An analysis of coping mechanisms and health outcomes in a feminine context

By
Laura Rudy

A Thesis Submitted to
Saint Mary's University, Halifax, Nova Scotia
in Partial Fulfillment of the Requirements for
the Degree of Master of Science in Applied Psychology
(Industrial/Organizational)

August, 2011, Halifax, Nova Scotia

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Approved: Dr. Catherine Loughlin
Supervisor

Approved: Dr. Lori Francis
Examiner

Approved: Dr. Bernadette Gatien
Examiner

Approved: Dr. Margaret McKee
External Examiner

Date: August 2011
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Acknowledgments

I am grateful for the unwavering support and aid offered by Dr. Catherine Loughlin, whose guidance was instrumental in the development and execution of this research project. I would also like to acknowledge the assistance of Dawn Burstall, Margaret Angus and Sarah Teal who were invaluable in the selection and recruitment of participants. I am deeply appreciative of the love and support offered by my family and friends. My gratitude also extends to the Social Sciences and Humanities Research Council of Canada (SSHRC) for their financial contribution. I profusely thank the above-mentioned key players. Their invaluable contribution helped lead to the success of this project.
An analysis of coping mechanisms and health outcomes in a feminine context

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Abstract

Previously, research has argued that there are sex-based differences in coping with work stress. However, these studies were typically conducted in male-dominated contexts and did not control for organizational level or access to coping resources. I empirically investigate these potential confounds arguing that different outcomes will arise when organizational levels and context vary. Survey data were collected from managers \( n = 125 \) and clerical workers \( n = 161 \) at a health care institution to explore these hypotheses in a feminine context. Participants perceived female employees as demonstrating equal or more leadership behaviours than male employees. In this context, two novel findings emerged. First, even women at lower organizational levels were more likely to use direct action coping. Second, emotion-focused coping benefitted men and women's health. With greater understanding of the relationship between gender, work stress coping mechanisms and health, stress prevention strategies may be developed to minimize strain accordingly.

August 2011
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**Work stress: A global epidemic**

Society is characterized by economic uncertainty, increased competition and globalization (Friedman, 2007). The nature of work today is typified by an increasingly fast pace, growing productivity demands and information overload. The increase in the number of single parents, dual-career households and elderly dependents challenge workers to manage multiple roles in their work and home lives. Hence, it is no surprise that many workers are reporting elevated stress levels (Torkelson, Muhonen & Peiró, 2007; Stavroula & Aditya, 2010; British Standards Institute, 2011; Sahler, Dubois, Journoud & Pelletier, 2009). In fact, the World Health Organization has proclaimed that work stress is a global epidemic (Avey, Luthans & Jensen, 2009).

One third of employees are chronically overworked (Galinsky et al., 2005), two-thirds reported an increase in workload over a one year span in 2006 (Accenture, 2006), and 52% of employees believe job demands negatively affect their responsibilities at home (APA, 2007). In a 2007 study conducted by the American Psychological Association, 50% of Americans reported that their stress had notably increased in the past five years; work was found to be the chief stressor for 74% of Americans. Occupational stress, characterized as stress resulting from one’s job, is affected by numerous triggers, such as lack of control, an elevated workload and/or role stressors (Lewis & Cooper, 1988). Given the association of stress with physical ailments, such as heart attack and stroke, it is not surprising that occupational stress is one of the leading causes of death in the workplace (Hamer & Malan, 2010; Quick, 1998).
Stress is inevitable and endemic in organizations, and can lead to a host of toxic consequences for both the employee and the organization (Kou, 2005). Increased stress leads to spiraling organizational health care costs, loss of employee morale and productivity, and increased absenteeism and turnover (Lloyd & Foster, 2006; Sahler et al., 2009). Moreover, stress can encourage workplace violence, including physical attacks and homicide (Johnson & Indvik, 1996; Stavroula & Aditya, 2010; British Standards Institute, 2011). The economic impact of stress leads to billions of dollars of lost revenue annually for companies around the globe (Gianakos, 2002; Gorin & Arnold, 2006). The costs of employee absenteeism, disability claims, lower productivity and turnover resulting from stress represent an enormous liability to companies’ growth and ultimate success.

A male perspective of work stress, coping and health outcomes

Gender has often been neglected in the work stress literature (Torkelson & Muhonen, 2004; Long & Flood, 1993). In fact, job stress models originally tested on men may not adequately assess the impact of stress on women (Brooker & Eakin, 2001; Torkelson & Muhonen, 2004). The male experience was typically considered universal, and females were overlooked in much of the research. Consequently, occupational health psychology (OHP) has been viewed through the male lens (Messing, 1998). Further, although numerous samples in OHP have been comprised of predominantly women (e.g., studies of nurses; Leiter, Price & Laschinger, 2010; Leiter & Maslach, 2009; Landa, López-Zafra, Martos & Aguilar-Luzón, 2008), they typically work in a male-dominated (i.e., masculine) environment, with primarily men at the top. A masculine environment can be defined as a setting in which most managers are male. Conversely, a feminine
environment can be characterized by a majority of female managers.

Despite the norm of male-based stress models, assumptions around universal responses to stress are being questioned in other areas of science. For example, until recently, in biology, the universal fight-or-flight response has been indiscriminately applied to women and men (Taylor et al., 2000; Taylor, 2006). The fight-or-flight response refers to the hardwired human predisposition to attack or escape contingent upon the type of stressor observed in the environment. Until the mid 1990s, research conducted on the physiological and neuroendocrine responses to stress were predominantly conducted with male samples (Taylor et al., 2000). With the recent inclusion of female samples, the universal fight-or-flight response is being questioned. Research suggests that women may use a 'tend-and-befriend' approach to stress instead (Taylor et al., 2000; Taylor, 2006). Women, especially those responsible for offspring, may be more likely to rely on their social networks to pacify their progeny and protect against attacks via their relationships with others (Taylor et al., 2000; Taylor, 2006). Hence, questioning assumptions about sex/gender in areas such as work stress and coping may be timely.

**Observed gender differences in health outcomes and work stress coping strategies**

Research suggests that the health outcomes of work stress may diverge for men and women. Men may suffer from more life-threatening disease, such as coronary heart disease, cirrhosis of the liver and commit suicide more than women (Jick & Mitz, 1985; Nelson & Burke, 2002; Nock et al., 2008). However, women may experience more psychological (e.g., anxiety, depression) and minor physical symptoms (e.g., headache, back pain) than men. Women are twice as likely to be diagnosed with depression than
men, and are also more prone to anxiety (Byers, Yaffe, Covinsky, Friedman & Bruce, 2010; Kuehner, 2003; Murphy, 1986; Beatty, 1996). According to a World Health Organization report, depression is the "greatest disease burden" for women, more than any other disease (Mazure, Keita & Blehar, 2002). Moreover, Zuckerman (1989) and Kelly, Tyrka, Anderson, Price and Carpenter (2008) state that women experience more anxiety and depression than men when under stress. A study by Krantz, Berntsson and Lundberg (2005) conducted with Swedish white-collar employees revealed that women endured significantly more minor physical symptoms of stress than men, such as stomachache, headache, sleep disturbance, dizziness, lower back pain, loss of appetite, and shoulder and neck pain. In response to work stress, Nelson and Burke (2000) reported that women describe poorer general physical health, more anxiety, depression, sleep disturbances and headaches than men. One potential reason posited for this discrepancy may due to working women's conflicting demands between paid work and childrearing/home care responsibilities; a situation with which fewer men contend (Barreto, Ryan & Schmitt, 2009; Nelson & Burke, 2000).

Coping represents the cognitive and behavioural strategies that an individual uses to manage environmental demands (Lazarus, 1991). In previous research not controlling for organizational level or context (an issue to which I will return shortly), women used more emotion-based (i.e., cognitive) coping, while men used more direct action (i.e., behavioural) coping (Matud, 2004; Ptacek, Smith & Dodge, 1994; Endler & Parker, 1990). Emotion-focused coping is a passive strategy, and serves to manage emotions associated with stress or to change the significance assigned to an event. This strategy aims to reinterpret the stressor in lieu of altering the external cause. Emotion-focused
coping includes responses such as acceptance, speaking to colleagues and expressing feelings, and it does not directly address the problem (Torkelson et al., 2007). Direct action coping is considered to be an active and more adaptive strategy, and focuses on solving a problem (Torkelson & Muhonen, 2004); whereas, emotion-focused coping may be a beneficial strategy by regulating distress, particularly when incidents are beyond one’s control. Direct action coping is typically favoured in the literature, whereby an individual confronts a problem directly (Lazarus & Folkman, 1984; Torkelson & Muhonen, 2004). Direct action coping has been linked with leadership effectiveness (Pratch & Jacobowitz, 1997; Jacobsen, 2009).

