Assessing Occupational Stress in the Canadian Multicultural Workplace

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Abstract

The present thesis examines the interconnected influence of workplace factors, social environment (family, social network), and cultural/ethnic background on work-related stress in Canadian-born in comparison to immigrant non-Canadian-born employees. Little research has compared unique samples such as immigrant, Canadian-born, or other ethnic groups within the context of work. Thus, a comparative analysis, which could specify differences among participants of the Canadian workplace, was employed in determining how work-related stress affects individuals and whether specific groups have different perceptions of work-related stress. The sample examined in this present study comprised professionals working in the field of education, health care, and social work.

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Chapter One

Assessing Occupational Stress in the Canadian Multicultural Workplace

An impressive body of research has identified strong associations between work and health. Previous research has demonstrated that occupational stress can have positive or negative influences on the health and well-being of an employee working in any workplace, irrespective of the size of the company, field of activity, or form of employment relationship (e.g., Baba, Jamal & Tourigny, 1998; Ellovainio, Kivimaki, Steen, & Levanto, 2000; Grebner, Semmer, & Elfering, 2005). Specifically, there is growing scientific evidence illustrating the fact that a high level of stress due to work demands is increasingly reported worldwide by a large number of the working population (Loretto et al., 2005) and discussing the effects of work-related stress on individual health and well-being. Most studies, however, have focused on the assessment of ways in which workplace factors interact with personal factors to affect an employee's health, in general, and mental health, in particular. Moreover, considering the dynamic and constant transformations imposed on the workplace by ethnic and cultural diversity, globalization, and continuous changes in technology, research has also tried to assess the bearing of these new work related responsibilities on the health and well-being of individuals, communities, and society (e.g., Polanyi & Tompa, 2004).

Nowadays, workplaces are becoming increasingly multicultural and therefore include a large variety of employees of more than one ethnicity, nationality, or religious and cultural background (Amason et al., 1999). In the context of the new global economy trend, Canadian workplace structure and composition has also permanently changed. Multicultural issues within these culturally diverse workplaces, mainly expressed through language barriers, differences in cultural values, and complex processes of acculturation, may induce high

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levels of occupational stress for both non-Canadian-born employees and their native Canadian counterparts. Although there is an abundance of research in the area of occupational stress, little research has explored the health and well-being of individuals in the context of a multicultural workplace; however, this limitation of previous research has gained more attention with the increase of diversity in the workplace. One of the keys to better understanding the complex phenomenon of workplace stress is to consider employees' cultural variability or ethnicity when analyzing occupational stress. For example, samples used in most previous analyses were samples not taking into account the differences that might exist amongst individuals with different ethnic, cultural, or religious backgrounds. As a result, these studies primarily focused only on analyzing the impact of work on health and well being by merely considering the relationship among work and workplace attributes (e.g., job demands, job control, or social support) in interaction with individual characteristics (e.g., personality, education) and workplace characteristics (Baba et al., 1998). Little research has compared unique samples such as Canadian-born versus immigrants or other ethnic groups within the context of work. Thus, a comparative analysis, which could differentiate the specificity that might exist among participants within the Canadian workplace, could be valuable in determining how work-related stress affects individuals and whether specific cultural groups perceive stress differently.

The objective of the present study was to produce a comparative analysis between Canadian-born employees and their immigrant non-Canadian-born counterparts with respect to their perception of occupational stress within the Canadian workplace. This thesis also attempted to provide a critical review of the available literature regarding the influence of workplace factors and the interconnection among the components of an employee's social

environment and how they might induce work-related stress in Canadian-born and/or immigrant employees. When considering the components of an employee's social environment one would include their family, social network, personal characteristics, and cultural background. Additionally, the review aimed to highlight the fact that the quality of work experienced could be influenced by both objective characteristics of the work environment and the match of work environment with workers' needs, interests, desires, backgrounds, and personality, and that this fact was not always properly captured within the current theoretical models.

Introduction and Description of the Concept of Occupational Stress

Recently there has been an increasing number of studies researching work stress and its influence and various manifestations on the health of working individuals (Baba, et al., 1998). Additionally, previous research has highlighted growing confirmation of the fact that stressful demands at work are interconnected to mental health problems. In a recent study, Marchand, Demers, and Durand (2005) estimated that 15 to 20 per cent of workers in European and North American countries were affected by, or reported as being distressed by, mental health issues. Ganster and Fox (2001) suggest that such mental health problems can develop as a result of ongoing long-term stressful conditions, predominantly found in daily challenges of work or private life, and are characterized by increased somatic distress, social isolation, depressive reactions, emotional exhaustion, or work absenteeism.

As a generally accepted definition, stress is a state that is accompanied by physical, psychological, or social complaints or dysfunctions and results in individuals feeling unable to bridge a gap between their abilities and the expectations placed upon them. Work–related stress is a relatively new concept and is considered to be just one component of stress (Baba

et al., 1998). The existent literature proposes several interpretations of work-related stress and has demonstrated that particular work specific stressors, such as overload, insecurity, ambiguity, responsibility, or physical aspects of the workplace, may have a significant and negative impact on employees' health status. However, research shows that it is very difficult to identify, capture, and accurately analyze all the elements that may represent the complete picture within the workplace (e.g., Elovaino et al., 2000; Ettner & Grzywacz, 2001). That is, most studies have demonstrated that it is very complicated to separate individual characteristics, such as personality traits, coping strategies, personal perspective on life, from actual job demands and stressors, and further, that it is difficult to accurately interpret how these stressors alone might influence individual mental health and well-being (Grebner et al., 2005). For example, individuals with pessimistic personality traits might over-report negative aspects of their work conditions; conversely, individuals with optimistic personality traits might report few aspects of their work conditions as negative, therefore introducing bias into the collected data.

A comprehensive attempt to conceptualize the relationship between work and stress would include individual, social, and organizational factors acting together as environmental stimuli that could have significant implications on an employee's mental health. According to Loretto et al. (2005), there is still a huge need for a comprehensive investigation into "the extent to which work-related stress is caused by work factors and the extent to which personal, demographic and lifestyle influences may contribute to stress" (p. 329). Therefore, in studies of occupational stress, it is important to distinguish among all causes that might induce distress and ill-health in employees. This perspective becomes even more complex and challenging when applied to multicultural workplaces. For example, in a multicultural

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work environment, individual characteristics (e.g., personality traits, gender, religion or cultural background) and individual resources (e.g., level of education, marital status, ability to adjust to the new workplace culture, or social interaction with co-workers) may have a significant influence on the level of occupational stress that affects workplace participants (Ettner & Grzywacz, 2001).

Despite apparent differences however, these conceptualizations of work stress appear to converge in the same direction - there is an emerging consensus that no clear definition of work-related stress currently exists. In an attempt to explain the complex concept of work-related stress, Arthur (2005) states that work-related stress could be defined as "a construct that gives a more acceptable name to what are probably mental health problems that manifest as 'depression, burnout, anxiety disorders, conversions reactions and work-family conflicts' resulting from the 'new organizational reality'"(p. 274). Consequently, the current shifting in the labor market, characterized by economic recession, globalization, and increased workforce diversity, imposes revolutionary changes at the organizational level which in turn may create significant amounts of stress for workers. For example, the new types of work that are continuously introduced into the workplace due to the use of modern and complex technology leads to new forms of psychological burden for employees. The way work is currently performed has led to a workplace situation for which physical work is no longer the only attribute of the workplace but is, to some extent, replaced work by mental and emotional effort (Peeters, Montgomery, Bakker, & Schaufeli, 2005).

Also, the increasing diversity in the workforce leads toward new and complex demands in terms of accommodating workers' needs, interests, and backgrounds within the workplace environment. In addition to this, changes in family structures (e.g., multicultural

families, single parents) and increasing participation of women in the workplace has altered the boundaries between work and family life. In their study, Baba et al., (1998), reported that occupational stress can be viewed as a process in which stressors are associated not only to the content and circumstances of work but also to the individual characteristics, resources, and social environment. However, most of the previous research has failed to consider in the analysis the components of social environments, family relationships, and cultural backgrounds in which workers are living. As a result, previous research has overstressed the role of the workplace and deemphasized these other social factors in their attempt to understand the association between occupational stress and positive or negative health outcomes.

Description of Theoretical Models that Link Work and Stress

In an attempt to better explain occupational stress and its implication on individual health and well-being, researchers have proposed a number of theoretical models. These theories have been used to better understand the complex relationships between work stressors and their negative, and/or positive influence on health. Specifically, the main objective for many of these studies has been the identification of the most common sources of work stress. Sauter et al. (1990) defined the most common sources of occupational stress as workload and work pace, conflict and ambiguity in the workplace, career concerns, work scheduling, interpersonal relationships, and job content and control. While most theoretical frameworks have been proposed primarily for the purpose of analyzing occupational stress on the population, looked at as a homogenous majority, the relationships between ethnic minorities and job stressors/health outcomes have been largely unaddressed. In addition, there is a strong need to determine whether these models are able to capture most special

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issues of concern of particular relevance for diverse cultural and ethnic groups. With the globalization of work and increasing diversity of the workplace, current theoretical models of occupational stress must be adapted to include all groups and attempt to increase understanding and respect regarding differences between these groups.

Since the 1980s, the leading work stress model in occupational health psychology has arguably been the demand-control model proposed by Karasek (de Lange et al., 2003). Essentially, the model posits that the combination of low control and high demand leads to negative health outcomes. In other words, employees who face high demands in the workplace and have little control over their work are considered to be exposed to stressors that may negatively influence their health (Grebner, Semmer, & Elfering, 2005). In support of Karasek's model, Ganster et al. (2001) completed a longitudinal study that emphasized the importance of job control on employees' ability to cope with job demands and work environment.

Social support at work, an overlooked component, was later incorporated in the model; as a result, the demand-control-support model was defined. This newer model postulates that the highest risk of illness is expected in employees with high demand, low control, and low social support in the workplace. Although the demand-control-support model is very similar to the demand-control model, the former underlines the hypothesis that the psychological and social pressure people experience in the workplace develop from social and interpersonal relations among the participants in the work process (Helland Hammer et al., 2004; Loretto et al., 2005; Marchand et al., 2005; Peeters et al., 2005; Polanyi & Tompa, 2004).

Although the new model provides a better picture of the work related stressors, this model is considered strictly focused only on the characteristics of work itself. Specifically, only factors such as work pace and overload, work schedule, and job content and control, have been considered as the main stressors in the work place. To date, occupational stress research has demonstrated that there is a strong need to extend Karasek's model outside workplace settings and begin including important aspects of individual life and work experiences, such as interpersonal relationships, social support, adjustment issues, cultural values, or even the acculturation processes and their implications (Marchand et al., 2005).

