information regarding level of education, organizational tenure, income, gender, and race, and these data were employed to estimate possible response bias. Further, gender was used as a grouping variable to evaluate whether significant differences existed between salesmen and saleswomen with regard to the focal constructs, as well as the applicability of the proposed model. These multi-group tests and their associated results will be discussed in the Results and discussion Sections of this work.

5.3. Measurement validation procedure

First, the items described in the prior section were analyzed via confirmatory factor analysis using LISREL 8.54 to verify unidimensionality. The following fit statistics indicate a good fit for the measurement model: χ^2 = 2186.40 df = 1273; IFI = .98, TLI = .97, CFI = .98, RMSEA = .04, SRMR = .05 (Hu & Bentler, 1999).

Next, nomological validity is assessed by examining the Pearson correlation between each pair of constructs to verify that the relationships are consistent with extant theory and prior empirical work found in the literature. With only one exception

(role conflict: problem-focused coping) all correlations are significant, and in all cases the associations are in the expected direction, thus demonstrating nomological validity (Hair, Black, Babin, Anderson, & Tatham, 2006).

Convergent validity is assessed first by examining the completely standardized factor loadings of each observed variable on its designated construct. All loadings are statistically significant (*t*-values range 5.62–34.33) and exceed the recommended .50 minimum (Anderson & Gerbing, 1988); with only four of the 53 factor loadings below .70. Convergent validity also is assessed by calculating the composite reliabilities and the average variance extracted (AVE) of each construct using the methods suggested by Fornell and Larcker (1981). Composite reliabilities range from .81 to .93 and AVEs range from .51 to .72, all above recommended levels (Fornell & Larcker, 1981).

Lastly, discriminant validity is assessed using two methods. First, a series of two-factor confirmatory models are estimated. For each pair the model is estimated first by restricting the factor intercorrelations to unity. Then the model is estimated again with the restriction removed. In each case, the χ^2 difference tests (1 df) are significantly smaller in the unrestricted model demonstrating discriminant validity (Anderson & Gerbing, 1988; Bagozzi & Phillips, 1982). Second, the square of the correlation between each pair of constructs is compared to the average variance extracted (AVE) for each associated construct (Fornell & Larcker, 1981). Among the constructs in this study, the largest squared correlation equals .31 while the smallest AVE equals .51. In sum, in each case the individual AVE estimates are significantly greater than the individual squared correlation estimates, further demonstrating discriminant validity among the constructs.

6. Results

Descriptive statistics, correlations and Cronbach alphas are presented in Table 1. Correlations of the study constructs are in the expected directions. Fig. 2 provides the standardized path coefficients and significance levels, along with the fit indices of the structural model proposed through the 9 hypotheses (LISREL 8.54). As shown in Fig. 2, the hypothesized model provides a good overall fit to the study data: Π 2 = 2843.41 df = 1302; IFI = .96, TLI = .95, CFI = .96, RMSEA = .05, SRMR = .06. Also, 13 of the 17 hypothesized relationships are statistically significant and in the hypothesized direction; as further discussed next.

As shown in Fig. 2, findings indicate that while role clarity was not significantly related to emotion-focused coping (ns), role clarity was positively related to problem-focused coping (γ = .28, p < .01); supporting Hypotheses 1b, but failing to support Hypothesis 1a. Support also is found for Hypothesis 2a, as the relationship between role conflict and emotion-focused coping is statistically significant and positive (γ = .33, p < .01). In contrast, the relationship between role conflict and problem-focused coping is not statistically significant (ns), failing to support Hypothesis 2b.