Emotion-focused coping has been viewed from a standpoint of deficiency, as it has been associated with health problems. Emotion-focused coping is associated with depressed affect, emotional exhaustion and may aggravate stress levels, while direct action coping is believed to alleviate depressed affect, emotional exhaustion and stress (Rafnsson, Jonsson & Windle, 2006; Boyd, Lewin & Sager, 2009). However, studies have not typically controlled for organizational level or context, and one component of emotion-focused coping, entitled “social support coping,” has been influential in the promotion of superior health outcomes for women (Torkelson & Muhonen, 2004; González-Morales, Peiró, Rodríguez & Greenglass, 2006). Social support coping is defined as emotional (belonging and intimacy) and practical (guidance) resources that are available to an individual. The construct is measured by the coping items: “I talk to understanding friends,” and “I seek as much social support as possible” (Greenglass, 2000; Dewe & O’Driscoll, 2002).
Women and men have been reported to differ in their stress coping strategies and health outcomes. However, again, it is important to note that organizational level and context were not typically controlled in the studies conducted on these topics. It has been hypothesized that different coping strategies may result from the different gender socialization of men and women (González-Morales et al., 2006). From a young age, men are typically taught to solve their own problems, not to rely on others, and expressions of emotion are usually regarded as a sign of weakness. Hence, men may have a greater propensity to plan and rationalize their actions, directly tackling the problem and eschewing emotion-based coping. In contrast, Catalyst (2005) found that women have trouble being perceived as “problem solvers” by men in masculine organizations. Women are taught to depend on their social connections for support and guidance (Saarni, Mumme & Campos, 1998). When confronted with a challenge, women may tend to use self-blame and wishful thinking, and they seek social support as an outlet for the expression of their emotions. This is also what is ‘expected’ from them (Fielden & Cooper, 2002).

Researchers contend that the idea that women cope in a more passive fashion can be construed as a gender-role stereotype (Torkelson & Muhonen, 2004; Long, 1990). Coping transpires in an environment that features an unbalanced allocation of resources and power (Torkelson & Muhonen, 2004; Long & Cox, 2000), and it is likely to be more difficult for women to use direct action coping if others view women as poorer problem solvers (Catalyst, 2005). When controlling for occupational level, few differences in coping strategies arose between men and women in a masculine organization (Greenglass, 2002). It has also been suggested that direct action coping may be more
widely used at higher echelons of an organization, and emotion-focused coping more employed at lower levels. A potential reason for this distinction relates to the fact that management is typically comprised of males, while front line staff is typically female (Torkelson & Muhonen, 2004; Narayanan, Menon & Spector, 1999). Consequently, there is a need for more research that examines the coping strategies used by men and women in related jobs at various levels and in different organizational contexts (female-dominated (i.e., feminine) versus male-dominated (i.e., masculine)). Exploring such relationships is one goal of this study.

**Organizational context and organizational level as potential confounds**

To date, researchers have not typically controlled for organizational context (e.g., female versus male-dominated) or organizational level (e.g., managerial versus clerical positions) in studies on work stress (Boyd et al., 2009; Rafnsson et al., 2006; Matud, 2004; Ptacek et al., 1994; Endler & Parker, 1990). Hence, organizational context and level may have been confounded with gender in prior research.

The purpose of the present study is to examine relationships between organizational context, level and gender, by questioning some of the assumptions previously made in the work stress literature. Until the 1980s, most organizations were male-dominated (Bergman, 1986; Padavic & Reskin, 2002; Britton & Logan, 2008). However, at present, there are certain fields (e.g., health care) that are female-dominated (Adams, 2010). By examining a female-dominated organization (an atypical context in the literature, where most managers are women), it is possible that we may be able to better understand some of the relationships among employees’ stressors, coping style and
health. With a more nuanced understanding of these relationships, stress prevention strategies may be developed to minimize strain accordingly.

An examination of organizational context; why masculine versus feminine stereotypes might matter

Stereotypes are defined as automatic generalizations made to distinguish groups of individuals (Catalyst, 2005). People are often unaware that they have used these “mental shortcuts” to categorize individuals, and believe their perceptions are objective fact. Despite the fact that stereotypes may misrepresent reality, they are hard to negate, even when presented with evidence to dispel them.

At present, particularly in masculine workplaces, there are conflicting expectations of women. Women gain support and praise if they express “conventional” female qualities, such as kindness, friendliness and expressiveness (a communal approach); however, they are also required to display an individualistic power-centered approach if they want to succeed professionally (an agentic approach) (Hobfoll, Geller & Dunahoo, 2003; Eagly & Carli, 2007a). These expectations create a “double bind” for women, as personal qualities of warmth and caring clash with dominance and assertiveness, and create a challenging balancing act for female employees (Eagly & Carli, 2007a). There can also be costs for contravening feminine ideals, or violating prescribed gender roles by exhibiting masculine behaviours (e.g., dominance and assertiveness) (Berdahl, 2007).

Research suggests that stereotypes may be a driving factor in the unequal status of women in the workforce (Phelan & Rudman, 2010). Particularly in masculine industries, it has been posited that a greater number of women than men occupy jobs characterized
by limited resources (e.g., pay), restricted autonomy and lack of control, regardless of the occupation (e.g., clerical worker or senior level manager) (Torkelson et al., 2007; Kushnir & Melamed, 2006). It appears that despite education and seniority, female managers are also subject to more inequities and “unfair treatment” at work than their male counterparts (Kushnir & Melamed, 2006).

A gender gap still pervades the working world as stereotyped-based prejudice and discrimination impact female leaders who are trying to break into the ‘old boys network,’ which is particularly found in masculine organizations (Eagly & Carli, 2007a). Female leaders are less likely to obtain encouragement and undergo formal training, and assume fewer responsibilities than male leaders, with the effects more pronounced in masculine organizations (Powell & Graves, 2003). Generally, female leaders may be evaluated less favourably than their male colleagues, and it may be harder for women to be viewed as effective in a leadership capacity (Eagly & Carli, 2007a). Qualities associated with leadership, such as dominance, assertiveness and ambition, are typically associated with a stereotypical man, while “female” qualities, such as friendliness and sensitivity, are not recognized as intrinsic to leadership (Catalyst, 2005; Fels, 2004). Discrimination, which often occurs in subtle forms, increases women’s probability of failure, and may prevent them from accessing developmental opportunities. For instance, a lack of female mentors in organizations may impede women’s networking opportunities and access to promotions (Nelson & Burke, 2000).

The organization’s masculine corporate culture may be inhospitable to female managers. In a 1998 study by Ragins, Townsend and Mattis, male executives believed that female executives’ lack of experience and time (due to family commitments) were
major impediments to females' career advancement. However, female executives stated that the unwelcoming corporate culture was the crux of the issue. At present, an inhospitable corporate culture for females still pervades numerous organizations, and may dissuade competent female leaders from ascending the corporate ranks (Barreto et al., 2009).

Despite great strides in equal opportunity employment and a sharp increase in the number of female managers, women still occupy minority status at higher levels in most organizations (Alvesson & Billing, 2009; Eagly & Carli, 2007a). Canadian statistics reveal that women occupy 36% of lower managerial positions, compared to 24% of senior management positions and 6.4% of top positions (e.g., CEO) at Financial Post 500 companies (Scott & Brown, 2006; Catalyst, 2010). A patriarchal culture pervades many masculine organizations, and female managers may not be afforded an opportunity to network, and may lack mentors and role models (Linehan & Scullion, 2008).

In a 2007 study conducted in a male-dominated customer service department of a Swedish communications company, women described a lack of autonomy in their work and stricter regulation than their male colleagues (Torkelson et al., 2007). Female managers and clerical workers may lack legitimate power within masculine organizations. This lack of status is apparent in the hostile work environment experienced by some women in the workplace. For instance, at least 41% of American women, versus 32% of men, have been subjected to some form of sexual harassment at work, whether it be flirting, a sexual joke or a physical gesture (Bell, McLaughlin & Sequeira, 2002; Das, 2009). Female clerical workers also contend with their fair share of stereotypes and discrimination at work, and are subjected to higher workload, fewer advancement
opportunities and lower salaries than male clerical workers (Henson & Rogers, 2001; Gyllensten & Palmer, 2005).

In a study by Catalyst (2005) conducted in a masculine context, it was found that men deem male leaders to be more efficient at stereotypically masculine activities: problem-solving, delegating and influencing others in more senior positions. However, women believed that female leaders are better problem-solvers than men, which defies the stereotyped male advantage in this domain. Women agreed that male leaders are better at delegating and influencing. Men also believed that female leaders are better at stereotypically feminine activities: supporting and rewarding others. Women rated female leaders as having an advantage at supposed “female pursuits”: supporting, rewarding, team-building, mentoring, consulting and inspiring others. In general, it appears as though female leaders are judged better at “caretaking” pursuits, and male leaders at “take charge” activities.