From a multicultural point of view, one of the limitations of Karasek's model is represented by the fact that the model was conceptualized for individuals living in developed countries, which are characterized by high levels of industrialization, educational attainments, and health standards. Therefore, the research on this model has been mostly conducted within this kind of culture and society. It is important to determine whether this model is unique to individuals living in industrialized societies or is to the same extent applicable to other individuals (Xie, 1996). The marginal socio-economic status of immigrants, the majority of which have been raised outside Canada, may make them more vulnerable to risk factors, emerging from both workplace and social environment, than their Canadian-born counterparts. Variables such as age, gender, race, ethnicity, education level, language proficiency, or availability of ethnic or other community support, need to be introduced into the equation. Consequently, Karasek's model may need to be amended/extended when applied to cross-cultural groups in order to avoid biased or flawed findings.

The workplace based effort–reward imbalance model, proposed by Siegrist (1996, 1998), represents a different theoretical framework used to define work-related stress. This model postulates that the imbalance occurring between workplace efforts and occupational reward leads to distress and adverse health effects (van Vegchel, de Jonge, & Landsbergis, 2005). Siegrist's model emphasizes that work role has the potential to provide opportunities of positive self-experience, increased self-efficacy, and recurrent positive experience of self-esteem if one is adequately rewarded. Conversely, failure of employers to recognize or reward efforts can be detrimental to an employee's health and well-being (Siegrist, 2005).

Immigrant workers often report feelings of loss as they encounter working life in their new country (Yost & Lucas, 2002). This loss often occurs because they are regarded as unqualified and lacking in workplace initiative. Their efforts to demonstrate skills or abilities are often not properly understood and rewarded by their co-workers, supervisors and/or employers. This loss of positive work response may result in low self-efficacy, self-esteem, and motivation, which in turn may trigger significant psychological strain and alter the individual's normal behavior. That is, as Van Vegchel et al. (2005) state, since "the effort-reward imbalance model is based on the principle of social exchange, it can be seen as an equity process. For that reason, it is possible that employees stay ill at home longer than necessary to compensate for occupational rewards (e.g., salary, status, respect, social acceptance) that they feel they should have received" (p. 554). By keeping in mind that in a multicultural work environment these aspects may be easily exacerbated, the effort-reward imbalance model will need to carefully capture the whole range of variables, at both the organizational and individual level, in order to allow viable findings throughout the analysis.

A different approach used in the attempt to explain individual reactions to workplace stressors is the Cognitive Activation Theory of Stress as proposed by Ursin and Eriksen (2004). This theory posits that if the individual is in control of his/her actions and the result has predictable and desired outcomes, then there will be no need to activate one's personal alarm system. Conversely, if the individual is unsure about the future actions to be taken and does not consider themselves as having the necessary resources to pro-actively deal with the future demands, then the individual needs to enhance his/her efficacy by psycho-physiological activation. This type of psycho-physiological activation is considered healthy and necessary for a short period of time, but over the longer term it may pose serious health risks for the individual. Arnetz (2005) has applied the Cognitive Activation Theory of Stress at the organizational level and has analyzed the influence of permanent organizational changes on employee mental health. This researcher evaluated the clarity of organizational goals as a predictor of mental energy or work-related exhaustion for employees. In other words, departments with lower clarity of organizational goals respond with higher collective stress in order to meet external productivity demands, as compared to departments with high clarity of organizational goals. As predicted, clarity of organizational goals was an important moderator of organizational stress and overall well-being. These results clearly illustrate that employees in departments with poor goal clarity have higher levels of stress and therefore, may be more susceptible to develop depressive disorders than employees working in departments with strong leadership and clear organizational goals. Consequently, the Cognitive Activation Theory of Stress model may be useful, not only in understanding variations in individual stress responses and experiences, but also in interpreting and managing organizational stress.

The literature also emphasizes that cultural background can play a very important role in shaping the ways in which efficacy beliefs are developed, the purposes to which they are put, and the socio-structural arrangements through which they are best exercised (Cochrane & Stopes Roe, 1981; Jamal & Badawi, 1995; Santos et al., 1998; Yost & Lucas, 2002). Therefore, individuals may achieve greater personal efficacy and productivity when their psychological orientation is congruent with the structure of the social system (Rismark & Sitter, 2003). In other words, the greater an individual's compatibility with present workplace and other social structures the lower the level of stress and the easier the process of adjustment in the community and at the workplace. Therefore, a primary advantage of the Cognitive Activation Theory of Stress is that it may be well suited to elucidate human personal development, adaptation, and change, while still accounting for diverse characteristics and cultural backgrounds.

Social Ecology Theory as proposed by Stokols (1992) represents another framework used in occupational stress research. This theory focuses on both the person and the environment, and suggests that individual dispositions, resources, and characteristics shape perceptions of how employment influences health (Ettner & Grzywacz, 2001). Thus, to find out how a specific job and/or work environment influences health outcomes, individual attributes, which may skew the reporting of job effects on health, must be controlled. For example, workers who had higher levels of perceived constraints and neuroticism, worked nights or overtime, or reported serious ongoing stress at work or higher job pressure, reported negative health outcomes (Ettner & Grzywacz, 2001). Ettner and Grzywacz (2001) employed a unique approach in studying the work-health relationship by examining the rating of objective and subjective characteristics of workers, while simultaneously controlling for

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personality and other individual-traits thought to influence reporting behavior. These authors used Social Ecology Theory to explain the association between various aspects of employment arrangement and worker health. The results of this study indicated that workers who experienced serious ongoing work stress or job pressure reported more negative effects, whereas workers who were self-employed, worked part-time, or reported a higher level of skill on the job, reported more positive effects. This study provides rich information for employers and policymakers on why and how to improve working conditions and to create jobs that benefit not only the worker, but also the employer and community. Although this particular study provides unique information regarding the relationship between work and mental health, it is less clear what the results would indicate if a more comprehensive ecological model and a larger number of person-environment interactions were to be considered. It follows then that this model should be used with caution. For example, one question that may arise is whether the outcome measure is capturing the true health effects of a particular job or rather, simply capturing individual workers' perceptions. As such, to the extent that the researcher is unable to perfectly adjust the model for individual traits influencing a worker's outlook on life (e.g., the fact that immigrants are more likely to see themselves as unadjusted/unable to cope with workplace/society demands, even when they are not), the estimated outcomes may be biased.

Another theoretical framework largely employed in the research is the person-environment (P-E) fit framework proposed by Caplan (1975). This model characterizes stress as a lack of correspondence between characteristics of the person and the work environment (Elovaino et al., 2000). Essentially, the concept of P-E fit suggests that alignment between characteristics of people and work environments result in positive outcomes for both

individuals and organizations. Conversely, a large body of research (Ettner & Grzywacz, 2001) shows that a poor fit between individual characteristics and work environment, especially in the case of individuals who tend to react to stress with negative emotional states, increases the risk of health problems. Immigrants appear to face an increased personal vulnerability, exhibit heightened physiological and psychological reactivity in stressful situations, and benefit less from support available to them, when compared with non-immigrant people. Furthermore, the fit between immigrant workers' desires, interests, values and personalities, and the jobs in which they are engaged exemplifies the concept of "dignified work". For many people, one's occupation defines a large part of one's sense of identity, and the loss of this identity, because of leaving behind their previous life and occupation they had established in their home country, may result in feelings of uselessness, frustration, low self-esteem, and low self-efficacy. Therefore, regaining their lost social status and professional identity in the host country can be considered one of the main goals regarding perceived fit in the workplace, and the attainment of dignified work (Xie, 1996). In summary, the P-E fit model is considered one of the few conceptualizations of an individual's relationship to the environment that encompasses a broad range of relationships. The main limitation of this model, however, is represented by the fact that the broad range of relationships encompassed within the model makes it difficult to establish which stressors are fundamentally important and which are not.

Finally, a lay theory of stress has been proposed by Furnham (1997). This theory uses a lay representation of stress and represents a different approach in the attempt to delineate sources of occupational stress. As such, this theory is conceptualized as the common sense explanation people provide for aspects of social behavior. There are researchers (e.g.,

Kinman & Jones, 2005) who argue that knowledge of how individuals interpret the concept of stress has particular utility in understanding manifestations of occupational stress cross-culturally. For example, because of cultural differences, people might describe illness differently and possibly even experience different symptoms. Acknowledging that people from different cultural groups may experience or express occupational stress differently would be very helpful in conceptualizing culture specific workplace stress and represents more than an intellectual curiosity. Research conducted by Kinman and Jones (2005) examined lay representations of work stress utilizing semi-structured interviews with 45 individuals from a range of occupations. These researchers found that individual beliefs in relation to stress are likely to subsequently effect individual perceptions and therefore, work-related actions. Unfortunately, no clear consensus was ascertained as to how work stress was interpreted. Participants referred to a diverse array of personal, environmental, and social factors when defining the concept of work-stress and placed different weighting on the role these factors played in the antecedents and outcomes of stress. In conclusion, Kinman and Jones (2005) stated that "lay representations of workplace stress are likely to have a profound impact on individual perceptions and experiences of health symptoms and on determining the type of remedial action that the respective person might take. The manner in which an individual conceptualizes occupational stress may also influence their work-related actions" (p. 118). However, the small sample size used in the study is considered an important limitation with respect to the generalizability of the results.

In summary, there are some considerations that should be noted. First, the two prevailing models relating work and health employed in the previous literature are the job demand-control-support and the effort-reward imbalance models. The use of these two

models in current studies has demonstrated, however, that some aspects of work experiences, as a result of new workplace realities, go beyond the core constructs of the models. These additional aspects include worker beliefs about the importance and meaningfulness of work, the fit between work and worker needs, interests, desires, values, and personality, and their work, and the need for gaining access and belonging to a community, both in a social and professional sense. As well, it is important to determine whether these models are applicable only to individuals living in developed and industrialized countries or can be equally extended to individuals living in less developed countries. Consequently, these models must be reconsidered for future research, allowing them to capture the full range of experiences of workers in today's increasingly flexible, multicultural, and competitive workplaces.

Second, the majority of the existing studies analyzing the subject of work-related stress explore only the surface of the interaction effects within and between cross-cultural groups. All the theoretical frameworks discussed above have been employed to explain work-related stress; however, most of them have omitted any cross-cultural consideration and applicability. For example, if one was to conduct work-stress related research with recent immigrants in Canada, one might want to consider such concepts as immigrants' characteristics, pre- and post-migration stressors, coping strategies adopted by individuals, their families, and the larger society in relation to the resettlement experience. Research on similarities and differences in human attitudes and behavior, particularly research that takes these concepts into account, is essential in determining how work-related stress affects individuals and whether different cultural groups perceive stress differently.