Findings also support Hypotheses 3a and 3b. The relationship between self-efficacy and emotion-focused coping is significant and negative (γ = -.26, p < .01), while the relationship between self-efficacy and problem-focused coping is significant and positive (γ = .37, p < .01). Similar to Hypotheses 1a and 1b, partial support exists for Hypothesis 2b. Specifically, findings indicate that the proposed relationship between external locus of control and emotion-focused coping is significant and positive (γ = .34, p < .01), supporting Hypothesis 4a. However, the relationship between external locus of control and problem-focused coping is not statistically significant; thus no support is found for Hypothesis 4b. In sum, predictions regarding the influence of organizational stressors and personal characteristics on the choice of coping style utilized received mixed support (5 out of 8 were statistically significant).

Before evaluating the estimated path coefficients between coping styles and job-related strains, it was necessary to test for the expected mediating effects proposed in the various components of Hypotheses 5a, 5b, 6a, and 6b. This was done using methods proposed by Judd and Kenny (1981), Sobel (1982), and Baron and Kenny (1986); and the results are exhibited in

Table 1	
Descriptive	statistics

•										
	RCLAR	RCONF	SEB	LOCUS	EFC	PFC	EMEX	JSAT	JAX	WITH
RCLAR	(.84)									
RCONF	37**	(.77)								
SEB	.33**	12* .30**	(.73)							
LOCUS	26**		26** 24** .35**	(.86)						
EFC	14**	.23**	24**	.35**	(.67)					
PFC	.36**	08ns	.35**	22**	25 ^{**}	(.72)				
EMEX	43 ^{**}	.46**	31 ^{**}	.43**	.31**	28 ^{**}	(.80)			
JSAT	.41**	34 ^{**}	.34**	36**	30 ^{**}	.38**	48**	(.89)		
JAX	14 ^{**}	.34**	17 ^{**}	.26**	.39**	21 ^{**}	.56**	39**	(.86)	
WITH	- . 25**	.30**	17 ^{**}	.36**	.24**	20**	.43**	62 ^{**}	.39**	(.90)
MEAN	4.21	1.85	4.03	1.98	1.95	3.77	1.86	3.98	2.58	1.48
SD	.66	.77	.53	.61	.66	.57	.61	.66	.93	.79

Cronbach α coefficients are listed within parentheses on the diagonal. RCLAR, role clarity; RCONF, role conflict; SEB, self-efficacy beliefs; LOCUS, external locus of control; EFC, emotion-focused coping; PFC, problem-focused coping; EMEX, emotional exhaustion; JSAT, job satisfaction; JAX, job-induced anxiety; WITH, withdrawal.

^{*} *p* ≤ .05.

^{**} p ≤ .01.

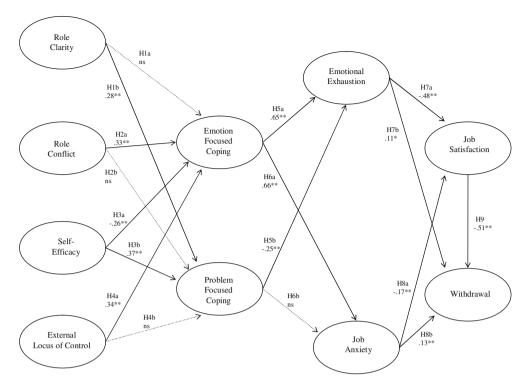


Fig. 2. Results for hypothesized model. Results of Structural Equation Model: Fit \cdot 2 = 2843.41, df = 1302; IFI = .96, TLI = .95, CFI = .96, RMSEA = .05, SRMR = .0 6. Parameter estimates are from the completely standardized solutio n and are significant at *p < .05, **p < .01.

Table 2. As shown in Table 2, ten of the sixteen hypothesized mediation effects were statistically significant. Those mediation effects that were found *not* significant include (1) *emotion-focused coping* mediating the effects between *role clarity* and *emotional exhaustion* (H5a_i) and *job anxiety* (H6a_i); (2) *problem-focused coping* mediating the effects between *role conflict* and *emotional exhaustion* (H5b_{ii}) and *job anxiety* (H6b_{ii}): and (3) *problem-focused coping* mediating the effects between *external locus of control* and *emotional exhaustion* (H5b_{iv}) and *job anxiety* (H6b_{iv}). All other hypothesized mediation effects, with one exception, exhibited partial-mediation. The signal relationship that exhibited full-mediation was between *emotion-focused coping* and *self-efficacy* and *job anxiety*. In sum, the majority of the hypothesized mediation effects were supported (10 out of 16). The six non-significant results will be further discussed in the following section. However, as will be shown, these non-significant results are not without foundation in the extant literature.