In a masculine environment, and certainly among male leaders, stereotypes reinforce a gender gap in leadership, and female leaders mention stereotypes as the primary obstacle to their advancement (Catalyst, 2004; Catalyst, 2005). By discrediting women’s problem solving ability, this deleterious stereotype subverts women’s ability to lead (Catalyst, 2005). Hence, female managers may need to spend a considerable amount of time getting “buy-in” and negotiating with employees; a state of affairs with which male managers do not have to contend (Catalyst, 2005). Women may believe that they need to work more intensely and longer hours to demonstrate their value and to outshine their male peers (Nelson & Burke, 2000), whereas men may be more likely to delegate responsibilities to subordinates (Catalyst, 2005). Female managers may feel compelled
not to delegate authority and tasks to co-workers and subordinates, for fear that they may be viewed as inadequate and unable to handle duties themselves. Some female managers report limited power in their roles, and their work may be more highly scrutinized than their male counterparts (Nelson & Burke, 2000).

Studies have also demonstrated that males perceive female leaders as possessing lower expertise and charisma, and as being less efficient at inspiring others and at team-building than male leaders (Catalyst, 2005). Consequently, it may be hard for women to motivate subordinates and peers to follow their recommendations, as these stereotypes challenge women’s power to lead. It is important to note that these stereotypes flourish in male-dominated fields.

The feminine work context

Although little research has been conducted in feminine work environments, research suggests that this context poses a unique set of circumstances. For instance, feminine organizations are viewed as submissive, emotional and caring (Gutek & Cohen, 1987; González-Morales, Peiró & Rodríguez, 2010). This perception is in stark contrast to masculine environments that highlight activity, forcefulness, logic and reason. While feminine cultures emphasize a participative and relational approach, masculine cultures value autonomy, independence, hierarchy, authority, competition and bureaucracy (Van Vianen & Fischer, 2002; Baron, Hannan & Burton, 1999). It appears as though feminine contexts highlight teamwork and support, and de-emphasize competition and a narrow focus on the bottom-line. Moreover, women are exposed to less sexual harassment within a feminine context (Berdahl, 2007). Perhaps, these discrepancies are reasons that work in a feminine context is associated with a decreased risk of myocardial infarction (i.e., heart
attack) in both genders, when compared to a masculine context (Östlin, Klerdal & Hammar, 2008).

There is also evidence to suggest that shorter working hours, part-time work and flexible arrangements (e.g., telecommuting) are more common in a feminine context, and appear to curb turnover (Hewlett, 2007). Thus, the acceptability of work-life balance and family-friendly arrangements is increased (Mandel & Semyonov, 2006). Consequently, it is not surprising that women who work in a feminine context give birth to more children than those working in a masculine environment (Hoem, Neyer & Andersson, 2006). It appears as though some women wish to work in a collaborative and supportive context, and may be less focused on monetary rewards and power than their male colleagues (Kim, 2008; Hewlett, 2007).

In feminine environments, such as education and health care, female leaders are deemed more effective than male leaders (Eagly, 2007). In masculine work environments, such as the military, the reverse pattern emerges: 360-degree subjective performance evaluations by subordinates, peers, superiors and leaders reveal that male leaders are judged more effective than female leaders. It has been suggested that in feminine fields, female and male leaders may not experience as many harmful stereotypes, and female leaders may be evaluated as equally capable to men. In fact, employees who had a female supervisor and who worked in a feminine occupation were more prone to consider women better problem-solvers than men (Catalyst, 2005). Nevertheless, it is important to note that even in feminine fields, such as nursing and education, men continue to be promoted more quickly than women with comparable qualifications (Eagly & Carli, 2007b). In any case, it appears as though negative
societies concerning female leaders may be lessened in a feminine working
environment, thereby perhaps changing female leaders’ stressors and coping strategies.

Hence, the first hypothesis emerges:

**Hypothesis 1:** In a feminine context, female employees will be perceived as using
more problem-solving, and other fundamental leadership behaviours (supporting,
rewarding, mentoring, networking, consulting, team-building, inspiring, influencing
upward and delegating) than male employees.

**An investigation of organizational level**

Previously, in the work stress literature, organizational level may have been
confounded with gender (e.g., men may have used more direct action coping because
their higher organizational status allowed them to do so). It is proposed that an analysis of
organizational level (i.e., manager *versus* clerical worker) may also help to disentangle
sex-based differences.

Women are underrepresented on boards of directors and are often excluded from
top management positions (Terjesen, Sealy & Singh, 2009; Sealy, 2010). CEOs often
perceive women to be unqualified, less competent than a man, and expect poor
performance in leadership positions. When a woman contravenes these gender
stereotypes, the successful female leader may be disliked (Terjesen et al., 2009).

Consequently, female directors assume less influential corporate titles, engage in more
administrative functions, and garner less pay than male directors (Terjesen et al., 2009).

By virtue of female leaders’ token status, male leaders tend to view females first by their
gender, exemplifying sex role stereotypes, and only after that as individuals. Hence, it is
challenging for female leaders to be accepted, heard and to operate on an equal playing
Female clerical workers may also be at a disadvantage compared to their male colleagues. For instance, female clerical workers report less opportunity for promotion and receive more scrutiny for mistakes than male clerical workers (Beaton, Tougas & Laplante, 2007). Moreover, a study conducted by Narayanan et al (1999) suggested that female clerical workers stipulated that lack of control, low levels of autonomy and work overload were the biggest causes of work stress. Male clerical workers did not report these stressors.

In masculine organizations, research has proposed that female leaders adopt a compensatory mechanism, in which they report possessing more masculine/instrumental characteristics (i.e., forceful, independent, self-confident and strong) than females lower in the organizational hierarchy (Garcia-Retamero & López-Zafra, 2006; Fagenson, 1990). It has been suggested that female leaders adopt such a stance to “blend-in”, and to counteract the fact that they are in a male environment.

Research on female leaders, such as managers, directors and CEOs, suggests that women bear the brunt of stereotypes, discrimination and antiquated notions that they are entering a “man’s field” (Yoder, 2001; Wilson, 2007). Particularly in masculine organizations, certain careers, such as management, are antithetical to motherhood, parental leave, part-time work hours or family friendly set-ups, which lead to stress among female managers who must “juggle it all” (Hakim, 2006). As work encroaches upon the employee’s private life, it is no surprise that half of women in senior-level professional and management positions in Britain are childless, even if they are married (Hakim, 2006). A similar pattern transpires in the United States, where 59% of female
managers are childless, compared to 29% of male managers (Hewlett, 2002). In a Danish study of business managers, 32% of female managers compared to 5% of male managers did not have children (Alvesson & Billing, 2009). The situation appears different in Sweden, a country renowned for its gender equality and family friendly policies. In Sweden, only 12% of female executives are childless, compared to 11% of male managers (Renstig & Henrekson, 2004).

In masculine organizations, it is often the case that a female manager must forego children to keep up with the demanding hours required of her job. For example, in Germany, women are often compelled to choose between a career and a family (Bennhold, 2010). Working mothers are often labeled with the derogatory term “raven mother,” after the black bird that thrusts her children from the nest (Bennhold, 2010). The expression is reserved for working women who leave their children's care in other peoples’ hands. Nevertheless, there is some evidence to suggest that in a feminine work environment, family-friendly policies may be more likely to be adopted, which may support and encourage female employees to have children and active work lives (Bardoel, Moss, Smyrnios & Tharenou, 1999; Dolcos & Daley, 2009).

Scant research has been conducted on the unique opportunities and challenges afforded to female leaders and clerical workers in a feminine context. However, we do know that the work motivators of male and female executives widely diverge. Therefore, there is reason to suspect that, in a feminine context, a more affiliative leadership style stressing more harmonious relationships may be encouraged. Whereas male executives state that their primary work motivators are power and money, female executives highlight connection and quality. The primary incentives for male leaders are career
progression (20 %) and financial rewards (10 %), whereas female leaders stress relationships at work (14 %) and supplying a high quality product/service to the customer/client (10 %). Career progression and financial reward are not even among the top motivators for female leaders (Hewlett, 2007). Goals, such as working with high-quality colleagues, obtaining meaning and value from work and making an impact on the well-being of society may be priorities in a feminine context (Hewlett, 2007).

Female leaders are more interpersonally oriented than male leaders (Gardiner & Tiggerman, 1999). In fact, this consideration for human capital has been proposed to incite a more motivating and less stressful work environment in a feminine versus a masculine context (Mauno, Kinnunen & Piitulainen, 2005). There is also some evidence to suggest that feminine traits, such as warmth and compassion, are encouraged and cherished amongst leaders and clerical workers in a feminine context. In fact, espousing female traits in such an environment is conducive to job satisfaction (Cejka & Eagly, 1999; Beaton et al., 2007). Leaders in a feminine context may provide more social support to their employees, which may enhance well-being (Moore, Grunberg & Greenberg, 2005).