Third, the existent literature seems to suggest that social and workplace support can be very helpful to ease the general process of adjustment for immigrants. Thus, the impact of

social support, in general, and workplace support, in particular, on immigrants' health should be considered of great importance. Future research should attempt to modify existing theoretical models to include the new configurations of social and workplace environment. Such research should also attempt to demonstrate that social and workplace support are intertwined with an individual's personal characteristics and therefore, these factors must play a more specific role in research. That is, social support may reduce the negative effects of other workplace stressors by acting as a buffer. Workplace support may also help decrease the sense of uselessness, frustration, and anger commonly experienced by immigrants within the resettlement process. As a result, the concept of social and workplace support offered to immigrants as a moderator needs further clarification and specification in order to be useful. Perhaps it needs to be broken down to smaller units such as supervisor support, coworker support, family support, peer support, in order to illustrate differential effects (Amason et al., 1999; Beiser, 2005; Shuval, 2000).

Although the conceptual frameworks outlined above tried to capture most aspects that could influence employee health and well-being within a workplace environment, it must be clear that occupational stress is not yet a well-defined concept. This term is frequently used in health care and occupational settings without regard for the powerful and varied connotations it may hold for individuals with different ethnic, cultural, or religious backgrounds.

Finally, the reviewed literature highlights that the majority of existing empirical research does not specifically take into account immigrants' characteristics when analyzing work-related stress. Very few of the theoretical frameworks used to study occupational stress have focused on establishing relationships between job characteristics/stressors and

individual characteristics, such as personal development, adaptation, and change, while also taking into consideration diverse characteristics and cultural backgrounds. Moreover, the few cross-cultural and comparative studies that do exist (Baba et al., 1998) are not enough to warrant clear results, and highlight the need for further research on work-related stress considering both the objective characteristics of the work environment and the subjective needs of the employee.

Stressors Emerging from the "New" Multicultural Workplaces

All theoretical frameworks presented above focus on various aspects of work and work environment that may have an influence on individual health and well-being. Given the changes to the multicultural world of work, many voices from this area of research recognize the need to rethink and/or expand on these theoretical models in order to capture all the dimensions of work that might, directly or indirectly, affect the health of employees (Polanyi & Tompa, 2004). Specifically, there is a strong need to identify the "new" contemporary dimensions of work that might influence the quality of the work experience in today's multicultural workplaces. This can be made possible through an attentive exploration of all workplace factors that might alter the relationship between work, family, and life interests and responsibilities. For example, most of the studies on occupational stress agree that the core dimensions of work susceptible to shaping the way in which work experiences are perceived by employees are: job demands and decision latitude, quality of social interactions, arrangements of work, and the fit between workers' interests and their jobs (Beiser, 2005; Ettner & Grzywacz, 2001; Polanyi & Tompa, 2004; Wang & Patten, 2001).

Job demands are defined as requirements or expectations in the working environment that have to be fulfilled by an employee. The health outcomes will likely be negative if these

expectations necessitate excessive effort in order to be achieved. Karasek's model predicts

that high job demands, low decision latitude, and low social support in the work environment

lead to adverse health effects. Moreover, Van Vegchel (2005) evaluated the theoretical issues

involving different interaction effects between job demands and job resources, and found that

active learning behavior, motivation, and personal growth occurs when both job demands and

decision latitude are high. In other words, efforts made by an individual at the workplace

have to be consistent with work rewards. Thus, a state of equilibrium between efforts and

rewards in the workplace can moderate the relationship between work and health, as well as

between health and well-being. From the immigrant point of view, the attempt to maintain

this state of equilibrium can be very challenging and demanding. Besides the common

stressors characteristic of the workplace environment and normally associated with job

demands, immigrants have to cope with additional aspects of acculturation. Communication

skills, the need to secure employment and/or the need to regain lost professional identity

and/or occupational status are only few of the additional stressors that can affect immigrants'

health and well-being. For example, immigrants with professional skills and training who

have to accept unskilled and low-paying entry level jobs in the host country can experience

feelings of frustration, bitterness, and hopelessness (Yost & Lucas, 2002).

Another important factor when considering stress in the workplace is the quality of

social interactions. Social support in the workplace, such as support from co-workers and

supervisors, is associated with positive outcomes. Conversely, lack of contact and interaction

with co-workers, hostility, harassment, or injustice in the workplace are normally associated

with negative health outcomes, increased level of stress, and low levels of job satisfaction

and life satisfaction. In their review, Keloway and Day (2005) emphasize the fact that social

support may reduce the negative effects of workplace stressors by acting as a buffer. They argue that social support in the workplace represent an important component of the "new" model of work environments. Healthy work environments encourage positive interpersonal relationships at work, promote forgiveness in the workplace, and discourage workplace mistreatment (e.g., verbal abuse, work obstruction, emotional neglect), which subsequently may positively impact psychological health and mediate the conflict between work and health. Further, healthy multicultural workplaces also have to assume the complex role of facilitator at the work site, in order to ease the integration and adjustment process of immigrants, and to promote acceptance in the work environment. In their study, Rismark and Sitter (2003), demonstrated that prospects for being accepted and invited to participate in work activities for immigrants were linked to the organization's recognition of these individuals, to the division of labor in the workplace, and to the interaction with social partners. Usually, this process is seen as a very difficult one, considering the fact that discrimination and stereotypes in the labor market represents the most common impediments to an immigrant's attempt to become integrated in the host country. Research reveals that as many as one in four visible minority immigrants report experiencing some form of discrimination during the early years of resettlement (Beiser, 2005). As such, healthy multicultural workplaces must carefully consider the fact that for immigrants in particular, entering a work site is about gaining access and belonging to a community, both in a social and professional sense (Rismark & Sitter, 2003), and that the worksite experience may strongly influence individual health and well-being, as well as working community outcomes.

The continuous changes imposed on organizations by the need to constantly improve productivity and efficiency is widely associated with negative health outcomes among employees. Living with change and uncertainty has become a common fact of modern working life for every individual. It has been argued, and admittedly there are two sides to the argument, that individuals perceive the causes of work place stress to be predominantly organizational. For example, Arnetz (2005) demonstrated that organizational support, such as strategy, culture, and clarity of organizational goals, represents a major factor in determining the level of stress experienced by employees. Although individuals, departments, and organizations react differently to stressors stemming from organizational changes, organizational support has proven to be an important moderator of organizational stress and overall well-being. Conversely, Elovaino et al. (2000) emphasized the fact that individual characteristics, such as personality traits, gender, and age may play an important role in addition to organizational effects in explaining individual-level mental health and job satisfaction. They also argue that individual characteristics, such as hostility, irritability, and/or negative affect, clearly account for the level of individual acceptance and support in the workplace.

From a multicultural workplace perspective, there is considerable evidence demonstrating that immigrant employees often face discriminatory attitudes and negative reactions at the work site from their native born co-workers or supervisors. These attitudes toward immigrants held by people in the host country affect immigrants' ability to adjust, secure employment, and integrate in to the community (Yost & Lucas, 2002). The immigrants' experience of discrimination and lack of social support in the workplace can lead to low self-esteem, fear, anger, loneliness, inability to cope, and psychological distress.

Social support, however, is regarded as a very important tool in moderating the stress-strain in organizational settings, particularly in multicultural work sites. Consistent with this, findings by Amason et al. (1999) indicated that supportive intra-organizational relationships have been linked to reduced uncertainty, increased job satisfaction, job security, satisfaction with supervisors, and also increased individual self-worth and health. In addition, Amason and colleagues stressed the fact that, in a multicultural workplace, individuals with different ethnic and social backgrounds may perceive social support differently. Therefore, training in cultural sensitivity and communication skills of work community as a whole, co-workers and supervisors, may play a major role in promoting helpful social support at the workplace for immigrants.

An unbalanced fit between workers' interests and their jobs is also hypothesized to generate negative health outcomes. As the P-E fit framework posits, a lack of compatibility between individual characteristics, abilities, values, and the work environment may result in occupational stress. When correspondence exists and individuals are happy and motivated by their jobs, a lower level of occupational stress will be perceived. Specifically, workers holding "good" jobs, which "fit" with their needs, interests, desires, backgrounds, and personality, are more likely to believe that their work has a positive effect on their health (Ettner & Grywacz, 2001). Consequently, they are more likely to participate in the labor force and compete successfully for a job. Alternately, a poor fit between individual abilities and work environment would reveal either a very demanding workplace environment or an individual not fully prepared to cope with the demanding situations at the work site.

As entering the workforce in the host country represents one of the main goals for immigrants, finding a "fit" job will likely enhance personal motivation and affect health

outcomes in a positive manner. In their study on a sample of full-time employed Muslims, immigrants and their descendents living in Canada and the United States, Jamal and Badawi (1995) reinforced the fact that job satisfaction, organizational commitment, and happiness in life are negatively related to occupational stress. Moreover, in a study on Chinese workers, Xie (1996) confirmed the generalizability of the P-E fit framework. Simply put, immigrants have the same ambitions, needs, desires, and expectations from their jobs, workplace community, and their social environment as their non-immigrant counterparts.

In addition to the above discussed dimensions of work, considered as common aspects in the workplace that can affect both non immigrants and immigrant workers, there are some new aspects of today's multicultural workplaces that may positively or negatively impact the relationship between work and health. The real acceptance of work communities, the ability to adjust to a new culture of work, the acculturation process and language barriers, and the desire to regain lost professional status might represent some of the new dimensions that need to be taken into consideration when analyzing characteristics of today's working population.

It is also noteworthy that some of the studies reviewed in this paper demonstrate that while some aspects of work/job stressors are considered as common stressors to all individuals, others are considered as having a differential impact and influence on individual health. That is, not all stressors affect all individuals in the same manner (Kelloway & Day, 2005). This suggestion is very helpful when considering the circumstances of immigrants, whereby, according to Yost and Lucas (2002), immigrants must not only adjust to the many losses that accompany immigration, such as loss of personal and occupational status, lack of skills and/or knowledge of how to compete in the new environment, and possible

discrimination based on immigrant status, but to any additional stressors surrounding family, social, and relationship issues. All these adjustments can create an especially traumatic experience for the individual. This experience might be either alleviated or exacerbated through an individual's access to resources, their coping styles, and/or social interaction.

