Voices of the teachers: The relationship between stress and job satisfaction of French Immersion Program and English Language Program teachers

Kathleen Carter

A thesis submitted to Dr. Derek H. Berg, Dr. Mary Jane Harkins, and the Office of Graduate Studies in partial fulfillment of the requirements for the degree of Master of Arts in Curriculum Studies

Faculty of Education

Mount Saint Vincent University

February, 2009

Copyright © Kathleen Carter, 2009
Abstract

The purpose of this study was to compare the challenges that French Immersion Program and English Language Program teachers experience in their profession and investigate the relationship between these challenges and teachers’ stress and job satisfaction. As well, specific focus was placed upon identifying the strategies used by teachers to cope with job related stress and the relationship between these strategies, stress, and job satisfaction. Sixty-six full time teachers participated in this study. They completed a seven-part questionnaire which was designed to collect data about teachers’ workload, work challenges, affective challenges, sources of affective challenges, coping strategies, job satisfaction, and career intention. Findings indicated that French Immersion Program teachers were more likely to identify the interpersonal challenges as challenging issues whereas the English Language Program teachers were more likely to identify the student-related issues as challenging. In addition, interpersonal challenges, student-related issues, and outside influences were related to stress. Also, stress was negatively correlated to job satisfaction suggesting that the higher the level of self-reported stress the lower the level of job satisfaction. When investigating the relationship between the self-reported stress, job satisfaction, and the coping strategies used during school hours, set priorities, and discuss issues with the administration were positively correlated with the job satisfaction level. In addition, set priorities, maintain a positive attitude, set realistic goals, and discuss issues with the administration were negatively correlated with the self-reported total stress. No significant correlations were found between the self-reported stress, job satisfaction, and the coping strategies used after school hours.
# TABLE OF CONTENTS

- Abstract ....................................................................................................................... 2  
- TABLE OF CONTENTS ................................................................................................. 3  
- CHAPTER ONE .............................................................................................................. 5  
  - INTRODUCTION ........................................................................................................... 5  
    - Purpose ....................................................................................................................... 6  
    - Research Questions .................................................................................................. 8  
- CHAPTER TWO ........................................................................................................... 10  
  - LITERATURE REVIEW .............................................................................................. 10  
    - Definition of Stress ................................................................................................... 10  
    - Causal Factors in Teacher Stress: A Brief Explanation .............................................. 10  
      - Age and Gender Differences as Variables to Assess Teacher Stress ....................... 11  
      - Teaching Experience as a Variable to Assess Teacher Stress ................................ 14  
      - Class Size, Type of School, and Type of License as Factors Contributing to Stress 15  
      - Workload............................................................................................................... 16  
    - Student Issues ........................................................................................................ 17  
    - Lack of Resources, Time and Support as Contributing Factors to Teacher Stress ... 18  
    - Teacher Stress Among Mainstream Teachers and Special Educators ..................... 20  
    - Differences in Stress Level Among Elementary teachers and Secondary Teachers .21  
    - Teacher Stress and Burnout.................................................................................... 22  
    - Stress and Coping Strategies ..................................................................................... 24  
    - Stress and Job Satisfaction, Career Intention, and Career Commitment ................. 27  
    - Teachers’ Recommendations..................................................................................... 32  
- CHAPTER THREE ....................................................................................................... 35  
  - METHOD ..................................................................................................................... 35  
    - Participants ............................................................................................................... 35  
    - Instruments ............................................................................................................... 35  
    - Procedure.................................................................................................................. 38  
    - Data Analysis............................................................................................................ 38  
      - Self-reported Stress Scale....................................................................................... 39  
      - Interpersonal Relationships .................................................................................... 39  
      - Student-related Issues ............................................................................................ 39  
      - Outside Influences ................................................................................................. 40  
    - Ethical Concerns ....................................................................................................... 40  
- CHAPTER FOUR ......................................................................................................... 41  
  - RESULTS ..................................................................................................................... 41  
    - Common Recommendations ..................................................................................... 45  
    - Recommendations from French Immersion Program Teachers ................................ 46  
      - More resource (help) time available for students in need ........................................ 46  
    - Recommendations from English Language Program Teachers ............................. 47  
- CHAPTER FIVE ........................................................................................................... 49  
  - DISCUSSION ............................................................................................................... 49  
    - Level of Stress and Job Satisfaction .......................................................................... 49  
    - Differences in Work-related Challenges .................................................................... 50  
    - Workload.................................................................................................................. 52  
    - Relationship among Work-related Challenges, Job Satisfaction, and Stress .......... 54
CHAPTER ONE