The Present Study

The present study is a replication and extension of findings by Torkelson and Muhonen (2004) and González-Morales and colleagues (2006).

Torkelson and Muhonen (2004) investigated the link between coping with work stress and health outcomes in a masculine, Swedish telecommunications company. The results suggested that coping strategies may indeed be related to gender and organizational level. At the managerial level, female and male employees did not differ in
their use of direct action coping, although women used social support coping more than men. However, at the non-managerial level, traditional coping strategies were apparent: women used more emotion-focused coping, and men used more direct action coping.

Building on hypothesis 1 (outlined on page 14), hypothesis 2a proposes that in a feminine context, female managers will use more direct action coping and emotion-focused coping than their male counterparts.

**Hypothesis 2b:** It is hypothesized that female clerical workers will use more direct action coping and emotion-focused coping than their male counterparts.

It is also interesting to note that despite previous findings, in Torkelson and Muhonen’s (2004) study, when organizational level and gender were controlled, there was no association between direct action coping and health. Further, seeking social support, a component of emotion-focused coping, was linked with fewer health problems.

González-Morales and colleagues (2006) also examined the relationship between coping with work stress and health outcomes in the masculine financial services industry. After controlling for organizational level, results showed that women used social support coping more often than men, and this coping strategy was positively correlated with women’s health, but negatively correlated with men’s health. It is conceived that in a masculine environment, stereotypes reinforce the notion that men do not express emotion, while women expressing their feelings is more stereotypical. In a feminine context, both men and women may be more free to use emotion-focused coping.

**Hypothesis 3:** Controlling for age, tenure, gender and organizational level in a feminine context, direct action coping will predict fewer psychological and physical health symptoms.
**Hypothesis 4:** Emotion-focused coping will predict fewer psychological and physical health symptoms, by contributing unique variance once direct action coping is accounted for.

**Method**

**Participants**

Seventeen hundred participants (400 Managers and Directors and 1,300 clerical workers) were contacted via email and were invited to complete an online survey. One-hundred and twenty-five managers (76 females and 49 males – 31.25% response rate) and 161 clerical workers (110 females and 51 males – 12.38% response rate) participated. Participants worked at a large health care institution located in Eastern Canada, in which 83% of employees are female and 17% are male. Females represent 73% of managers (27% male), and 90% of clerical workers (10% male). While the response rate among clerical workers is less than preferred, the organization had just finished a round of surveys making the timing of this survey less than optimal. There is perhaps some assurance in the fact that Torkelson and Muhonen (2004) also found lower response rates among line staff.

**Materials**

An informed consent form (See Appendix A for consent form) and a demographics questionnaire assessing gender, organizational level, age, education, and years employed were electronically distributed. Other demographic questions included hours worked per week, hours spent per week on household chores and family responsibilities, number of employees supervised and types of job tasks conducted at work (derived from the occupational database O*Net for managers and clerical workers) (See Appendix B for
demographic questions). Work stress was assessed via a 4 item scale (α of .84) developed by Keller (1984). Sample items were “I experience tension from my job,” and “aspects of my job are a source of frustration to me.” Higher scores reflected more work stress.

Questions derived from Catalyst (2005) assessing stereotypes of female and male employees in the workplace were included. The 20 item questionnaire measured the following work behaviours: supporting, problem-solving, rewarding, influencing, mentoring, delegating, networking, consulting, team-building and inspiring. Respondents indicated the percentage of female and male employees believed to perform each of the behaviours.

The Occupational Stress Indicator coping strategies inventory (Cooper, Sloan & Williams, 1988) was also administered. This inventory was comprised of 6 questions assessing direct action coping (α of .80) and 4 questions assessing emotion-focused coping (α of .65) using a 1 (“never used by me”) to 6 (“extensively used by me”) Likert scale. Examples of direct action choices included ‘I try to deal with the situation objectively in an unemotional way’ and ‘I plan ahead.’ Emotion-focused coping options consisted of ‘I resort to hobbies and pastimes,’ ‘I expand my interests and activities outside work,’ and ‘I talk to understanding friends.’ Higher scores were indicative of an increased direct action and/or emotion-focused coping style.

The General Health Questionnaire Short Form (GHQ; Hess, 2005) was administered. The General Health Questionnaire Short Form had 7 items that assessed psychological symptoms, anxiety, depression and social dysfunction, and had good internal and test-retest reliability and validity (α ranged from .78 to .95) (Hess, 2005).
The GHQ used a seven-point Likert scale ranging from 1 (not at all) to 7 (all the time); higher scores were indicative of lower levels of well-being. Sample questions were ‘Have you been feeling unhappy and/or depressed?’ and ‘Have you been thinking of yourself as a worthless person?’

Finally, the Physical Health Questionnaire (PHQ; Schat, Kelloway, & Desmarais, 2005) was included. It is a widely held notion that stress is associated with a compromised immune system, which can increase susceptibility to illness (Cohen, 1996). Thus, the PHQ was used to evaluate minor physical health problems, such as headaches, respiratory infections, gastrointestinal problems and sleep disturbance. The measure was comprised of 14 items and possessed high internal validity and reliability (α ranged from .7 to .9). Some items included ‘How often have you had difficulty getting to sleep at night?’ and ‘How often have you experienced headaches?’ which were answered on a 1 (not at all) to 7 (all the time) Likert scale. Higher scores reflected lower levels of physical health.

**Procedure**

The survey was electronically distributed via email to the health care institution’s managers, directors and clerical staff. Survey completion time was estimated to be approximately ten to fifteen minutes. Participants were able to complete the questionnaires in the privacy of their office or workspace. Due to the sensitive nature of the responses, it was explained that the health care organization would only have access to summaries of the responses. Furthermore, it was explicated that participation was voluntary, and that responses were both anonymous and confidential (REB # 11-013 and #CDHA-RS/2011-220).
Results

Female and male managers

The majority of female managers (47.4%) were in the 40-49 age group, possessed a Master’s degree (43.2%), and were employed at the organization for over twenty-one years (36%). Tasks most frequently conducted by female managers were managing staff (93.4%), directing and coordinating activities of the department (90.8%), establishing and implementing departmental policies (86.8%), determining staffing requirements and interviewing new employees (78.9%) and preparing documents using word processing software (68.4%).

The majority of male managers (42.9%) were in the 50-59 age group, possessed a Bachelor’s (38.8%) or Master’s degree (38.8%), and were employed at the organization between 6-10 years (26.5%). Tasks most commonly conducted by male managers encompassed managing staff (100%), directing and coordinating activities of the department (91.8%), establishing and implementing departmental policies (75.5%), determining staffing requirements and interviewing new employees (59.2%), and preparing documents using word processing software (67.3%).

Compared to female managers ($M = 46.91, SD = 8.45$), male managers ($M = 45.21, SD = 8.38$) worked a comparable number of hours per week. Female managers ($M = 20.67, SD = 12.71$) and male managers ($M = 17.32, SD = 11.78$) spent a comparable amount of hours per week on household chores and family responsibilities. Female managers ($M = 59.57, SD = 77.19$) and male managers ($M = 43.04, SD = 58.67$) supervised a comparable cohort of employees either directly or indirectly. Female managers ($M = 5.12, SD = .77$) and male managers ($M = 5.19, SD = .62$) experienced
comparable stress levels.

**Female and male clerical workers**

The majority of female clerical workers (36.7%) were in the 40-49 age group, possessed a college or other non-university certificate or diploma (66.7%), and were employed at the organization for over twenty-one years (26.4%). Tasks most frequently conducted by female clerical workers were filing documents (83.6%), answering phone calls and directing calls to the appropriate party (80%), preparing documents using word processing software (78.2%) and ordering supplies (68.2%).

The majority of male clerical workers (47.1%) were in the 40-49 age group, possessed a college or other non-university certificate or diploma (68.6%), and were employed at the organization between six to ten years (41.2%). Tasks most commonly conducted by male clerical workers encompassed preparing documents using word processing software (80.4%), filing documents (76.5%), bookkeeping (66.7%) ordering supplies (62.7%), and answering the phone (56.9%).

Compared to female clerical workers ($M = 36.03, SD = 9.38$), male clerical workers ($M = 35.69, SD = 5.7$) worked a comparable number of hours per week. Female clerical workers ($M = 19.3, SD = 11.67$) and male clerical workers ($M = 16.92, SD = 7.96$) spent a comparable amount of hours per week on household chores and family responsibilities. Female clerical workers ($M = .63, SD = 1.73$) and male clerical workers ($M = .22, SD = 1.29$) supervised a comparable cohort of employees either directly or indirectly. Female clerical workers ($M = 4.19, SD = 1.18$) and male clerical workers ($M = 4.19, SD = .86$) experienced comparable stress levels.