An important body of literature reveals that individual characteristics and resources can play a major role in the interaction between the process of securing employment and health (Ettner & Grzywacz, 2001; Grebner et al., 2005; Pines, 2004; Polanyi & Tompa, 2004; Santos et al., 1998; Wang & Patten, 2001; Yost & Lucas, 2002). Thus, age, gender, marital status, income, social status and support, recent life events, and traumatic events have to be considered when analyzing levels of occupational stress. Findings by Ettner and Grzywacz (2001) supported that workers with higher levels of perceived constraints and neuroticism, and lower levels of extraversion were more likely to report that their health is negatively influenced by their job. In addition, these authors state that visible minorities or individuals with a low level of education or social status are likely to use different criteria in evaluating the health effects of their job. These authors further suggested that this difference is evident because these individuals, who often face discrimination, lack of communication, or marginalization, find it very difficult to secure employment. Therefore, marginalized workers tend to consider, in the short-term, that being employed, even in a low-paying entry-level job, is relevant to their health and well-being. Unfortunately, looking from a long-term perspective, the option of being underemployed or unemployed has clear health disadvantages and can negatively influence employees' well-being.

In a recent study, Pines (2004) studied the relation between adult attachment styles and work-related stress. Attachment styles, as defined by Pines, "are represented by mental

working models which predispose individuals to habitual forms of engagement with others" (p. 68). These working models are determined for each individual by his/her caretaker accessibility and responsiveness. The findings emphasized the fact that individuals having a secure attachment history and secure working models enter their career with realistic expectations and are able to constructively cope with stressful work situations. Conversely, an insecure attachment history may lead to poor coping and maladjustment in adulthood. By linking attachment processes with migration stress, Santos et al. (1998) also demonstrated that, for adult Mexican immigrants, negative family relationships in childhood are strongly linked to marital discordance and work conflict, potentially resulting in subsequent mental health issues.

Personality characteristics moderate the relationship between work and health - different people expect different outcomes from work. This relationship between mental health and work has always been reciprocal and strongly correlated with individual characteristics (Beiser, 2005). For example, individuals who lose their jobs or who do not properly fit with their jobs experience a high risk of stress, whereas individuals who are prone to health problems are more likely than the non-stressed to be laid-off work. Consistent with these findings, Yost and Lucas (2002) supported the idea that immigrants represent a special group within the reality of today's multicultural workplaces, needing careful attention not only when examining the ways that workplace conditions affect their health, but also when examining the health of communities beyond the workplace.

Suggestions for Future Research

The literature reviewed in this paper clearly indicates that there is a strong need for a new approach in assessing occupational stress within the "new" multicultural work-force and

for more sophisticated theoretical studies linking work and mental health. The research thus far shows that there is an impressive body of literature in the area of stress and its manifestations - it is considered to be one of the most researched areas, both in terms of empirical and applied research (Baba et al., 1998). Nevertheless, researchers are in general agreement that work stress is a serious problem in many contemporary organizations and requires continued research as well as management at both individual and organizational levels. In addition, the beliefs that individuals hold about stress are unanimously considered to influence how they perceive stress within the workplace, the manner in which they respond to it, how they disclose it, and how they help manage it for themselves and others. Although all previous findings reinforce the fact that both personal and work-related antecedents influence mental health, most research has concentrated primarily on the working population as a homogenous whole, neglecting to consider the diversity existent in the workforce and components of social environments, family relationships, and cultural backgrounds in which workers are living.

Taking into consideration that annually Canada admits between 220,000 and 240,000 immigrants, and the fact that workforce diversity is emerging as one of the most pressing issues of organizational life (Jamal & Badawi, 1995), future research needs to employ a different approach in an attempt to fill the gaps in our understanding of the dynamics of diversity and its implications for occupational stress research. The main focus has to be on whether the findings about the influence of the workplace environment on employees' work attitudes and behavior are in the same manner applicable to the multicultural diversity of the working population currently existing in Canada. The field requires research about immigrant

and refugee work-related issues in comparison to members of the receiving society as a whole, as well as investigations comparing immigrants with native-born individuals.

The few studies investigating immigrants' occupational stress provide inconsistent findings. For example, although research with Mexican immigrants associated conflict in work relationships with increased marital strain and mental health distress (Santos, Bohon, & Sanchez-Sosa, 1998) similar studies with other ethnic groups failed to make this connection. Further, other research using Muslim participants was based on findings and measures created using a Caucasian Christian majority. Moreover, research based on community inquiries has even suggested that immigrants have fewer emotional problems than the native-born individuals (Beiser, 1999; Cochrane & Stopes-Roe, 1981). In an attempt to offer an explanation for the above mentioned inconsistency of the findings, Beiser (2005) stated that "it is not immigration *per se*, nor even its challenges that create mental health risk, but rather the interaction among vulnerabilities, stressors, social resources, and personal strengths" (p. 118).

To help ensure accurate results in future research, existing theoretical models also need to be updated for the reality of the new Canadian multicultural workplace. The majority of studies examined in the present thesis did not consciously model interactions between personal and work factors and did not specifically take into account immigrant characteristics when analyzing work-related stress. Among those empirical studies that tested for interactions, results were inconsistent due to inadequate theoretical reasoning (Marchand, Demers, & Durand, 2005). In addition, the debate about whether people from different cultural groups experience or express work-related stress differently represents more than an anomaly. For example, personal interpretation and representation of workplace stress is

likely to shape individual's perceptions and experience on the positive or negative influence of work on health and furthermore, on determining the type of remedial action that might be taken.

Explorations of the relationship between work and health in the new multicultural workplace need to be linked with the realities of everyday work. Considering the multicultural dimensions of the workplace environment in general, and Canadian workplace environment in particular, there are some questions that arise and need to be clarified. Therefore, some of the gaps in the literature considered above will be further addressed through the hypotheses of the present thesis. The basic argument of this study is that immigrant employees, with different backgrounds, culture, or religion, are likely to perceive occupational stress different from Canadian-born (CB) employees. In order to avoid strict social categorization, this present study will regard the immigrant individuals as non-Canadian-born (NCB). Three hypotheses are proposed for further analysis.

The first hypothesis suggests that the level of occupational stress perceived by NCB employees will be higher than the level of occupational stress perceived by CB employees. The reviewed literature in this thesis highlights that stressful demands at work are associated with a variety of mental health problems for working individuals (Arnetz, 2005; Baba et al., 1998; Jamal & Badawi, 1995; Kelloway & Day, 2005). Consequently, it is suggested that although workplace factors, such as job demands, job control, social support in the workplace, et cetera, may jeopardize the health of both NCB and CB employees, NCB employees may be affected to a larger degree. The suggestion is supported through consideration of the complexity of processes (e.g., settlement, adjustment, acculturation, etc.) an immigrant has to go through when re-locating to a new country. In addition, it is predicted

that both NCB female and male employees will perceive a higher level of stress in comparison with CB female and male employees. This suggestion is further supported by the findings of Cochrane and Stopes-Roe (1981) in which these authors demonstrated that employed East-Indian women had higher symptoms levels of psychological distress than did their English-born counterparts.

The second hypothesis suggests that NCB employees will have a lower level of perceived job satisfaction, life satisfaction, and marital satisfaction, when compared to their CB counterparts. According to Loretto et al. (2005), work and non-work aspects of an employee's life and the possible conflicts between work and non-work can be influenced by the level of occupational stress perceived by the individual. As such, problematic work relationships (e.g., interpersonal conflict with co-workers/supervisors, inability to positively adjust to the requirements of the job, lack of social support at work, etc.) are likely to have a detrimental effect on the individual's perceived satisfaction with respect to job content, personal life, and marital relationship. Unfortunately, immigrants often have to cope with exacerbated levels of conflicts between work and non-work aspects not only as a result of problematic work relationships but also because of daily experiences lived in the new country.

The third hypothesis suggests that, overall, CB employees will be affected less by mental health issues than their NCB counterparts. The adjustment and acculturation processes include a multitude of specific daily hassles that provide extra potential stressors to immigrants in comparison with their CB counterparts. For example, securing employment and economic success for themselves and their families represent an important aspect that may have significant influence on immigrants' health and well-being. Such stressors likely

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require a great deal of effort in order to adapt to the host country's circumstances, and may lead to mental health problems as a consequence. Current research suggests that it can take as long as 10 years for an immigrant to achieve his/her projected economic potential (Beiser, 2005) and there is a strong link between health, work, and social factors. Therefore, unemployment, low paid jobs, discrimination in the work place, loss of social status or professional prestige, lack of social and familial support or interactions, as experienced by immigrants can not only frustrate individual ambition, self-esteem, or self efficacy but can also have a deleterious influence on mental health.

Chapter Two

Method

Participants

The participants in this study included 84 professionals working in the field of education, health care, and/or social work. The study group consisted of 42 employed NCB professionals; (21 males and 21 females for Group 1), and the remaining 42 professionals were CB individuals (21 males and 21 females for Group 2) serving as a comparison group. The process of identifying and approaching NCB professionals was not only complex but also very lengthy. It is believed that the major impediment in recruiting this particular group of professionals may be a result of the relatively small number of NCB professionals residing in the Prince George area that would also match with the demographic requirements preset by the participant inclusion factors for this study.

Only immigrant professionals accepted into the Canadian immigration program and admitted through economic category were selected for the study. Economic category includes skilled workers as principal applicants and accompanying spouses and dependants, business

immigrants, and provincial/territorial nominees. The selection of skilled workers is based on a number of criteria including education, work experience, knowledge of English/French, and other valuable assets. Therefore, these individuals are regarded as well prepared to face the complex process of immigration and relocation in the new country and readily able to easily succeed in the labor force in a short period of time (Statistics Canada, 2003).

The two groups of participants, CB and NCB professionals were matched on important demographic characteristics, such as age, level of education, marital status, and socio-professional status. There were no significant differences between the two groups, for age (CB group M = 39.73, SD = 8.57; NCB group M = 42.09, SD = 9.95; $p > 0.10$), number of children (CB group M =1.42, SD =1.29; NCB group M =1.59, SD =0.98; $p > 0.10$), or hours worked per week (CB group M = 39.70, SD = 11.34; NCB group M = 39.66, SD = 12.11; $p > 0.10$). For the NCB group the average length of stay in Canada was 9.3 years.

The majority (75%) of the participants in the study were self-reported Caucasians (39 in the CB group and 24 in the NCB group), 16.67% of the participants self reported as Other (3 in the CB group and 11 in the NCB), 4.76% of the participants self-reported as Black (4 in the NCB group), and 3.57% of the participants self-reported as Hispanic (3 in the NCB group). For the CB group, 83.33% (n = 35) reported university and above university level of education and 16.67% (n = 7) reported college education, while for NCB group 95.23% (n = 40) reported university or post university level of education, and 4.76% (n = 2) reported only college education. Table 1 contains the descriptive frequencies of the demographics for the two groups. All participants in the study were considered to be highly educated professionals employed in the fields of education, social work or health care. The overall sample used in the present study can be considered as a sample of convenience.