INTRODUCTION

Stress in the workplace is present and reported by teachers across the world (Arikewuyo, 2004; Naylor & Schaefer, 2002; Schroeder, Akotia, & Apekey, 2001) and has been an area of concern for teacher unions and federations (Ferguson, 1984; Naylor, 2001). Research suggests that a teacher’s ability to deal with the challenges he or she faces will affect his or her job satisfaction level (Borg & Riding, 1991) to the point where he or she might leave the profession (Taylor, Zimmer, & Womack, 2005).

Studies on the topic have assessed teacher stress while considering variables such as gender differences, age, and years of experience (Borg & Riding 1991; Ferguson, 1984; Kyriacou, 2001; Miller, Brown-Anderson, Fleming, Peele, & Chen, 1999; Naylor, 2001a, 2001b; Schaefer, 2001a, 2003). However, most studies were concerned with evaluating the stress level of teachers in general without differentiating between the educational program, such as English Language or French Immersion in which the teachers are teaching. French Immersion Programs in Nova Scotia are offered by Anglophone school boards to the students who wish to attend school with an emphasis on French instruction in order to deepen their knowledge of this language (Nova Scotia, Department of Education, 1998). These schools typically offer two streams: an English Language Program and a French Immersion Program. Within the French Immersion Program, there is Early French Immersion Program (grades primary to 12) and a late French Immersion Program (grades 7-12).
Purpose

As previously noted, myriad research on teacher stress have been associated with job dissatisfaction and is believed to be the cause of some teachers leaving the profession (Kyriacou, 1990; Taylor et al., 2005). However, highly stressed or dissatisfied teachers who remain in the profession may not only be damaging their health; they may also be impacting negatively on the quality of the relationships they have with their students and thus may have detrimental effects on the classroom environment (Farber, 1984; Manthei & Solman, 1988).

Most studies provided a broad view of the level of stress and the factors contributing to it among the profession. Researchers have been interested in comparing the experiences of teachers who teach students with special needs to those who teach in regular streams (Williams & Gersch, 2004,) but there seems to be little research that specifically addresses the level of stress of French Immersion Program teachers. In Naylor’s (2001b) report, for instance, the French Immersion teachers were included in the data but not analysed separately. Perceptions of the French Immersion and the English Language Programs among parents, teachers, and administrators are varied and contrasting. A New-Brunswick study (Dicks, 2002) suggested that teachers from the English Language Program and the administrators believed that French Immersion classes were filled with high-achievers from advantaged socio-economic backgrounds. French Immersion Program teachers did not share this perception and in addition, demographic data in this study suggested that the socio-economic levels of the students in both programs were similar. A study allowing the teachers from both programs to express the types of challenges they face on a daily basis might help in adjusting their misconceptions of the programmes.
Heavy workload, lack of resources, and class composition are among the factors identified as contributing to teacher stress (Borg & Riding 1991; Ferguson, 1994; Naylor 2001b; Schaefer, 2003; Williams & Gersch, 2004). Nova Scotia is predominantly English-speaking province and most educational resources are initially available in English to later be translated to French. In their annual report, The Canadian Parents for French Association (CPF, 2006) considered that one of the challenges provinces and territories must face in the up coming years is finding and developing curricula and teaching materials that are up to date and tailored to the needs of French Second Language Learners. Until these resources are made available, the task of creating and or translating adequate materials for the students is left to the teachers. Also, in the Program Policy for French Second Language Programs (Nova Scotia, Department of Education, 1998), inclusion of students with special needs is specifically addressed. It is said that while students with special needs are capable of acquiring a second language, the schools must provide adequate resources and services to address the needs of these students in French programs. Furthermore, it is mentioned that it is preferable that the resources be offered in French, when possible. When interviewing parents of children with special needs on their decision to leave or remove a child from French Immersion (Noel, 2003), parents expressed their concerns over a lack of appropriate support.