**Managers compared to clerical workers**
Compared to female clerical workers ($M = 36.03, SD = 9.38$), female managers ($M = 46.91, SD = 8.45$) worked more hours per week, $t(184) = 8.09, p < .01$, and it represented a large effect size, $r = .51$. The power to detect an effect was 1.0. Female managers ($M = 20.67, SD = 12.71$) and female clerical workers ($M = 19.3, SD = 11.67$) spent a comparable amount of hours per week on household chores and family responsibilities. Female managers ($M = 59.57, SD = 77.19$) supervised more employees either directly or indirectly than female clerical workers ($M = .63, SD = 1.73$), $t(73.05) = 6.57, p < .01$, and it represented a large effect size, $r = .61$. The power to detect an effect was 1.0. Female managers ($M = 5.12, SD = .77$) experienced higher stress levels than female clerical workers ($M = 4.19, SD = 1.18$), $t(183.39) = 6.47, p < .01$, and it represented a medium effect size, $r = .43$. The power to detect an effect was 1.0.

Compared to male clerical workers ($M = 35.69, SD = 5.7$), male managers ($M = 45.21, SD = 8.38$) worked more hours per week $t(84.2) = 6.62, p < .01$, and it represented a large effect size, $r = .58$. The power to detect an effect was 1.0. Male managers ($M = 17.32, SD = 11.78$) and male clerical workers ($M = 16.92, SD = 7.96$) spent a comparable amount of hours per week on household chores and family responsibilities. Male managers ($M = 43.04, SD = 58.67$) supervised more employees either directly or indirectly than male clerical workers ($M = .22, SD = 1.29$), $t(48.04) = 5.12, p < .01$, and it represented a large effect size, $r = .59$. The power to detect an effect was 1.0. Male managers ($M = 5.19, SD = .62$) experienced higher stress levels than male clerical workers ($M = 4.19, SD = .86$), $t(98) = 6.68, p < .01$, and it represented a large effect size, $r = .56$. The power to detect an effect was 1.0.

Stereotypes of female employees – female respondents
In this environment, female managers and clerical workers perceived female employees as demonstrating significantly more leadership behaviours than male employees. Please refer to Table 1.

Table 1.

*Leadership behaviours of female and male employees by female respondents*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>r</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem-Solving</td>
<td>69.84</td>
<td>22.16</td>
<td>52.61</td>
<td>25.24</td>
<td>8.07**</td>
<td>183</td>
<td>.51</td>
<td>1.0</td>
</tr>
<tr>
<td>Supporting</td>
<td>73.88</td>
<td>21.45</td>
<td>50.11</td>
<td>26.12</td>
<td>11.13**</td>
<td>182</td>
<td>.63</td>
<td>1.0</td>
</tr>
<tr>
<td>Rewarding</td>
<td>58.63</td>
<td>27.77</td>
<td>45.88</td>
<td>25.92</td>
<td>5.68**</td>
<td>181</td>
<td>.39</td>
<td>1.0</td>
</tr>
<tr>
<td>Influencing</td>
<td>57.94</td>
<td>27.55</td>
<td>51.2</td>
<td>26.59</td>
<td>2.79*</td>
<td>174</td>
<td>.21</td>
<td>.92</td>
</tr>
<tr>
<td>Mentoring</td>
<td>59.17</td>
<td>27.8</td>
<td>46.44</td>
<td>26.54</td>
<td>5.46**</td>
<td>179</td>
<td>.38</td>
<td>1.0</td>
</tr>
<tr>
<td>Delegating</td>
<td>60.22</td>
<td>25.14</td>
<td>54.07</td>
<td>26.47</td>
<td>2.58*</td>
<td>181</td>
<td>.19</td>
<td>.9</td>
</tr>
<tr>
<td>Networking</td>
<td>64.94</td>
<td>24.89</td>
<td>52.44</td>
<td>25.32</td>
<td>5.83**</td>
<td>179</td>
<td>.40</td>
<td>1.0</td>
</tr>
<tr>
<td>Consulting</td>
<td>62.91</td>
<td>26.69</td>
<td>46.54</td>
<td>25.55</td>
<td>7.67**</td>
<td>181</td>
<td>.50</td>
<td>1.0</td>
</tr>
<tr>
<td>Team-Building</td>
<td>59.72</td>
<td>26.68</td>
<td>44.09</td>
<td>25.45</td>
<td>7.42**</td>
<td>180</td>
<td>.48</td>
<td>1.0</td>
</tr>
<tr>
<td>Inspiring</td>
<td>59.67</td>
<td>27.25</td>
<td>43.68</td>
<td>25.08</td>
<td>7.27**</td>
<td>181</td>
<td>.48</td>
<td>1.0</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01

*Stereotypes of female employees – male respondents*

Male managers and clerical workers perceived female employees as
demonstrating equal amounts or significantly more leadership behaviours than male employees. Please refer to Table 2.

Table 2.

*Leadership behaviours of female and male employees by male respondents*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Female Employees</th>
<th>Male Employees</th>
<th>t</th>
<th>df</th>
<th>r</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem-Solving</td>
<td>M=69.00, SD=20.43</td>
<td>M=61.90, SD=22.19</td>
<td>2.76*</td>
<td>99</td>
<td>.27</td>
<td>.9</td>
</tr>
<tr>
<td>Supporting</td>
<td>M=73.80, SD=16.86</td>
<td>M=60.80, SD=22.37</td>
<td>5.39**</td>
<td>99</td>
<td>.48</td>
<td>1.0</td>
</tr>
<tr>
<td>Rewarding</td>
<td>M=66.67, SD=21.43</td>
<td>M=59.19, SD=21.70</td>
<td>3.07**</td>
<td>98</td>
<td>.30</td>
<td>.93</td>
</tr>
<tr>
<td>Influencing</td>
<td>M=65.45, SD=20.57</td>
<td>M=60.91, SD=22.00</td>
<td>1.84</td>
<td>98</td>
<td>.18</td>
<td>.55</td>
</tr>
<tr>
<td>Mentoring</td>
<td>M=64.85, SD=20.27</td>
<td>M=59.19, SD=22.93</td>
<td>2.23*</td>
<td>98</td>
<td>.22</td>
<td>.73</td>
</tr>
<tr>
<td>Delegating</td>
<td>M=64.30, SD=21.14</td>
<td>M=60.30, SD=21.10</td>
<td>1.62</td>
<td>99</td>
<td>.16</td>
<td>.47</td>
</tr>
<tr>
<td>Networking</td>
<td>M=67.20, SD=19.90</td>
<td>M=60.00, SD=21.42</td>
<td>2.98**</td>
<td>99</td>
<td>.29</td>
<td>.93</td>
</tr>
<tr>
<td>Consulting</td>
<td>M=67.58, SD=19.54</td>
<td>M=59.70, SD=22.43</td>
<td>3.25**</td>
<td>98</td>
<td>.31</td>
<td>.96</td>
</tr>
<tr>
<td>Team-Building</td>
<td>M=66.10, SD=20.49</td>
<td>M=58.90, SD=22.51</td>
<td>3.07**</td>
<td>99</td>
<td>.29</td>
<td>.9</td>
</tr>
<tr>
<td>Inspiring</td>
<td>M=64.70, SD=21.58</td>
<td>M=60.10, SD=21.86</td>
<td>1.9</td>
<td>99</td>
<td>.19</td>
<td>.55</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01

*Direct action coping among female and male managers*

On average, the use of direct action coping did not differ among female managers (M = 4.53, SD = .58) and male managers (M = 4.57, SD = .40), t (121.08) = -.5, p > .05,
and it represented a small effect size, $r = .05$. The power to detect an effect was 0.11.

Please refer to Table 3.

Table 3.

Direct action and emotion-focused coping among female and male managers

<table>
<thead>
<tr>
<th></th>
<th>Female Managers</th>
<th></th>
<th>Male Managers</th>
<th></th>
<th>$t$</th>
<th>$df$</th>
<th>$r$</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct action</td>
<td>4.53</td>
<td>.58</td>
<td>4.57</td>
<td>.40</td>
<td>-.5</td>
<td>121.08</td>
<td>.05</td>
<td>.11</td>
</tr>
<tr>
<td>Emotion-focused</td>
<td>3.87</td>
<td>1.01</td>
<td>3.91</td>
<td>.83</td>
<td>-.27</td>
<td>123</td>
<td>.02</td>
<td>.08</td>
</tr>
</tbody>
</table>

Emotion-focused coping among female and male managers

On average, the use of emotion-focused coping did not differ among female managers ($M = 3.87$, $SD = 1.01$) and male managers ($M = 3.91$, $SD = .83$), $t (123) = -.27$, $p > .05$, and it represented a small effect size, $r = .02$. The power to detect an effect was 0.08. Please refer to Table 3.