Procedure

The data were collected between May 2007 and July 2008. The main source for recruiting NCB professionals was through the Immigrant and Multicultural Services Society (IMSS) in Prince George. This local agency has a list with contact information of members and individuals that accessed various settlement services in the Prince George area. In addition to using IMSS contact list, the snowball sampling technique was also employed in recruiting NCB professionals. Alternatively, the control group was recruited using only traditional convenience methods (i.e., word of mouth, snowball sampling technique, advertising).

The researcher was responsible for contacting and approaching potential candidates for the study. Participants in both groups were initially contacted via telephone or e-mail to obtain indication of interest and to arrange a follow-up meeting time. The purpose of the study was explained to potential participants and respondents were given a consent letter prior to the initiation of data collection in any context (Appendix A). This letter described the rationale for the study and stressed the participants' right to refuse to answer any aspect of the questionnaires or to terminate their participation at any time. The confidentiality of responses was also emphasized. In addition, all participants received a listing of specialized services in the community to ensure that if there was any adverse reaction to participation, they would have been aware of potential avenues from which to seek help (Appendix C).

In the second phase of the data collection, self-report questionnaires were either handed out or sent via mail to the participants. In order to minimize the bias that might be introduced in the study by assigning the same order of the questionnaires to each respondent, the Latin square arrangement was used as a counterbalancing method. Consequently,

following agreement to participate in the study, 120 sets of questionnaires were distributed to volunteers in Prince George. In all cases, participants filled out the set of questionnaires confidentially on their own time and were asked to mail the questionnaires back to the researcher or return them to the researcher if completed face-to-face. Out of 120 questionnaires sent out 102 were returned to the researcher. Due to the fact that some of the respondents did not met the demographic requirements preset for this study (e.g. marital status, employment status) or failed to completely answer to the questions in the survey, only 84 sets of questionnaires were further considered for the statistical purpose of this study. The overall response rate based on the total number of completed interviews to the total numbers of questionnaires handed out to the volunteers in the project was 70%.

Measures

Demographics

The demographic questionnaire (Appendix B) asked for information regarding the participant's marital status, date of birth, ethnicity, education, years in Canada, employment status, occupation, and length of employment.

Measures of Satisfaction

The *Satisfaction with Life Scale* (Appendix D; Diener, Emmons, Larson, & Griffin, 1985) was included as a measure of how satisfied the participants were with their lives overall. This short (5 items) questionnaire asked the participants to mark on a seven point scale from 1 ("strongly disagree") to 7 ("strongly agree") how fully they support various statements about their life satisfaction ($\alpha = .80$ and test-retest reliability $= .76-.82$; Pavot & Diener, 1993).

Measure of Mental Health

The *Symptom Checklist-90-Revised©* (Appendix E; Derogatis, 1996) was used to evaluate levels of reported symptoms on nine different symptom scales (somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism). This scale was a 90 item scale that could be completed in 15 minutes. The SCL -90 R has been successfully translated into different languages and has been used in social psychiatric studies of diverse ethnic and cultural groups, such as Cambodian, German, Arabic speaking, Korean, or French-Canadian (Roskin & Dasberg, 1983; Antony &Barlow, 2004). Previous research has provided evidence of the validity (e.g., Schmitz, 1999) and reliability of the SCL-90 (r ranging from .77 to .90; e.g., Derogatis, 1994; α = .98; e.g., Sun, Zhang, & Fu, 2007).

Measure of Relationship Satisfaction

The *Locke-Wallace Marital Adjustment Test* (Appendix F; Locke & Wallace, 1959; α = .90) was used to assess marital adjustment and satisfaction. The test consisted of 15 items measuring overall marital satisfaction, amount of disagreement, and level of compatibility.

Measure of Job Satisfaction

The *Job Satisfaction Survey* (Appendix G; Traut, Larsen, & Feimer, 2000; α = .69 - .88) was a twenty-five item measure that asked respondents to rate on a scale from 1 ("strongly disagree") to 4 ("strongly agree") how much they supported statements of satisfaction with various aspects of their employment experience. The scale evaluated five dimensions of job satisfaction each investigated using five items including overall job satisfaction, satisfaction with supervisors, satisfaction with job content, satisfaction with departmental relationship, and satisfaction with job training. This survey was originally

created for fire services but transformed for this purpose into a general survey using simple

adaptations and alterations of some of the items.

Measure of Occupational Stress

Job stress was assessed with a 13-item scale developed by Parker and DeCotiis (1983;

Appendix J). This Likert-type scale uses 1-5 response options indicating strong agreement to

strong disagreement. A high score on this scale indicated a higher degree of occupational

stress. This scale was frequently used to tap overall job stress and has good psychometric

measures (Baba et al., 1998).

Chapter Three

Results

General Description of Analyses

Several statistical techniques were employed for the data analysis. For the first

hypothesis a two-way factorial analysis of variance (ANOVA) was employed to assess

whether the level of occupational stress perceived by NCB in comparison to CB employees

was significantly different. This statistical technique was chosen in order to assess the

influence of the two independent variables (group and gender) on the dependent variable,

occupational stress, when considered separately as well as how their effects combine in the

analysis (Keppel & Wickens, 2004). The next two hypotheses in this study were analyzed

using multivariate analysis of variance (MANOVA). This statistical technique was chosen in

order to test differences among groups on a combination of dependent variables. A well

recognized benefit of using MANOVA versus ANOVA is the protection against inflated

Type I error, due to the fact that MANOVA considers dependent variables as a linear

combination (Tabachnick & Fidell, 2001). A word of caution is necessary with respect to the

power of the analysis; given the small sample size in our study, power was an ongoing concern when interpreting results.

In the case where the omibus test was considered significant, post-hoc analyses were completed in order to determine the location of revealed differences. The initial step in this process consisted of checking the correlations among dependent variables. In the case of correlated dependent variables, a Roy-Bargman step-down analysis was used for the follow-up analyses. Priorities were assigned to dependent variables according to theoretical and practical considerations. The highest-priority DV would be tested in univariate ANOVA, with appropriate adjustment of alpha (.0167). The rest of DVs would be tested in a series of ANCOVAs.

Job Stress

A 2 (group: CB, NCB) x 2 (gender: male, female) between subjects factorial ANOVA was conducted to identify whether there was a significant difference between the level of occupational stress perceived by NCB employees in comparison to their CB counterparts. The alpha level was set at .05. The results of the ANOVA indicated that there was no significant main effect for group, $F(1,80) = 0.24$, $p > 0.10$, no significant effect for gender, $F(1,80) = 1.78$, $p > 0.10$, and no interaction between the two groups, $F(1,80) = 0.13$, $p > 0.10$ (see Table 2 for the means and the standard errors of the means). The first hypothesis was therefore rejected.

Overall Satisfaction

A 2 (group: CB, NCB) x 2 (gender: male, female) x 3 (satisfaction: life, relationship, job) mixed model MANOVA was conducted to evaluate the hypothesis that CB professionals working in the field of education, health care, or social work have an increased level of

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perceived job satisfaction, life satisfaction, and marital satisfaction when compared to their NCB counterparts. The results of the MANOVA omnibus test indicated no significant main effects or interaction for satisfaction, thus follow-up analyses were not conducted. For the group Wilk's Λ was 0.95, F (3, 78) = 1.45, $p > 0.10$. For the gender Wilk's Λ was 0.98, F (3, 78) = 0.44, $p > 0.10$. For the interaction Wilk's Λ was 0.98, F (3, 78) = 0.3, $p > 0.10$ (see Table 3 for the means and the standard errors of the means). The second hypothesis was rejected.

Mental Health

A 2 (group: CB, NCB) x 2 (gender: male, female) x 9 (symptoms: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism) mixed-model MANOVA was conducted with group and gender as the between subject variables and symptom as the within subject variable (Tabachnick & Fidell, 2001). Our third hypothesis argued that, overall, CB employees would be affected less by mental health issues than their NCB counterparts.

The omnibus MANOVA revealed no significant interaction, with Wilks's $\Lambda = 0.84$, F(10, 71) = 1.32, $p > 0.10$, and no significant main effect for gender, with Wilks's $\Lambda = 0.83$, F(10, 71) = 1.4, $p > 0.10$. However, the analysis revealed significant differences for the main effects of group. For group, Wilks's Λ was 0.71, F (10, 71) = 2.88, $p = 0.004$, $\eta^2 = 0.2$. Assumptions of normality and homogeneity of variance-covariance matrices were also satisfactory. Consequently, hypothesis three was partially accepted.

Given the significance of the omnibus MANOVA for the main effect of group, it was appropriate to investigate further the nature of the relationships among the independent variable (group) and the dependent variables (symptoms: somatization, obsessive-

compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism), to find out which of the nine dependent variables were influenced by group. Tabachnick and Fidell (2001) suggest Roy-Bargmann step down analysis as the most appropriate statistical technique to be used in order to avoid measuring/reporting overlapping variance in the case of correlated dependent variables. Subsequently, the next step of the analysis was to assess the degree to which the dependent variables were correlated; the analysis of Pearson correlations revealed that the dependent variables were correlated. Table 4 contains Pearson correlations for the nine dependent variables used for this analysis.

To investigate the impact of main effect for group (CB and NCB) on the individual dependent variables, a Roy-Bargmann step-down analysis was subsequently conducted. Given some practical considerations, priority order was assigned for three of the dependent variables considered in the analysis. The decision of testing these three dependent variables only was supported by two underlying arguments. First, MANOVA provides accurate results and works best with highly negatively correlated dependent variables and acceptably well with dependent variables moderately correlated in either direction (Tabachnick & Fidell, 2001). For our particular study, the Pearson correlations presented in Table 4 indicated that all nine dependent variables employed in this analysis were positively correlated; however, somatization, phobic anxiety and paranoid ideation could be considered as moderately correlated and subsequently follow-up Roy-Bargmann step-down analysis could be justified with these variables. Second, tests of between subjects' effects for the omnibus MANOVA, suggested significant univariate Fs for the main effect of group only for somatization, phobic anxiety and paranoid ideation. Although the statistical significance of these F values is of little importance and should not be reported, knowledge of the univariate Fs produced under

MANOVA may help to understand which dependent variables might have an influence in the future development of the analysis.