Everyday, teachers face numerous challenges. The actions they take to deal with the difficulties they face may help reduce the occupational stress they experience (Arikewuyo, 2004; Kyriacou, 2001; Williams & Gersch, 2004). Kyriacou (2001) observed that the present studies on teacher stress did identify some of the coping strategies used by teachers for instance but did not address the effectiveness of the various coping strategies used by teachers.
Finally, research has highlighted that stress can influence teachers’ decision to leave the profession (Taylor et al., 2005) and teacher attrition and retention have been much discussed topics (Berg et al., 2005; Canadian Teacher’s Federation 2003). In British Columbia, Obadia and Theriault, (1995) were interested in the students’ reasons for leaving the French Immersion Program and focused on possible solutions to the problem but they did not examine French Immersion Program teachers’ reasons or desire to leave the French Immersion Program. The Canadian Parents for French Association (CPF, 2006) observed that a large number of teachers leave Nova Scotia after they graduate to work in another province, making it difficult to find qualified French Second Language teachers. Considering that graduating student teachers might not stay in the province, it is imperative to find ways of improving the work life of the French Immersion teachers already in the schools so that they don’t leave the profession.

The purpose of this study was to compare the challenges that French Immersion Program and English Language Program teachers experience in their profession and investigate the relationship between these challenges and teacher stress and job satisfaction. As well, specific focus was placed upon identifying the strategies used by teachers to cope with job related stress and examine the relationship between these strategies, teacher stress and job satisfaction.

Research Questions

1. Do French Immersion Program teachers experience the same level of stress and job satisfaction as English Language Program teachers?

2. Do French Immersion Program teachers and English Language Program teachers differ in work-related challenges?
3. Do French Immersion Program teachers and English Language Program teachers report different levels of workload?

4. Is there a relationship between work-related challenges, job satisfaction, and self-reported stress?

5. Is there a relationship between the self-reported total stress, job satisfaction, and the coping strategies?

6. What are the recommendations made by teachers to improve their career satisfaction and effectiveness as educators?
CHAPTER TWO
LITERATURE REVIEW

This literature review provides an overview of the studies on occupational stress, the identified factors contributing to stress among teachers, the coping strategies used by teachers, the job satisfaction of teachers, and the various recommendations made by teachers to help reduce their stress levels.

Definition of Stress

Arikewuyo (2004) referred to two definitions of stress. The first definition was suggested by Quick, Sekade, & Eakin (1986), and “is the generalized, patterned unconscious mobilization of internal energy resources that occur when a person is confronted with a stressor, or that condition that causes stress” (Arikewuyo, 2004, p.195). The second definition was proposed by Baron and Byrne (1997) and defined stress “as the response to physical or psychological events perceived by the individual as potentially causing harm or emotional distress” (Arikewuyo, 2004, p.196). In 1978, Kyriacou and Sutcliffe proposed the following definition of teacher stress: “Teacher stress may be defined as the experience by a teacher of unpleasant, negative emotions, such as anger, anxiety, tension, frustration or depression, resulting from some aspect of their work as a teacher” (Kyriacou, 2001, p. 2). Kyriacou and Sutcliffe’s (1978a) definition of stress will be used for this study.

Causal Factors in Teacher Stress: A Brief Explanation

In his review of recent findings on teacher stress, Jarvis (2002) identified three main causal factors in teacher stress: factors intrinsic to teaching, cognitive factors
affecting the individual vulnerability of teachers, and systemic factors operating at the institutional and political level. The factors intrinsic to teaching encompass elements such as workload, working hours, class discipline and evaluation. The factors affecting the individual vulnerability of teachers encompass the teacher’s self-image. Finally, the systemic factors encompass the sources of stress that are generated by the “system” such as, the administration, the school board, and the politics that govern education. According to Kyriacou (2001) the systemic factors will differ among countries depending on the characteristics of national educational systems, the teaching conditions in the various countries, and the societal perceptions.