Direct action coping among female and male clerical workers

On average, female clerical workers ($M = 4.64$, $SD = .57$) used significantly more direct action coping than male clerical workers ($M = 4.06$, $SD = .82$), $t (158) = 5.25$, $p < .01$, and it represented a medium effect size, $r = .39$. The power to detect an effect was 0.99. Please refer to Table 4.

Table 4.

Direct action and emotion-focused coping among female and male clerical workers
Emotion-focused coping among female and male clerical workers

On average, the use of emotion-focused coping did not differ among female clerical workers \((M = 3.95, SD = 1.05)\) and male clerical workers \((M = 3.9, SD = 1.0)\), \(t\) (158) \(= .33, p > .05\), and it represented a small effect size, \(r = .03\). The power to detect an effect was 0.09. Please refer to Table 4.

Coping strategies predicting health outcomes

The means, standard deviations and reliability coefficients of the variables and their intercorrelations are presented in Table 5. Demographic variables (gender, organizational level, age and education) were significantly related to health outcomes. Direct action coping was significantly associated with emotion-focused coping \((r = .26)\). Emotion-focused coping was related to fewer psychological \((r = -.37)\) and physical health symptoms \((r = -.32)\). Direct action coping was associated with fewer psychological health symptoms \((r = -.20)\).
Table 5.

Means, standard deviations, reliability and correlations for the study variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Gender</td>
<td>-</td>
</tr>
<tr>
<td>Level</td>
<td>-.08</td>
</tr>
<tr>
<td>Age</td>
<td>-.01</td>
</tr>
<tr>
<td>Education</td>
<td>.07</td>
</tr>
<tr>
<td>Tenure</td>
<td>-.11</td>
</tr>
<tr>
<td>Work setting</td>
<td>4.61</td>
</tr>
<tr>
<td>Hrs Worked</td>
<td>40.43</td>
</tr>
<tr>
<td>Hrs House</td>
<td>18.9</td>
</tr>
<tr>
<td>9. Supervised</td>
<td>23.39</td>
</tr>
<tr>
<td>----------------</td>
<td>--------</td>
</tr>
<tr>
<td>10. Direct Action</td>
<td>4.49</td>
</tr>
<tr>
<td>11. Emotion Focused</td>
<td>3.91</td>
</tr>
<tr>
<td>12. GHQ</td>
<td>2.69</td>
</tr>
<tr>
<td>13. PHQ</td>
<td>2.65</td>
</tr>
</tbody>
</table>

N = 286. Age and tenure treated as continuous variables. Gender (female = 0, male = 1); Level (Manager/Director = 0, Clerical worker = 1).
* p < .05, ** p < .01.
The results of a hierarchical regression analysis predicting psychological health symptoms are presented in Table 6. Given the goal of replicating/extending Torkelson and Muhonen’s (2004) findings, I followed their procedure for the analysis to facilitate comparisons. In step one, age and tenure within the organization were controlled for (fortunate given the discrepancy between females and males on these variables). Age and tenure did not account for any variability related to psychological health symptoms. In step two, gender and organizational level were included. Gender and organizational level did not significantly predict psychological health symptoms. In step three, direct action coping predicted improved psychological heath (decreased symptoms; \( r = -.22, p < .01 \)) and explained a significant proportion of variance in psychological health (5%). In the final step, emotion-focused coping explained a significant proportion of variance in psychological health (11%), and was negatively correlated with symptoms (\( r = -.34, p < .01 \)). The full regression model explained 18.8% \((p < .01)\) of the variance in psychological health. The power to detect an effect was 1.0.

Table 6.

*Coping strategies predicting psychological health symptoms \((N = 268)\)*

<table>
<thead>
<tr>
<th></th>
<th>( \beta )</th>
<th>( B )</th>
<th>( SE B )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Age</td>
<td>-.1</td>
<td>-.13</td>
</tr>
<tr>
<td></td>
<td>Tenure</td>
<td>.06</td>
<td>.05</td>
</tr>
<tr>
<td>Step 2</td>
<td>Gender</td>
<td>-.08</td>
<td>-.21</td>
</tr>
<tr>
<td></td>
<td>Organizational level</td>
<td>.14</td>
<td>.33</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results of a hierarchical regression analysis predicting physical health symptoms are presented in Table 7. In step one, age and tenure did not account for any variability related to physical health. In step two, gender ($r = -.28$, $p < .01$) and organizational level ($r = .19$, $p < .01$) accounted for 12% of the variance in physical health. Male employees ($M = 2.23$, $SD = .77$) had improved physical health compared to female employees ($M = 2.88$, $SD = 1.11$), and clerical staff ($M = 2.85$, $SD = 1.1$) possessed inferior physical health compared to managers ($M = 2.4$, $SD = .92$). In step three, direct action coping did not predict improved physical health. In step four, emotion-focused coping explained a significant proportion of variance in physical health (11%), and was negatively correlated with symptoms ($r = -.34$, $p < .01$). The full regression model accounted for 25% ($p < .01$) of the variance in physical health. The power to detect an effect was 1.0.

Table 7.

| Coping strategies predicting physical health symptoms ($N = 268$) |
|-----------------------------|----------|--------------|
|                              | $\beta$  | $B$          |
| Direct action               | -.22**   | -.41         | .11          |
| Emotion-focused             | -.34**   | -.42         | .07          |

$R^2 = .01$ for Step 1 ($p > .05$); $\Delta R^2 = .03$ for Step 2 ($p > .05$); $\Delta R^2 = .05$ for Step 3 ($p < .01$); $\Delta R^2 = .11$ for Step 4 ($p < .01$).

** $p < .01$

Age and tenure treated as continuous variables. Gender (female = 0, male = 1); Level (Manager/Director = 0, Clerical worker = 1).
Coping and Health

Step 1
- Age: -.14, -.15, .08
- Tenure: .11, .08, .05

Step 2
- Gender: -.28**, -.62, .13
- Organizational level: .19**, .41, .12

Step 3
- Direct action: -.07, -.12, .1

Step 4
- Emotion-focused: -.34**, -.37, .06

\[ R^2 = .02 \text{ for Step 1 } (p > .05); \ \Delta R^2 = .12 \text{ for Step 2 } (p < .01); \ \Delta R^2 = .01 \text{ for Step 3 } (p > .05); \ \Delta R^2 = .11 \text{ for Step 4 } (p < .01). \]

** \( p < .01 \)

Age and tenure treated as continuous variables. Gender (female = 0, male = 1); Level (Manager/Director = 0, Clerical worker = 1).

**Discussion**

**Confirming context**

The results of the present study support the prediction (i.e., hypothesis 1) that in a feminine context, negative stereotypes of female employees may be tempered. In this context (where 73% of managers are female), it appears as though female employees may be viewed as either matching or even surpassing male employees across a range of leadership behaviours. In this environment, female leaders may be freer to engage a blend of more stereotypically feminine and masculine coping behaviours.

Traditionally, workplace studies have been conducted in masculine contexts (Catalyst, 2005; Torkelson & Muhonen, 2004; Torkelson et al., 2007; González-Morales et al., 2006). This trend prompted González-Morales and colleagues (2006) to issue a request to investigate the relationship between work stress coping styles and health within
other contexts. The present study is a direct response to this request, and one of the few studies that have emerged examining coping strategies within a feminine arena.

Stereotypes concerning female leaders are rampant in masculine organizations, and these mental shortcuts may discredit women’s leadership capability (Catalyst, 2007) and create unique stressors, coping responses and health outcomes. Men are perceived as assertive, competitive and possessing the right combination of qualities for a prototypical leader, whereas women are perceived as kind and caring, an atypical leadership profile. The present study builds on previous research, and the first hypothesis tested whether, in a feminine work environment, damaging stereotypes of female employees may be lessened. This hypothesis was supported; in a feminine context, female employees were viewed as demonstrating equivalent male (e.g., problem-solving, delegating and influencing) and female (e.g., supporting and rewarding) leadership behaviours. In addition, female and male leaders were equivalent on a host of other characteristics: hours worked, hours spent on household chores and family responsibilities, number of employees supervised and stress levels. It is possible that more equal conditions of employment and personal responsibilities may foster a climate in which women and men are equally valued and respected, a solid platform for an equal opportunity employer in which stereotypes are less powerful.

As women are entering the workforce in unprecedented numbers, it is posited that their greater representation may help to assuage damaging stereotypes (Duehr & Bono, 2006). In fact, it was found that female managers are attributed significantly more agentic and task-oriented leadership qualities compared to thirty years ago (Duehr & Bono, 2006). Women’s self reports of confidence, authority and masculinity, and the value that
women assign to power, challenge, leadership and prestige in their career have become more closely aligned with men (Eagly & Carli, 2003). In the technology sector, women either hide their gender identity or become more masculine, which may help dispel negative stereotypes (Wajcman, 2007).