Somatization was considered as the highest priority dependent variable, followed by phobic anxiety, and then paranoid ideation. The Roy-Bargman procedure requires that the highest-priority dependent variable be tested in univariate ANOVA, followed by two ANCOVAs with the respective higher-priority dependent variables treated as covariates. In order to minimize the chance of making a Type I error, a traditional Bonferroni procedure was employed. This approach required setting individual alpha levels at 0.0167 (0.05/3) for each follow-up analysis.

A first follow-up ANOVA was conducted to find out the effect of group on somatization. The analysis revealed a significant main effect for group $F(1, 80) = 8.27$, $p = 0.005$, $\eta^2 = 0.09$. Therefore NCB professionals reported experiencing and communicating a higher level of somatic distress than their CB counterparts (see Table 5).

The second follow-up test was conducted to find out the effect of group on phobic anxiety. First, the assumption of homogeneity of regression of slopes was tested. With somatization as a covariate and phobic anxiety as a dependent variable, the test determined that the assumption of homogeneity of regression of slopes was not violated. Consequently, an ANCOVA analysis was conducted using somatization as a covariate and phobic anxiety as a dependent variable. The analysis revealed no significant main effect for group, $F(1, 79) = 1.17$, $p > 0.10$, which suggests that phobic anxiety adds no unique variability to the linear combination that was due to the first dependent variable, somatization (see Table 5 for means, adjusted means and their respective standard error of the means).

The third follow up analysis was conducted to assess the effect of group on paranoid ideation. With somatization and phobic anxiety as covariates and paranoid ideation as a dependent variable, the homogeneity of regression of slopes' test revealed that the assumption of homogeneity was not violated. Consequently, an ANCOVA was conducted to find out the amount of unique variability added by paranoid ideation scores to the linear combination once the effects of the other two dependent variables, somatization and phobic anxiety, were removed. There was a significant effect for group $F(1, 78) = 7.53$, $p = 0.008$, $\eta^2 = 0.088$. Consequently, the paranoid ideation variable significantly contributed unique variability to the linear combination over and above the first two variables, somatization and phobic anxiety (see Table 5 for means, adjusted means and their respective standard error of the means).

Chapter Four

Discussion

The primary purpose of this thesis was to explore occupational stress as it is experienced by individuals in the context of a multicultural workplace. Considering the continuous increase in diversity in the Canadian workplace, the present thesis attempted to identify the differences that might exist in perceived occupational stress between NCB individuals with various ethnic, cultural, or religious backgrounds and individuals born, raised and educated in Canada. Thus, a comparative analysis was employed to determine how work-related stress affected individuals and whether NCB participants perceived stress differently. The three research hypotheses were that NCB professionals would report higher occupational stress than CB professionals employed in same fields of work, that NCB professionals would be less satisfied with their job, marital relationship, and life than CB

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professionals, and that NCB professionals would report more mental health issues than their CB counterparts.

Two of the hypotheses regarding the differences that might exist in perceiving occupational stress and satisfaction with job, marital relationship and life between CB and NCB professionals were not supported. The third hypothesis regarding mental health displayed by the two groups was partially supported. Specifically, it was found that, despite the fact that there were no differences in the level of occupational stress perceived by the two groups and apparently equal satisfaction with job, marital relationship, and life, NCB professionals displayed higher somatic and paranoid ideation symptoms than CB professionals employed in similar areas of work. These findings are in partial agreement with previous research reviewed for this study. In their study on workers' perceptions of how jobs affect health, Ettner and Grzywacz (2001) found that employees, who report having high control and decision latitude over their work, are more likely to be satisfied with their jobs and perceive the effects of their job on their well-being as very positive.

Job Stress

The first hypothesis suggested that there would be a significant difference in the level of occupational stress perceived by NCB employees versus their CB counterparts. Controls were expected to show lower level of occupational stress, while NCB individuals were expected to report higher level of stress. Contrary to predictions, the results suggested no significant differences in the way NCB professionals perceived occupational stress in comparison with their CB counterparts. However, previous research indicates that permanent exposure to elevated demands at work is associated with a variety of mental health problems for working individuals (Arnetz, 2005; Baba et al., 1998; Jamal & Badawi, 1995; Kelloway

& Day, 2005). Although our null findings do not support the results of previous research, there are several aspects specific to the cohort analyzed in this study that might justify our results. For example, one explanation for the present results is that the cohort examined in this study contained white collar professionals employed in education, health care, and social work; individuals whose jobs were likely to provide them with high decision latitude, opportunity for skill utilization, safe working conditions, a valued social position, and financial security. In this situation, one's perception of occupational stress might be eclipsed by the benefits of being rewarded for all the efforts required in the work environment (Kelloway & Day, 2005). For example, most immigrants, and in particular those accepted to immigrate in Canada under the skilled worker category, are perceived as highly educated and very career-oriented volunteer migrants. Consequently, these individuals are considered to be especially determined to succeed in the new country and therefore, better prepared to manage both positive and negative challenges in order to regain their lost professional status and to make good use of their education. Professional accomplishment, which provides them with the opportunity to perform in high level specialized jobs, is more likely to positively influence the way occupational stress is perceived by NCB individuals. Re-experiencing the comfort of their previous role and the certainty about their professional status in the new culture, these immigrants may be more likely to report sound and positive feelings of accomplishment and wellbeing. Research supports that positive perception of job on health and wellbeing is highly correlated with high application of skills, decision latitude, and valued occupational status (Ettner & Grzywacz, 2001).

Overall Satisfaction

The second hypothesis suggested that NCB employees would have a lower level of perceived job satisfaction, life satisfaction, and marital satisfaction, when compared to their CB counterparts. Previous research has highlighted the fact that immigrants often have to cope with exacerbated levels of conflicts between work and non-work aspects not only as a result of problematic work relationships but also because of day to day experiences lived in the new country (Yost & Lucas, 2002); consequently, the degree of overall satisfaction would be more likely to be lower for immigrants than from their Canadian born counterparts. In contrast to this hypothesis, the findings suggest that overall satisfaction with job, marital relationship, and life of NCB employees working as professionals in education, health care, and social work does not differ from that of CB employees employed in similar occupations.

One possible explanation for this finding is the perception of immigrants on the quality of their life in Canada. In a recent study, Picot (2008) found that, in spite of difficult economic, professional, and familial challenges experienced by immigrants in the early years of resettlement in the host country, immigrants remained optimistic regarding their decision to immigrate in Canada. This positive attitude towards immigration is likely more prominent for individuals immigrating in Canada under the economic category. All participants in our study were skilled workers who voluntarily decided to immigrate in Canada; consequently, they willingly agreed to undergo a difficult discriminatory selection process based on their education, work experience, knowledge of English/French, health status and other valuable abilities. Considering this complex process of selection, it is believed that these highly educated immigrants came to the decision to immigrate after a well thought-out evaluation of all the negative aspects that contributed to the deterioration of quality of their life in the

country of origin in comparison with the negative aspects of immigration process and the positive factors perceived as attractive in Canada. Therefore, these immigrants may be satisfied because of a genuine appreciation of the quality of life offered in Canada.

In a recent study conducted by Statistics Canada, 84% to 92% of the immigrants admitted under the economic category reported that "their quality of life was better in Canada than it had been prior to coming here" (Picot, 2008). The prospects that Canada has to offer, the freedom, rights, safety, and security are likely significant influences when evaluating the perception of life satisfaction in individuals migrating from developing countries with no social stability, freedom, or rights. Consistent with this suggestion, in a study on psychological wellbeing in a Turkish-Canadian sample, Uskul and Greenglass (2005) found that psychological wellbeing was not associated with the length of stay in Canada but rather with the quality of the respondents' life in Canada.

Marital satisfaction was another variable that did not show significant differences when comparing the two groups; the marital satisfaction of immigrant employees working in education, health care, and social work was not significantly different from that of CB employees working within the same sectors. This finding is contradictory to previous research which has shown that the challenges faced by immigrants in the complex process of integration and adaptation to the new country debilitate the family dynamics and pose huge strain on family cohesion (Yost & Lucas, 2002; Santos, Bohon & Sanchez-Sosa, 1998). One explanation for this result may have to do with the fact that, in the immigration context, marriage can be a powerful source of emotional and social support for the partners in a couple. The isolation, lack of friends, and social network associated with the complex process of resettlement in a new country may have an opposite effect on a marital

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relationship and thus contribute to positively strengthen the ties, rapport and communication within the family unit. Both partners in an immigrant couple would have to rely on each other in order to provide emotional and social support for the family; for them, relying on each other might be the most trustworthy source of social support that it is easily accessible.

It is also noteworthy that NCB participants in our study did not report significant differences with respect to satisfaction with their job and/or life when compared with their CB counterparts This finding is similar to the previously discussed research conducted by Uskul and Greenglass (2005) on psychological wellbeing in a Turkish-Canadian sample which demonstrated that satisfaction with job and marital relationship were positively correlated with life satisfaction.

Another explanation for the lack of support for these hypotheses may have to do with the geographical area from which the data were collected. For this particular study, our respondents were selected from the Prince George area only. It is believed that living in a medium sized city as opposed to a large urban community may significantly diminish the amount of daily stresses at the family level and increase the quality of living. For example, a family residing in a medium sized city can accomplish more of the day to day tasks at a normal pace and with higher family cohesion, participation, and satisfaction than a family residing in a major city. One of the NCB respondents in this study, who relocated in Prince George after several years living in a major Canadian city, reported that the biggest accomplishment for her family cohesion was having her husband back home from work at 5:00 pm every day, therefore making him able to participate together in various activities related to their children or other family members.

Mental Health

This thesis also examined the degree to which CB employees were affected by mental health issues in comparison to their NCB counterparts. It was suggested that CB professionals would display less mental health problems than NCB professionals. The hypothesis was partially supported. That is, NCB professionals working in the fields of education, health care, and social work were found to have significantly higher levels of somatic and paranoid ideation distress than their CB counterparts working in the same sectors. This finding is in agreement with previous research that has shown that the adjustment and acculturation processes immigrants have to face when settling in a new country create extra potential stressors for immigrants in comparison with their CB counterparts. For example, securing employment and economic success for themselves and their families in the new country represent one of the most imperative objectives that may cause significant negative impact on immigrants' health and well-being (Beiser, 2005).

Somatization is defined by Mak and Zane (2004) as "the substitution of somatic preoccupation for dysphoric affect in the form of complaints of physical symptoms and even illness" (p. 967). It is believed that somatization in the context of immigration may be a result of the prolonged stress immigrants face in the ressetlement process. For example, during the process of regaining profesional and social status, immigrant professionals might be exposed to an elevated degree of stress, which in turn may amplify the reporting of somatic sensations. As a result, individuals may tend to convey somatic distress in response to psychosocial stress. In the same vien, Mak and Zane (2004) studied the phenomenon of somatization among Chinese Americans and demonstrated that there is a strong positive relationship between chronic stress, due to long lasting everyday stressors, and somatization.