Table 2 Mediation tests.

Path	Mediation effect ^a
$RCLAR \rightarrow EFC \rightarrow EMEX^b$	None
$RCLAR \rightarrow PFC \rightarrow EMEX$	Partial
$RCONF \rightarrow EFC \rightarrow EMEX$	Partial
$RCONF \rightarrow PFC \rightarrow EMEX$	None
$SEB \rightarrow EFC \rightarrow EMEX$	Partial
$SEB \rightarrow PFC \rightarrow EMEX$	Partial
$LOCUS \rightarrow EFC \rightarrow EMEX$	Partial
$LOCUS \rightarrow PFC \rightarrow EMEX$	None
$RCLAR \rightarrow EFC \rightarrow JAX$	None
$RCLAR \rightarrow PFC \rightarrow JAX$	Partial
$RCONF \rightarrow EFC \rightarrow JAX$	Partial
$RCONF \rightarrow PFC \rightarrow JAX$	None
$SEB \rightarrow EFC \rightarrow JAX$	Full
$SEB \rightarrow PFC \rightarrow JAX$	Partial
$LOCUS \rightarrow EFC \rightarrow JAX$	Partial
$LOCUS \rightarrow PFC \rightarrow JAX$	None

^a It reflects the results of tests of mediation suggested by Judd and Kenny (1981), Sobel (1982), and Baron and Kenny (1986).

^b RCLAR, role clarity; RCONF, role conflict; SEB, self-efficacy beliefs; LOCUS, external locus of control; EFC, emotion-focused coping; PFC, problem-focused coping; EMEX, emotional exhaustion; JAX, job-induced anxiety.

While no specific hypotheses were offered for the direct effects of coping styles on job-related strains, it is appropriate to mention the associated path estimates. Findings indicate that three of the four related path estimates are significant, and in the direction that would be expected based on several extant studies examining such direct effects. As shown in Fig. 2, the paths between emotion-focused coping and emotional exhaustion (β = .65, p < .01) and emotion-focused-coping and job anxiety (β = .66, p < .01) are both positive and significant. The path between problem-focused coping and emotional exhaustion (β = .25, p < .01) is negative and significant, while the path between problem-focused coping and job-induced anxiety is not significant.

Finally, as predicted both emotion-focused coping and job-induced anxiety are negatively related to job satisfaction ($\beta = -.48$, p < .01; $\beta = -.17$, p < .01), and positively related to intent to withdraw ($\beta = .11$, p < .05; $\beta = .13$, p < .01) supporting Hypotheses 7a, 7b, 8a, and 8b. Also as expected job satisfaction is negatively related to intention to withdraw ($\beta = -.51$, p < .01) providing support for Hypothesis 9.

6.1. Gender group analyses

First, we separated the total sample into two sub-samples (one for men n = 364 and one for women n = 131). Then, using LISREL 8.54 we tested for group mean differences using multiple group SEM modeling. The results of the test for differences of means are exhibited in Table 3a. As shown in Table 3a none of the mean differences were significant.

Second, we estimated the hypothesized model separately for men and for women so as to compare the significance and the size of the path coefficients. The results of this analysis are exhibited in Table 3b. Overall, it appears that the model applies reasonably well to both men and women.

In the case of men, the only notable difference is the significant negative path (p < .05) between external locus of control and problem-focused coping. This is consistent with hypothesis H4b, and suggests that salesmen who tend toward external attribution likely will not utilize problem-focused coping strategies when dealing with job-related stress. However, the same path is not significant in either the full sample or the women only sample, although in both cases the path estimate is negative as expected.