These findings also challenge the view that female leaders always operate on an unequal playing field to male colleagues, and corroborates the notion that in feminine environments, female leaders may actually be judged more effective than men (Eagly & Carli, 2007). It appears that context matters, as resistance to the presence of female leadership may be diminished and the legitimacy of female authority may not be called into question in more feminine contexts (Eagly & Carli, 2003). Whereas when a leader pursues a career in a gender incongruent environment (e.g., female leaders in a masculine environment), prejudice and stereotypes may be more prevalent, in feminine organizations, female leaders may be evaluated as more effective when they pursue a leadership position (Garcia-Retamero & López-Zafra, 2006).

Historically, women were viewed as not possessing the right qualities to enter the executive suite, however consensus is shifting. Numerous business analysts and researchers now contend that women may have some advantages previously unrecognized (Sharpe, 2000; Hefferman, 2002; Wachs, 2000; Eagly, 2007). Although the differences are small, female leaders may exhibit a more transformational leadership style than males, and have been found to be more caring and supportive of subordinates. A transformational leader establishes trust and confidence by defining organizational goals, establishing a shared vision and by mentoring and empowering subordinates to reach their potential (Eagly, 2007). On the other hand, male leaders have been found to
concentrate on subordinates' failure to meet standards, to avoid resolving problems until they are urgent, and to become absent on critical occasions (Eagly, 2007). In a feminine environment, there is evidence to suggest that attributes may be more balanced; with leaders enacting a combination of authority and take-charge behaviours, coupled with a communal and caring style (Eagly, 2007).

**Organizational level**

Results of the present study suggest that women and men at the managerial level may equally employ direct action and emotion-focused coping. Further, female clerical workers may equally employ emotion-focused coping and actually utilize direct action coping to a greater extent than their male colleagues in a feminine context (supporting hypothesis 2). This is a novel finding. The results support findings obtained in masculine contexts (Torkelson & Muhonen, 2004; Long & Kahn, 1993; McDonald & Korabik, 1991). It is plausible that in this context, managers of both sexes have access to power and resources, which propel them to exercise their authority and to directly solve problems as they arise. Researchers purport that managers possess a high degree of instrumentality and are socialized into using direct action coping (Korabik, McDonald & Rosin, 1993; Vinnicombe & Singh, 2002).

Perhaps more striking is the fact that at the clerical level in this feminine work context, women used direct action coping to a greater extent than men. These results counter findings obtained in masculine environments, in which women and men reverted to traditionally conceived coping strategies (i.e., men used more direct action coping and women used more emotion-focused coping) (Torkelson & Muhonen, 2004; Carver, Scheier & Weintraub, 1989). It is possible that in a masculine context, in which negative
stereotypes of female employees are widespread, female clerical workers revert to passive coping strategies that conform to their perceived lower status within the organization (Roth, 2009). Conversely, in a feminine environment, female clerical workers may feel empowered to directly tackle problems, as they are not negatively stereotyped as submissive and docile (de Pillis, Kernochan, Meilich, Prosser & Whiting, 2008). Another potential explanation could be that male employees change the way they handle problems, as they are immersed in a feminine context. They may try to emulate the emotion-focused coping strategies traditionally ascribed to women. Furthermore, it is conceivable that female clerical workers model the direct action coping behavior of female managers.

An additional finding in the present study was that at both clerical and managerial levels, females and males did not differ in their use of emotion-focused coping. Emotion-focused coping has customarily been associated with the female gender role (González-Morales et al., 2006; Matud, 2004; Ptacek et al., 1994). The consensus in the research literature has generally been that women are socialized into discussing their feelings and emotions, to bond with others and to engage in passive stress mitigation techniques (e.g., reinterpreting the meaning of a stressor) (Nelson & Burke, 2002). Nevertheless, results from the present study suggest that men may be equally likely to employ this traditionally female coping strategy in particular contexts (e.g., feminine). It is possible that in a feminine context, whereby values of support, caring and compassion are fostered, men may mirror the values of the organization and the behaviour of their female colleagues. It is also conceivable that men who use emotion-focused coping are attracted to work in a feminine context, an environment where this coping strategy is highly utilized. Perhaps,
emotional bonding is encouraged by men and women in a feminized environment, which would run counter to the prevailing view, adequately captured in this classic statement by renowned organizational theorist, Douglas McGregor (1967): “The very expression of emotion is widely viewed as a feminine weakness that would interfere with effective business processes” (p. 23). The role of emotion-based coping may be worth reevaluating in light of alternative models of organizations.

While not central to the study at hand, it should also be noted that gender and organizational level were also significant predictors of physical health, such that male employees had improved physical health compared to female employees, and managers had better physical health compared to clerical staff. The results corroborate findings from Krantz et al (2005), Nelson and Burke (2000) and Bradley and Eachus (1995) suggesting that women experience worse physical health than men in response to work stress. While it is not clear why women may experience less physical health than men, potential reasons could include a mismatch between the effort expended and rewards received. Even in feminine contexts, and despite a female-friendly environment and potential reduction in harmful stereotypes, the wage gap still favours men (International Trade Union Confederation, 2008) and traditional work-family overload may still be present for women. As such, women may demonstrate higher autonomic arousal and a biophysical response (Seigrist, 1996; Lidwall & Marklund, 2006) despite different work contexts.

Similarly, clerical staff may have worse physical health outcomes compared to managers, as managers may have more financial resources and discretionary control over their work schedule to seek quality health care. In fact, the single most important
determinant of health is class status (Borg & Kristensen, 2000; Adler & Snibbe, 2003). Therefore, managers, who possess more education and higher income, may experience better physical health compared to less educated and lower income clerical workers. In addition, managers may have more authority, decision-making latitude and autonomy in their jobs, which has been associated with improved physical health (Schieman & Reid, 2009; Karasek, Baker, Marxer, Ahlbom & Theorell, 1981).

**Direct action coping**

After controlling for gender and organizational level, direct action coping only had a positive effect on employees’ psychological health, with no relationship found with physical health (hypothesis 3). It is possible that within a feminine environment, direct action coping is not viewed as positively as it is in a masculine context.

The values of caring, support and expression of emotion in a feminine context are juxtaposed to the values of competition, aggression and avoidance of discussing emotion and feelings in a masculine environment (Nelson & Burke, 2002). The instrumental nature of the masculine environment may foster a climate in which direct action coping is favoured over the “softer” emotion-focused coping. Hence, it may be that direct action coping predicts superior psychological and physical health in a masculine work environment, where the coping strategy aligns more closely with organizational values.

**Emotion-focused coping: an adaptive strategy?**

In the present study, after controlling for gender and organizational level, emotion-focused coping with work stress had a positive effect on employees’ psychological and physical health (hypothesis 4). Perhaps, in a feminine work context, employees in general, regardless of their gender, are more free to cope with work stress
using emotion-focused coping. There may not be as large a penalty for using this stereotypically feminine coping style to manage work stress. Hence, emotion-focused coping may be perceived more favourably than in a masculine context.

Coping can be construed as operating in a “gendered” work context, which may affect women’s and men’s coping techniques (González-Morales et al., 2010). When coping with a stressful circumstance, an individual generally anticipates a modification in the stressor that may decrease the stressful occurrence and ease strain. Nevertheless, this transformation is not only contingent upon individual coping mechanisms, but also upon the reaction elicited from the collective group (Fielden & Cooper, 2002). In a feminine context, the female majority may feminize the environment, and imbue the organization with values of expressiveness and caring (Gutek & Cohen, 1987). Hence, the use of emotion-focused coping (e.g., expressing emotion and bonding with colleagues) may be accepted and encouraged, which may promote better health.

Traditionally, direct action coping has been considered more efficient than emotion-focused coping in dealing with work stress (Gianakos, 2002; Semmer, 1996; Greenglass, 1995). Nevertheless, more contemporary research suggests that this is not the full picture. Some investigations, including the present study, reveal that emotion-focused coping is a favourable strategy for improved psychological and physical health in some contexts. Most notably, two other recent studies uncovered a positive association among emotion-focused coping and positive affect (Yamasaki & Uchida, 2006; Yamasaki, Sakai & Uchida, 2006). Another study revealed that emotion-focused coping improved both psychological and physical health (Van Harreveld, Van Der Pligt, Claassen & Van Dijk, 2007). Further, some studies suggest that direct action coping is not always adaptive.
When encountering an uncontrollable stressor, sustained effort at changing the uncontrollable situation by use of direct action coping engenders poor health outcomes (Folkman, 1984). Meanwhile, Torkelson and Muhonen (2003, 2004) found no association between direct action coping and health outcomes. Thus, the conventional notion that direct action coping is more adaptive than emotion-focused coping may be challenged. This study contributes to this emerging literature.