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Consequently, given that daily stress experienced by immigrants within the adjustment and acculturation process, accompanied by the complex process of regaining financial, professional, and social status, is such an integral part of their distress experience, our findings would be in agreement with previous research.

It is also important to take into account the potential cultural differences in reporting health aspects. Previous research has demonstrated that people with different backgrounds may describe illness diferently. In his study on immigrants' health in Canada, Beiser (2005) indicates that some Asian languages may lack the words associated with description of mental health issues. As a result, it has been suggested that Asian cultures may report symptoms of distress caused by depression as merely physical symptoms; thus, Asians may report more somatic distress while other cultures, in particular North Americans, may report more psychological distress. However, other research completed on a sample of Chinese Americans suggested that "the cultural assertion that Chinese tended to supress their affective states and lacked semantics to express their affect in psychological terms was not supported" (Mak & Zane, 2004, p. 973). It has been also sugested that immigrants may make use of both Western and traditional, culturally specific, medicine to deal with their health problems. For example, one of the participants in this study, from Asian descent, reported that she has not gotten sick once since she moved in Canada two years ago, as she regularly used traditional Chinese remedies for minor illneses; however, she used the Canadian medical system for regular check-ups and she was very appreciative of the attention and good care provided by the medical doctors in Canada.

Non-Canadian-born professional also experienced more paranoia than did CB professionals. This increased level of paranoid symptoms may develop from the constant

exacerbated level of worries, uncertainty, and suspicion immigrants experience due to the challenges caused by the immigration process. For example, constantly exacerbated level of worry and distress for immigrants may be rooted in language barriers. Professional immigrants, in particular, may be very sensitive with respect to language barrier issues. In a professional work environment, where one would be required to orally communicate, read and write professional reports, language mistakes or misinterpretation could cause embarrassment and self-consciousness. Being continually preoccupied with the likelihood of being judged by others (co-workers/supervisors, friends, family members) based solely on the personal ability to communicate in a foreign language, could intensify one's level of distress (Dimun Yost & Lucas, 2002). Consequently, overcoming the language barriers and mastering the language of the host country are likely to pose a great deal of stress on individual and result in a heightened level of worry, anxiety, and suspicion.

Study Limitations

Several limitations of this thesis should be noted. One of the main limitations of this thesis was the sample size employed in the analysis. Given the fact that the geographical area from which volunteers were selected was limited to Prince George, it was quite difficult to identify and recruit a larger number of immigrant professionals working in the area of education, health care, and social work. For this reason, the number of subjects used was relatively low, subsequently decreasing the power of the analysis and potentially resulting in non significant findings for some of our statistical analyses. It is worth mentioning that, despite the implications that come along with this limitation, we can be confident about the effects that showed statistical significance.

Another limitation of this thesis was the reliance on self-report data, which may have introduced bias in the analyses. Self-reports might be seen as "blunt instruments in the face of a very complex reality" (Amason et. al, 1999). The lack of opportunity for the respondents to make objective assessment of the responses, including individual's perception of stress, cultural beliefs and values, could have a negative effect on the results of the analyses. It is possible that although the respondents were presented with the same set of questionnaires, the way of interpreting the questions or concepts might be subjective, based on the individual cultural and ethnic background and experience. Furthermore, given the substantial length of time (60 minutes) required for answering the complete set of questionnaires by each individual, it may be possible to have some errors in measurement introduced by various circumstances, such as the respondent interest in the researched topic or the individual's mood at the time of answering the questions. Each of these factors was outside of the control of the researcher. A more comprehensive analysis would require using self-report questionnaires in addition to data gathered through direct interviews; this way the bias introduced by self-report data could be minimized and the analysis may capture information that could be other wise overlooked or misinterpreted.

The third limitation of the present thesis relates to the fact that coping mechanisms and/or personality traits are not considered in the study when analyzing the level of occupational stress. It is believed that individual attributes could influence the way one would perceive and report the health effects of their job. For example, positive personality traits, such as high level of extraversion, positive perception of life, and optimistic attitude, in concert with proactive coping strategies would be expected to associate with high level of overall satisfaction and low level of stress. Previous research has indicated that each

individual has a personal mechanism in assessing stressors and dealing with them. In particular, Donnelly (2002) highlighted that "each individual's coping strategies should be viewed and assessed within their particular social, cultural, and situational context" (p. 724). The present study overlooked cultural and ethnic influences on individual coping mechanisms. Therefore, in this study we cannot clearly differentiate the real impact of occupational stress on health, life satisfaction, marital satisfaction, and job satisfaction.

A final limitation of this study may be found in the fact that our sample was comprised of individuals working only in the fields of education, health care, and social work. Although this condition has been introduced with the purpose of minimizing the major differences regarding socioeconomic and professional status of the participants in the study, we have to take into account the possibility of not obtaining significant statistical differences between groups as a result of the fact that the variations in job demands, control latitude, and skill utilizations within these professional groups is quite limited. A multi-occupational sample would probably detect more variability on workload demands, therefore potentially being able to capture statistically significant differences among professional groups.

Chapter Five

Conclusion and Recommendations

By asking NCB professionals how they perceive occupational stress in comparison with their CB counterparts, the present thesis provides some answers with respect to similarities and differences that might exist between the two groups within the multicultural Canadian workplace. The present thesis proposed a comparative analysis between NCB professionals working in education, health care, and social work and CB professionals employed in the same fields of work, regarding job stress, overall job, marital relationship

and life satisfaction, and mental health issues. The results suggest that, regardless of challenges caused by the complex immigration process, there are no differences in the way immigrant professionals perceive job stress and overall satisfaction with job, marital relationship, and life in comparison with their CB counterparts. However, the results suggested that NCB professionals report more somatization and paranoid ideation symptoms in comparison to CB participants.

Research that explores the relationship between work and health in the multicultural Canadian workplace is very important for a better understanding of the impact that work can have on individual perception of health. Considering that immigration in Canada will continue to be a main source for its work force, it is essential to recognize that a multicultural approach to workplace stressors and related health outcomes are required. Raising awareness regarding the specific characteristics a multicultural workplace environment might entail can play an important role in alleviating ill-health and increasing the level of wellbeing in both NCB and CB individuals. Based on currently available scientific information, a multicultural approach to broadening the existent support services in the workplace would be welcomed. Introducing culturally sensitive support services within the workplace may improve the overall quality of work and alleviate the distress of immigrants This research may help mental health professionals and/or disability management professionals to become more aware of cultural competencies and to develop culturally sensitive counseling methods in their attempt to provide services from a multicultural workplace perspective.

The results of the current thesis also point to the importance of further study regarding occupational stress of immigrant professionals residing in small and medium sized cities employed in technical areas of work, such as engineering professions. It would be also

useful for researchers to analyze the coping strategies employed by immigrant professionals in comparison with their CB counterparts, in order to engage in fully understanding the relationship among occupational stress, mental health, and overall satisfaction in the context of immigration.

In conclusion, taking into account the limitations, the present thesis presented more similarities than differences between the two groups in the level of perceived occupational stress within the context of Canadian multicultural workplace. The findings of this study suggest a positive facet of NCB professionals who immigrated in Canada under the economic category. Not only do these individuals appear better prepared to cope with the stresses of immigration process (e.g., acculturation, social and professional integration, language barriers, or lack of family/friends support), but, once they succeed in regaining their previous socio-professional status, they seem to be exposed to similar experiences of job stress and overall satisfaction with job, marital relationship, and life as their CB counterparts.

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Table 1

Descriptive Frequencies for the demographics of the Two Groups:
NCB (n = 42) and CB (n = 42) Professionals

	Percent NCB	Percent CB
Age		
20 – 29	14.28	9.52
30 – 39	30.95	45.23
40 – 49	35.71	30.95
50 – 59	19.04	14.28
Level of Education		
High School	0.00	0.00
Some College/University	4.76	4.76
Graduated College	11.90	11.90
Graduated University	50.00	52.38
Masters/PhD	33.33	30.95
Number of Children		
Zero	16.66	30.95
One	26.19	16.66
Two	38.09	40.47
Three	19.04	7.14
Four or more	0.00	4.76
Ethnicity		
Caucasian	54.76	92.86
Hispanic	9.52	0.00
Black	9.52	0.00
Other	26.19	7.14

Table 2

Means and Standard Errors of the Mean for Job Stress

Group	Female		Male	
	Mean	Std. Error	Mean	Std. Error
CB	31.66	2.26	33.86	2.26
NCB	31.95	2.26	35.81	2.26

Table 3

Means and Standard Errors of the Mean for Overall Satisfaction

		Female		Male	
		Mean	Std. Error	Mean	Std. Error
Job Satisfaction	CB	73.67	2.16	75.76	2.16
	NCB	76.33	2.16	76.52	2.16
Marital Satisfaction	CB	24.85	1.51	26.42	1.51
	NCB	22.95	1.51	23.57	1.51
Life Satisfaction	CB	28.23	1.06	26.85	1.06
	NCB	26.28	1.06	26.42	1.06

Table 4

Pearson Correlations for the Dependent Variables Employed on SCL 90R

	SOM	OC	IS	DEP	ANX	HOS	PHOB	PAR	PSY
Somatization (SOM)	1.000	.631	.538	.668	.623	.458	.499	.521	.583
Obsessive Compulsive (OC)			.787	.852	.720	.553	.438	.430	.532
Interpersonal Sensitivity(IS)				.737	.673	.502	.469	.555	.645
Depression (DEP)					.761	.625	.442	.465	.568
Anxiety (ANX)						.532	.553	.397	.593
Hostility (HOS)							.368	.272*	.395
Phobic Anxiety (PHOB)								.443	.520
Paranoid Ideation (PAR)									.495
Psychoticism (PSY)									1.000

Note: Correlations are significant at the 0.01 level (2 – tailed)
    * = Correlation is significant at the 0.05 level (2 – tailed)

Table 5

Means, Adjusted Mean, and Standard Errors of the Mean on Significant Main Effect of Group

Group	Somatization		Phobic Anxiety		Paranoid Ideation	
	Mean	Std. Error	Adj. Mean	Std. Error	Adj. Mean	Std. Error
CB	51.833	1.393	49.849	1.105	47.481	1.227
NCB	57.500	1.393	51.580	1.105	52.376	1.227

Appendix A. Information Letter and Consent Form

Date:

Dear Sir or Madam:

I am writing this letter to inform you about a research project entitled "Assessing Occupational Stress in the Canadian Multicultural Workplace" that you may be interested in and to ask if you would consider participating. The intent of this project is to attempt to determine how occupational stress is perceived by the different groups of employees in the context of the Canadian multicultural workplace. There are no known risks to participating in this study and the potential benefits include the opportunity to help provide more information about occupational stress in the Canadian work environment.