Age and Gender Differences as Variables to Assess Teacher Stress

In 1984, the Nova Scotia Teachers Union published a report entitled Stress and the Nova Scotia Teacher (Ferguson, 1984). The objective of this study was to gather information on stress factors and possible differences among sub-groups. The variables considered were the size of the school, teachers’ gender, level of teaching experience, type of school (rural or urban), class size, type of position held (administrator or non-administrator), and teachers’ license category. Participants in this study consisted of 219 females and 180 males; 7 respondents failed to identify their gender. Among the participants, 89 were administrators and 317 were teachers from both the secondary and the elementary levels. The age of the participants was not recorded in the biographical data.

The questionnaire designed to investigate the factors contributing to teacher stress contained three parts. The first part gathered demographic data, such as the teachers’ level of experience, assignment, license category, and type of school. The second part
gathered information concerning the stress factors that were grouped in categories such as parents and community, student-related, teaching area, working conditions, and administration. The last part contained open-ended questions in which the teachers were asked to identify the items which give them the most satisfaction, the items the most stressful to them, and changes they would like to see. Results suggested that there were significant differences in the stress factors reported between males and females. Males reported that the methods used in teacher promotion and the teacher salary were their predominant stress factors whereas females reported that disruptive students, lack of time for students, talking to parents about students, and evaluating students were their predominant stress factors.

When analysing the data collected from the 737 respondents to the English Teaching Workload Survey, Naylor and Malcomson (2001) considered the similar variables as Ferguson (1984). Respondents were grouped by age (47% of the participants were under 40 years old), by gender (66% were female teachers) by employment status (full-time or part-time), by level of education and by teaching experience (30% of the respondents with less than five years of experience). Naylor and Malcomson also grouped the respondents according to the timetable used in their school (linear/semester/trimester/quarter), their class size, their class composition, and their reported average working hours. English teachers presented symptoms of stress, and both age and gender seemed to be important variables that affected stress perception and the capacity to cope with stress. For example, 56% of the respondents in their 20s answered that they were “coping somewhat” or “not coping” with fatigue while the results falls to 25% for the respondents who were in their 60s.
Borg and Riding (1991) examined teacher stress in Malta. All secondary schools in Malta are single sex schools. The sample constituted of 545 Maltese secondary teachers (347 male teachers and 198 female teachers) out of which 504 were full time teachers, 31 were part time teachers and 10 were casuals or instructors. The respondents were divided according to age, gender, teaching experience, type of teaching position (i.e. teacher, head of department, part-timer/casual/instructor/other), type of school (area secondary girls, area secondary boys, junior lyceum girls, junior lyceum boys), school size, and curriculum taught. An eight-section self-administered questionnaire was designed for the purpose of their study. The questionnaire asked questions in order to gather demographic information, sources of stress, prevalence of teacher stress, absenteeism, job satisfaction, career intention, career commitment, and self-image. To the question “In general, how stressful do you find being a teacher?” 33.6% of the teachers surveyed answered that their job was either very stressful or extremely stressful. Furthermore, when looking at the variables gender and age, the results suggested that male teachers reported a higher level of stress than the female teachers, except for the category of teachers under 31 years of age. The results obtained here concerning the gender differences somewhat contradict the results observed by Naylor (2001b), which suggested that women experienced a higher level of stress than men. An explanation for this discrepancy probably lies in the samples’ differences: in the study conducted with Maltese secondary teachers, almost 64% of the respondents were male teachers (Borg & Riding, 1991) whereas in the research conducted in Canada (Naylor, 2001a), two thirds of the respondents were female teachers.
Teaching Experience as a Variable to Assess Teacher Stress

In Ferguson’s study (1984), years of experience also appeared to influence stress. The more experience the respondents had, the less stress was reported due to class discipline. However, the study did not specify whether males and females had similar levels of experience. Considering that classroom discipline was one of the predominant stress factors identified by women in this study and that the more experience a teacher had the less stress was perceived due to disruptive students, it appears necessary to specify the years of teaching experience of each gender. If women had less experience, this could account for their reported higher level of stress due to class discipline.