In the women sample, the interesting result is in the significant negative path (p < .05) between role clarity and emotion-focused coping. This result is consistent with hypothesis H1a, and suggests that saleswomen who believe they clearly understand their job-related roles likely will not utilize emotion-focused coping strategies in response to job-related stress. Here too, the same path is not significant in either the full sample or the men only sample.

Table 3aConstruct mean comparisons: salesmen versus saleswomen.

KAPPA	RCLAR	RCONF	SE	LOCUS	EFC	PFC	EMEX	JAX	JSAT	WITH
Difference	004	110	071	054	.083	054	014	.026	.087	094
t-value	068	-1.647	-1.479	884	1.297	996	300	.290	1.234	-1.027

Mean value for men minus mean value for women = difference.

Table 3bPath estimate comparisons: salesmen versus saleswomen.

PATH	Full sample (<i>n</i> = 495)	Men only (<i>n</i> = 364)	Women only (<i>n</i> = 131)
RCLAR → EFC	ns	ns	22 [*]
$RCLAR \rightarrow PFC$.28**	.21**	.54**
$RCONF \rightarrow EFC$.33**	.30**	.41**
$RCONF \rightarrow PFC$	ns	ns	ns
$SE \rightarrow EFC$	26**	-22**	30**
$SE \rightarrow PFC$.37**	.41**	.21*
LOCUS → EFC	.34**	.30**	.11 ns
LOCUS → PFC	ns	15 [*]	ns
$EFC \rightarrow EMEX$.65**	.63**	.74**
$EFC \rightarrow JAX$.66**	.65**	.73**
$PFC \rightarrow EMEX$	25 ^{**}	23 ^{**}	28**
$PFC \rightarrow JAX$	ns	ns	ns
$EMEX \rightarrow JSAT$	48 ^{**}	- .49 **	43**
EMEX → WITH	.11*	.17*	.09 ns
$JAX \rightarrow JSAT$	17**	- . 13*	32 ^{**}
$JAX \rightarrow WITH$.13**	.13*	.12 ns
JSAT → WITH	51 ^{**}	47**	61**

Note: Differences in statistical significance in some cases may be due to varying sample size.

^{*} p < .05.

^{**} p < .01.

The discussion section that follows next will focus on the results for the full sample, as only minor differences are found when applying the model to salesmen as compared to saleswomen.

7. Discussion and conclusions

The results of this study generally support the model of stress and coping depicted in Fig. 1. As predicted, role clarity was positively associated with problem-focused coping. Thus, salespeople who reported higher job-related role clarity were more likely to rely on problem-focused coping. Also as predicted, higher levels of role conflict were associated with the use of emotion-focused coping. Together, these results suggest that emotion-focused coping likely is a more common response for those who experience higher levels of job-related role conflict; while problem-focused coping likely is a more common response for those who experience higher levels of job-related role clarity. Therefore, if managers want to encourage problem-focused coping behaviors, efforts to decrease levels of role conflict and to increase levels of role clarity should be a productive means of accomplishing this goal. In this regard, and consistent with the principles of social learning theory (Bandura, 1986), providing successful sales mentors as role models and assigning initial job tasks that enhance the likelihood of success may contribute to increased role clarity and self-efficacious beliefs, along with a greater reliance on problem-focused coping in stressful situations.