Your participation in this phase of this project will involve one 45 minute time period during which you will be asked to complete several surveys that ask questions about yourself and your reaction to stress. I am interesting only in overall perceptions or views. All information that you provide will be held in strict confidence. Only the researchers who are involved in this project will ever have access to your completed surveys, which will be kept in a locked and secure place at the University for a period of seven years after which time they will be shredded. Your names will be removed from all questionnaires and replaced with code numbers. Please be assured that once you have decided to participate as a volunteer in the project, you can still withdraw from the study at any time with no consequence, and any information collected from you will be withdrawn and shredded.

If you would like to participate in this project, please complete and return the attached informed consent sheet and feel free to keep this information letter for further reference. Also I must inform you that you must receive a copy of your signed consent form.
If interested, a copy of the final results can be attained, upon completion of the project, by contacting me directly.

Thank you very much for your time and consideration. I look forward to hearing from you. If you have any questions, please contact me at pascar@unbc.ca. Also, if at any time, you have concerns about the research project, you may contact my supervisor Dr. Shannon Wagner (250 960-6320; wagners@unbc.ca) or the UNBC Office of Research (250 960-5820; e-mail: reb@unbc.ca).

Sincerely,

Romana Pasca
Graduate Student
Disability Management Program
University of Northern British Columbia

Assessing Occupational Stress in the Canadian Multicultural Workplace
Researcher: Romana Pasca
Research Participant Consent Form

Do you understand that you have been asked to be in a research study?	Yes	No
Has the attached information sheet been explained to you? *A copy must be given to you for you to keep.*	Yes	No
Do you understand the benefits and the risks involved in participating in this research study?	Yes	No
Do you understand that you are free to refuse to participate or to withdraw from the study at any time? *You do not have to give a reason for your choice to withdraw.*	Yes	No
Have you been able to ask questions and to discuss this research study?	Yes	No
Do you understand who will have access to the information you provide?	Yes	No
Have the issues of anonymity and confidentiality been explained to you?	Yes	No

This research was explained to me by: _____

Print name

I agree to participate in this study:

_____

Signature of Research Participant

_____

Printed Name of Research Participant

_____

Date of Participant's Signature

_____

Signature of Witness

_____

Date of Witness's Signature

I believe that the person signing this form understands what is involved in the research study and voluntarily agrees to participate.

_____

Signature of Researcher

_____

Date of Researcher's Signature

Appendix B. Demographic Survey

Please answer the following questions.

What is your gender?   _____Male
                                        _____Female

What is your marital status?   _____Single (never married)
                                        _____Married/Common Law
                                        _____Separated
                                        _____Divorced
                                        _____Widowed

How many children do you have?   _____

What is your date of birth?   _____   _____   _____
                                        Day   Month   Year

What is your place of birth?   _____   _____   _____
                                        Country   Province   City/Town

What are your ethnicity/cultural backgrounds?

_____
                                                (Please specify)

Were your parents born in Canada?   Mother_____Yes   Father ____Yes

                                          ____No   ____No

How do you consider yourself?   _____First generation Canadian

                                    _____Second generation Canadian

                                    _____Other (please specify)

Year of immigration to Canada (if applicable): _____

Country of origin: _____

How long have you lived in Canada? _____   _____
                                   Months   Years

What is your highest educational level completed?

_____ Trade/Technical School (please specify): _____

_____ College Diploma (please specify): _____

_____ Some University

_____ University Degree (please specify): _____

_____ High school

_____ Other (please specify):

_____

What is your occupation? _____

How many hours per week do you work at your job?

_____

Appendix C. Prince George Wellness Resources Sheet

Public Counselling Resources

Resources	Phone Number	Web Page
Anxiety Disorders Group	561-8033	www.bcss.org
Canadian Mental Health Association	564-8644	
	Toll free: 1-866-564-8644	www.cmhapg.ca
Depression Support Group	564-8644 (ext 26)	www.cmha.bc.ca
Mental Health Information Line – B.C.	1-800-661-2121	www.cmha-bc.org
Psychological Association Referral Service – B.C.	1-800-730-0522	www.psychologists.bc.ca
Immigrant and Multicultural Services Society	562-2900	www.imss.ca
Mental Health and Addiction Services	545-7417	www.northernhealth.ca

Private Counseling Resources

Resources	Phone Number	Web Page
Brazzoni & Associates	614-2261	www.brazzoni.com
Worth Counselling and Assessment	563-7331	
Walmsley & Associates Professional Counselling	564-1000	www.walmsley.ca

Appendix D. Satisfaction with Life Scale

Directions: Below are five statements with which you may agree or disagree. Using the 1-7 point scale, indicate your agreement or disagreement with each item by selecting the appropriate number.

Strongly Disagree	Disagree	Slightly disagree	Neither agree or Disagree	Slightly agree	Agree	Strongly agree
1	2	3	4	5	6	7

1. In most ways my life is close to my ideal.	1	2	3	4	5	6	7
2. The conditions of my life are excellent.	1	2	3	4	5	6	7
3. I am satisfied with my life.	1	2	3	4	5	6	7
4. So far I have gotten the important things I want in life.	1	2	3	4	5	6	7
5. If I could live my life over, I would change almost nothing.	1	2	3	4	5	6	7

Appendix E. Symptom Checklist – 90 – Revised ©

Appendix F. Locke-Wallace Marital Adjustment Test.

Directions: Check the dot on the line below which best describes the degree of happiness, everything considered, of your present marriage (spousal relationship). The middle point "happy" represents the degree of happiness, which most people get from marriage, and the scale gradually ranges on one side to those who are very unhappy in marriage, and on the other, to those who experience extreme joy in marriage.

1.

| * | * | * | * | * | * | * |

very   happy
perfectly
unhappy   happy

Directions: State the approximate extent of agreement or disagreement between you and your spouse on the following items. Please be sure to answer each question.

Always agree	Almost always agree	Occasionally disagree	Frequently disagree	Almost always disagree	Always disagree
1	2	3	4	5	6

2. Handling family finances.	1	2	3	4	5	6
3. Matters of recreation.	1	2	3	4	5	6
4. Demonstration of affection.	1	2	3	4	5	6
5. Friends.	1	2	3	4	5	6
6. Sex relations.	1	2	3	4	5	6
7. Conventionality (right, good, proper conduct)	1	2	3	4	5	6
8. Philosophy of life.	1	2	3	4	5	6
9. Ways of dealing with in-laws.	1	2	3	4	5	6

Directions: For each of the following questions, check only one answer for each.

10. When disagreements arise, they usually result in:
        (a) husband giving in   _____
        (b) wife giving in   _____

11. Do you and your spouse engage in outside interest together?
        (a) all of them   _____
        (b) some of them   _____
        (c) very few of them   _____
        (d) none of them   _____

12. In leisure time, do you generally prefer:
        (a) to be "on the go"   _____
        (b) to stay home   _____

    Does your spouse generally prefer:
        (a) to be "on the go"   _____
        (b) to stay home   _____

13. Do you ever wish you had not married?
        (a) frequently   _____
        (b) occasionally   _____
        (c) rarely   _____
        (d) never   _____

14. If you had your life to live over, do you think you would:
        (a) marry the same person   _____
        (b) marry a different person   _____
        (c) not marry at all   _____

15. Do you confide in your spouse?
        (a) almost never   _____
        (b) rarely   _____
        (c) in most things   _____
        (d) in everything   _____

Appendix G. Job Satisfaction Survey

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

Directions: Each of the following items asks you about how you feel about several aspects of your job. Please use the above scale to give the response that best describes you.

1. I feel my job is an important part of the organization. 1 2 3 4

2. I feel confident that my supervisor will do his/her best to get me an answer if he/she doesn't know. 1 2 3 4

3. I believe that my workload is just about right. 1 2 3 4

4. I receive adequate support from other divisions. 1 2 3 4

5. The training that I receive is adequate for me to perform my job. 1 2 3 4

6. I feel that training requirements are reasonable. 1 2 3 4

7. Operations, training, prevention, and headquarters personnel feel like they work as one organization. 1 2 3 4

8. On duty time is available for self improvement. 1 2 3 4

9. My supervisor has earned my respect. 1 2 3 4

10. I am not bored while on duty. 1 2 3 4

11. I believe that I can make a difference. 1 2 3 4

12. I am allowed to make the decisions needed to do my job. 1 2 3 4

13. I feel that the recruit training program is adequate to produce quality workers.   1   2   3   4

14. I feel that my supervisor is interested in my suggestions.   1   2   3   4

15. Communications flow up and down the chain of command.   1   2   3   4

16. I feel that members from other divisions do all they can to help me do my job.   1   2   3   4

17. Time on-site (in-station) is effectively planned and constructive.   1   2   3   4

18. I receive good training for my position.   1   2   3   4

19. My job performance does make a difference in the community.   1   2   3   4

20. I feel that my work is productive and not busy work.   1   2   3   4

21. I receive adequate support from the Chief Officers.   1   2   3   4

22. Leaving town for up to two weeks for outside training is not a waste of my time.   1   2   3   4

23. I feel that my supervisor adequately explains what is expected of me.   1   2   3   4

24. I receive the support I need from my supervisor.   1   2   3   4

25. I look forward to coming to work.   1   2   3   4

Appendix H. Job Stress Questionnaire

Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree
1	2	3	4	5

I have felt fidgety or nervous as a result
of my job
    1   2   3   4   5

Working here makes it hard to spend
enough time with my family
    1   2   3   4   5

My job gets to me more than it should
    1   2   3   4   5

I spend so much time at work, I can't
see the forest for the trees
    1   2   3   4   5

There are lots of times when my job
drives me right up the wall
    1   2   3   4   5

Working here leaves little time for
other activities
    1   2   3   4   5

Sometimes when I think about my job
I get a tight feeling in my chest
    1   2   3   4   5

I frequently get the feeling I am married
to the company
    1   2   3   4   5

I have too much work and too little time
to do it in
    1   2   3   4   5

I feel guilty when I take time off from job
    1   2   3   4   5

I sometimes dread the telephone ringing at
home because the call might be job-related
    1   2   3   4   5

I feel like I never have a day off
    1   2   3   4   5

Too many people at my level in the company
get burned out by job demands
    1   2   3   4   5