Miller et al. (1999) also investigated teacher stress and the stress factors. The researchers used the Teacher Stress Inventory (Fimian, 1988) to identify the sources of stress among full-time teachers and establish whether individual and organizational characteristics also contributed to teacher stress. Sixty people, 34 male teachers and 26 female teachers completed the survey. Unlike previous research, this study collected data concerning the marital status of the participants and examined whether marital status played a role in the level of stress experienced by teachers. Another difference to note is that they also investigated whether the presence of supervisor support influenced the stress level.

Miller et al. (1999) emphasized that their major findings concerned the relationship between stress and teachers’ need for supervisor support, their age and their teaching experience. Teachers with less than 15 years of teaching experience who reported feeling less support from their supervisor showed a higher level of emotional manifestation of stress. Marital status did not relate to stress level but married teachers showed a slightly higher level of fatigue than unmarried teachers.
Yagil (1998) investigated the relationship between teachers’ level of experience and the amount of stress perceived. The study also examined teachers’ level of experience in relation to the various sources of stress. Results suggested that inexperienced teachers reported a higher level of stress than their experienced counterparts. The main sources of stress that were identified by the inexperienced teachers were the interactions with the parents’ students and the overwhelming workload. The ambiguity in interpreting these studies might be found in the interpretation of an inexperienced teacher. In Miller et al. (1999) teachers with less than 15 years of teaching experience appeared to be considered as novice teachers. Yagil (1998), on the other hand, defined inexperience as zero to three years of experience.

Class Size, Type of School, and Type of License as Factors Contributing to Stress

In Ferguson’s (1984) study, rural teachers were more likely to experience stress than urban or vocational teachers. Also, for the class size, the author pointed out that the larger the class, the higher was the response for stress due to lack of time to spend with individuals. The results also suggested that license category might be a variable to consider when assessing stress factors. Indeed, when combining items that were ranked stressful and very stressful by license category, attitude of society towards teachers, classroom observations by administrators, and time spent in non-teaching duties per week showed a significant difference. However, Ferguson (1984) noted that number of respondents in each license category varied greatly, with fewer teachers in the TC3, TC4, and TC8 categories. Consequently, the results obtained by license category must be interpreted with caution. As well, it was unclear whether all the respondents worked full-time or part-time. This distinction is important since other studies suggest that some
teachers reduce their teaching hours in order to cope better with their stress (Naylor, 2001a). Also, if some of the respondents were substitute teachers, it is possible that they experienced a higher level of stress due to their mobility and the lack of employment stability. In addition, considering that teachers and administrators work in the same environment but do not perform the same type of task, the inclusion of the latter in the study could be questioned, but Ferguson does not offer an explanation for his choice of including the administrators in the study.

Workload

Schaefer (2003) analysed the data collected by the British Columbia Teachers Federation (BCTF, 2001) to examine workload and stress by grouping the teachers under two categories: elementary teachers and the secondary teachers. Schaefer provided information on the working hours of the participants. She reported that 18% of the respondents worked part-time and then, she explained that 55.5% of these teachers worked part time by choice, 21.1% had fewer hours but would prefer a larger assignment, 9.4% worked part time because of the workload, and 6.3% worked part-time because of sickness or disability. This additional analysis suggested that in order to reduce their workload, some teachers have decided to work fewer hours.

Naylor and Malcomson (2001) reported that English teachers at the secondary level claimed to be working 53 hours per week, most of which is for preparation outside of the classroom hours. They also reported an increase in their workload over the last years and considered the school organization to be responsible for the perception of increase of the workload. Participants also mentioned that they had more students with
special needs or students whose first language was not English who required more help whereas little support or resources were available.