These aforementioned expectations may provide insight into the non-significant mediational results surrounding Role clarity \rightarrow Emotion-focused coping \rightarrow and Emotional exhaustion and Job anxiety; as well as Role conflict \rightarrow Problem-focused coping \rightarrow and Emotional exhaustion and Job anxiety. More specifically, the extant literature discussed earlier in this work suggests that when employees' felt levels of role clarity are high, employees are less likely to utilize emotion-focused coping strategies when experiencing job-related stress. Similarly, when employees' felt levels of role conflict are high, they are less likely to utilize problem-focused coping strategies when experiencing job-related stress. Therefore, in the case of role clarity and emotion-focused coping one should not expect a mediational relationship since this style of coping most often will not be utilized when felt levels of role clarity are high. In similar fashion, one should not expect a mediational relationship between role conflict and problem-focused coping since this type of coping most often will not be utilized when felt levels of role conflict are high. A similar set of observations are suggested for the lack of mediation found between External locus of control \rightarrow Problem-focused coping \rightarrow and Emotional exhaustion and Job anxiety, since employees who tend toward external attribution also are more likely to utilize emotion-focused as opposed to problem-focused coping strategies.

Findings also support the expected positive relationship between self-efficacy and the use of problem-focused coping and the negative relationship between self-efficacy and the use of emotion-focused coping. Thus, helping salespeople to enhance their self-efficacious beliefs through reinforcement and training should also increase their use of problem-focused coping strategies. In contrast, findings suggest that the more salespeople tend toward an external locus of control orientation, the more the likely they are to adopt emotion-focused coping strategies. Therefore, salespeople should be encouraged (through training, supervisor feedback, etc.) to accept responsibility (internal locus) for both their successes and their failures. As well, it may be beneficial to identify candidates who tend toward an internal locus of control in the recruitment and selection process.

With regard to coping style mediating the relationships between organizational stressors, personal characteristics, and job-related strains, salespeople's use of emotion-focused coping styles in response to felt levels of role conflict and tendency toward external locus of control appears to increase levels of emotional exhaustion and job anxiety. In contrast, salespeople's use of problem-focused coping styles in response to felt levels of role clarity and self-efficacious beliefs tends to decrease levels of emotional exhaustion and job anxiety. Therefore, managers should try to establish and maintain work environments where employees perceive there is congruency/compatibility in the requirements of their job-related roles and expectations of job performance. As well, managers should maintain work environments where employees believe they understand job-related behavioral requirements, and what behaviors are considered appropriate or inappropriate. Developing these types of work environments also may help to increase salespersons' feelings of self-efficacy, and possibly encourage a more internal perception of locus of control (Lewin & Sager, 2007).

Lastly, as expected emotional exhaustion and job-induced anxiety decrease salespersons' felt levels of job satisfaction, and increase salespersons' intention to find employment elsewhere. Since salesperson turnover represents a significant cost to the firm in terms of future recruitment and training (Dubinsky, Dougherty, & Wunder, 1990; Singh et al., 1994), sales managers should monitor their sales personnel for signs of anxiety and exhaustion. When related symptoms emerge, interventions aimed at reducing levels of anxiety and exhaustion might include (1) adjusting the balance between responsibilities and resources to help increase performance and reduce perceptions of role conflict, (2) increasing feedback and coaching to foster perceptions of self-efficacy and minimize role ambiguity, and (3) developing support networks to provide alternative coping mechanisms to diminish external failure attributions.

7.1. Study limitations

While the study findings lend overall support to the proposed model, the study design and sample possess limitations. First, the data were generated through self-report instruments. Even though Marlow–Crowne items suggest no abnormal presence of social desirability response bias, the cross-sectional field study design offers limited robustness.

Further, the sample of salespersons generalizes only partially to other workplace populations. The commission sales force environment diverges greatly from, for example, clerical, accounting, military, and MBA student populations. Latack and Havlovic (1992) suggest that taking a middle-range approach, focusing on specific roles such as boundary-spanning, helps mitigate this limitation. Thus, the sample of salespersons may be generalizable to other similar boundary-spanning job classifications.

Also, only 495 of the total 1200 salespeople (41%) employed by the focal firm responded to the survey. While differences between respondents versus non-respondents, and early responders versus late responders on various demographic variables (i.e., education, organizational tenure, income, gender, and race) were limited only to job tenure, the 41% response rate represents another possible limitation of this work.

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