Limitations

Several limitations of this study are worth mentioning. First, the response rate was less than ideal; 286 employees completed the survey (31.25% among managers and 12.38% among clerical workers). Only replication can confirm these findings. However, it should be noted that despite the low response rate, a study by Schalm and Kelloway (2001) proposes that response rate is unlikely to negatively impact the validity of survey findings. In fact, there is only a small, negative and non-significant association between the survey response rate and the effect size of variables under investigation. The second potential limitation is the cross-sectional nature of the study. Data on work stress coping strategies and health outcomes were gathered concurrently, which renders it impossible to establish the causal order of the variables. For instance, it is possible that health outcomes influence the use of work stress coping strategies. Third, the same employees supplied self-report data for the independent and dependent variables, which can augment the likelihood of monomethod bias, and inflate the relationships under study. To remedy this issue, researchers may observe employees and their coping strategies at work, and may utilize objective health measures (e.g., heart rate, oxytocin and cortisol) as outcome variables. Nevertheless, this approach may also be challenging, given the 'Hawthorne
effect,' (i.e., that individuals alter their behaviour when under observation) (French, 1953; Gale, 2004). Consequently, the veracity of observations may also be called into question. Additionally, evaluating physiological reactions can be invasive and expensive (e.g., blood samples), and employees may not be willing to divulge their health records. Confidentiality concerning health records is a cherished right of individuals in a health care environment (Brann & Mattson, 2004). Fourth, while it could have been interesting to match each employee to their respective manager when assessing leadership stereotypes, this information was not collected. The procedure was a direct replication of the Catalyst (2005) study, and employees were only asked to assess employees in general about their leadership behaviours. Finally, only one feminine context from one organization was included in this study, which precludes direct comparisons between masculine and feminine contexts. This is definitely an area for future research.

Implications

By appointing more women to managerial positions, and by questioning whether a 'masculine,' agentic management style is necessarily the best way to operate, a reduction in stereotyping may arise (Leonard, 1998; Gherardi & Poggio, 2007). With a combination of ambition and drive, coupled with a nurturing and collaborative approach, women may drive business success; this mixture of traditional male traits and feminine qualities appears to be a competitive advantage in the global economy (Wachs, 2000; Rosette & Tost, 2010). The results of the study also suggest that traditional means of coping may be giving way in some contexts and may have implications for stress management interventions. Whereas individuals in masculine contexts may abstain from the use of emotion-focused coping, the results of the present study suggest that individuals in
feminine contexts may find greater support for such a coping strategy. In a feminine context, the superiority of direct action coping, once considered the most adaptive coping strategy, may now be called into question (Kohler & Munz, 2006; Gianakos, 2002; Lazarus & Folkman, 1984; Torkelson & Muhonen, 2004).

**Future research**

Future research efforts may examine how male employees navigate the feminine work context. Historically, research has focused on the experience of the female minority operating within a masculine context (e.g., Bagilhole, 2002; Kanter, 1977; Simpson, 1997). However, the tide is turning, and a small body of researchers is beginning to focus attention on the token male, as he operates in a feminine context (Pullen & Simpson, 2009). Nevertheless, very little is known of these token men. Results from the present study support the notion that female leaders are evaluated as equal to, if not more effective than, male leaders in this context. Hence, many questions regarding the male experience in a feminine context arise. Are male employees subject to more harassment for circumventing their prescribed gender role? Are they afforded as many opportunities to network as their female colleagues? Do men who choose to work in a feminine environment differ in terms of personality traits or ambition versus men who decide to work in a masculine context? Many questions remain to be answered.

Given the evidence that female leaders may be deemed more effective than male leaders in a feminine environment, future investigators may also wish to consider whether female leaders possess more autonomy, control and authority than male leaders in a feminine context. Future studies may also employ a longitudinal design to investigate health outcomes of coping mechanisms. At present, few studies of this nature are
longitudinal (González-Morales et al., 2010). Researchers have proposed that the value of
direct action and emotion-focused coping is contingent upon whether these strategies are
investigated in the short or long-term (Cooper, Dewe & O’Driscoll, 2001; Ingledew,
Hardy & Cooper, 1997). For instance, it has been posited that in the long-term, direct
action coping may have negative side effects, such as increasing tiredness or damaging
physiological consequences (Shimazu & Schaufeli, 2007).

Conclusion

It appears as though feminine contexts may alter the stressors experienced by
female employees. Negative stereotypes of female leadership may be assuaged, as female
employees are perceived as excelling in essential leadership behaviours compared to
men. Females may adopt more agentic (delegating, influencing) and communal
behaviours (supporting and rewarding) in their leadership quest. Furthermore, female
leaders may rival males, and female clerical workers may surpass males, in their use of
direct action coping, a coping style traditionally attributed to men. Additionally, female
and male leaders and clerical workers may equally employ emotion-focused coping, a
strategy conventionally ascribed to women. Finally, in a feminine organization, emotion-
focused coping, a style that was historically negatively construed as passive and
unhealthy, may be a more adaptive stress management technique. Direct action coping,
traditionally considered the “golden child” of the stress management world, may not be
as helpful, while operating in a female context.

The feminine work context appears to present unique opportunities for employees
and researchers alike, as this environment may challenge stereotypes and enhance the
perceived effectiveness of women leaders. Employees may also adopt coping strategies
traditionally ascribed to the opposite sex, and emotion-focused coping may be a preferential strategy for health in some contexts. Perhaps, as in some other areas of science (e.g., biology), it is time to question some of our assumptions in the stress and coping literature.
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Appendix A

An examination of workplace health and well-being

February 21, 2011

You have been invited to take part in an online research study that takes about 10-15 minutes to complete. The purpose of this research project is to learn about how employees cope with their work and interact with their co-workers. This will help us to better understand links between work on overall well-being.

The research is being conducted as part of Laura Rudy's Master's thesis, a graduate student in Industrial/Organizational Psychology, and Dr. Catherine Loughlin of the Department of Management, both at Saint Mary's University. The project is carried out with the support of the Healthy Workplace department.

The results from this project will contribute to a body of knowledge in occupational health psychology that may prove useful in creating a healthier workplace in many organizations. The purpose of the proposed research is to encourage a healthier workforce.

Your participation in this study is completely voluntary, and you may withdraw at anytime. All information collected as part of this study is both anonymous and confidential and will be held in complete confidence. Only summaries of responses will be viewed by the organization. The study has been approved by the organization’s Research Ethics Board, and the Saint Mary's University Research Ethics Board.

By completing the online questionnaires in the study, it is considered that you have given implied consent to participate.

In the unlikely event that any feelings elicited by participating in this study do not subside, please contact the organization’s Employee Assistance Program, a free service, provided by FGI (an external agency). Call toll free at 1-800-461-5558.

If you have any questions about the study, please contact Laura Rudy at laura.rudy@smu.ca or Dr. Catherine Loughlin at 902-491-6328 or catherine.loughlin@smu.ca Thank you.

Sincerely,

Laura Rudy
MSc Candidate
Saint Mary’s University

Catherine Loughlin
Dr. Catherine Loughlin
Canada Research Chair in Management
Saint Mary’s University
Appendix B

Are you (please select one option):

☐ Male
☐ Female

Are you a (please select one option):

☐ Manager/Director
☐ Clerical worker

What is your age bracket? (Please select one option)

☐ 17 and under
☐ 18-29
☐ 30-39
☐ 40-49
☐ 50-59
☐ 60-69
☐ 70 and above

What is your highest level of completed education? (Please select one option)

☐ Elementary school
☐ High school
☐ College or other non-university certificate or diploma
☐ Bachelor’s degree
☐ Master’s degree
☐ PhD
☐ Degree in Medicine, Dentistry, Veterinary Medicine or Optometry

How many years have you been employed at the organization? (Please select one option)

☐ 0-5 years
☐ 6-10 years
☐ 11-15 years
☐ 16-20 years
☐ 21 years and more

How many hours per week do you work? Please indicate a number in the box below.

[ ] Hours per week

*Only numbers may be entered in this field*

How many hours per week do you spend on household chores and family
responsibilities? Please indicate a number in the box below.

Hours per week

*Only numbers may be entered in this field*

At work, how many people do you supervise, directly or indirectly? Please indicate a number in the box below.

*Only numbers may be entered in this field*

What types of tasks do you do in your job? Please select as many options as applicable.

- [ ] Prepare documents using word processing software
- [ ] Order supplies
- [ ] Bookkeeping
- [ ] File documents
- [ ] Answer phone calls and direct calls to the appropriate party
- [ ] Manage staff
- [ ] Direct and coordinate the activities of the department
- [ ] Establish and implement departmental policies
- [ ] Determine staffing requirements and interview new employees
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The Saint Mary's University Research Ethics Board has issued an REB certificate related to this thesis. The certificate number is: 11-013.

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