When grouping the answers to the open-ended questions provided by 644 respondents (elementary and secondary teachers) to the question “What do you consider to be the most significant aspects of workload and stress?” Naylor (2001b) reported that teachers commented on the volume of work during a teacher’s day and the expectations that the teachers would address a wide range of issues. In this area, Naylor grouped the comments made by teachers concerning the volume of work, the constant curriculum changes, and general high expectations as they are voiced by the parents, the administrators, the school bards and society in general. Many teachers reported working over 60 hours each week, with peak periods, especially during report card sessions. Teachers also reported an increase in a range of work activities: meetings, paperwork, purchasing of materials, testing in addition to the regular actual teaching activities which involves preparation, marking, assessment and extra curricular activities. Teachers reported that curriculum changes were a particular area causing workload pressure. Interestingly, all of the teachers’ responses that are reported by Naylor referred only to the numerous changes in the mathematics curricula.

Student Issues

Naylor (2001b) noted that teachers made comments concerning the class composition and the students’ negative attitude about their education. With regards to the presence of students with special needs and ESL students, teachers expressed feelings of inadequacy in their ability to address the various students’ needs and learning styles. The presence of students with behaviour problems, such as attention deficit and hyperactivity
disorders, were also mentioned as sources of stress. Teachers also expressed concern that living in poverty or instability might impede students’ learning. Concerning students’ negative attitude, teachers mentioned societal expectations that everybody should graduate with a high school diploma. In this context, high school teachers reported that the students’ lack of interest for the subject being taught resulted in friction and tension, which added to the teachers’ stress level.

When investigating teacher stressors and their incidence on 247 secondary teachers (Betoret, 2006), the researcher noted that the factor related to interactions with students was reported as the most challenging aspect of the teaching profession and yet did not appear as the best predictor of burnout dimension. For this factor, respondents had to rate “students indiscipline” and “pressure from the students” on a Likert-type scale. The teachers had a range of responses from “It does not hinder me” (0), to “It hinders me a lot” (3). The researcher did not provide explanations for this result. Perhaps, teachers view their interactions with students, positive or not, as part of the profession and have a positive attitude towards this factor while they find other stressors for which they have less control more challenging.

Lack of Resources, Time and Support as Contributing Factors to Teacher Stress

In Naylor’s report (2001b) teachers also commented on the lack of resources, time and support. Respondents mentioned that their workload was increasing and did not have enough time to complete their work. The author stressed that the results from both the qualitative and quantitative data suggest that when demands on teachers’ time increase, teachers have a tendency to supply more time, to the detriment of their health and their family life. Also many teachers reported that they did not have sufficient or adequate
textbooks, that they lacked in basic school supplies, and had limited lab equipment. Other teachers pointed that they did not have the support needed for English Second Language and special needs students, and the lack of substitute teachers. Specialist teachers reported that they have to work even when they are ill because there are no qualified specialists available to substitute. Finally, teachers have also commented on the lack of respect and recognition of the profession. Teachers expressed their opinions about the perceived low salary they received for the hours they worked.

Betoret (2006) looked into teachers’ perception of self-efficacy and school coping strategies to investigate their role in the stress burnout relationship. These school coping resources refer to “any factors which help individual teachers overcome job-related stressors and value outcomes with students” (Blase, 1982, p. 102 as cited in Betoret, 2006). In other words, they are the sum of the human resources and the didactic materials made available to the teachers. The term self-efficacy refers to the teacher’s perception of his or her capacity to teach and manage a classroom with efficacy.

The self-efficacy scale was composed of 7 items that teachers had to rate according to a six-point Likert-type scale. These items were “I consider that I am sufficiently prepared to carry out my job properly”; “I find it difficult to maintain order and discipline in the classroom”; “I recognise that I am not equipped to face all the demands that are made on me as a teacher”; “I have sometimes had the feeling of not being cut out for this profession” (Betoret, 2006, p.523).

The school coping resources scale was composed of four items. On a Likert-type scale, teachers had to rate their level of agreement to the following statements: “The available material resources in the centre are insufficient to teach satisfactorily”, “The human resources available in the centre are insufficient to teach satisfactorily”. “The
specialized human support resources available in the centre are insufficient to teach satisfactorily”, and “The didactic materials available in the classroom are insufficient to develop a satisfactory and quality instructional process.” (Betoret, 2006, p. 524). Results suggested that teachers who reported a high level of school resources and high level of self-efficacy, had a lower level of stress, higher levels of motivation, job satisfaction, and involvement.

Teacher Stress Among Mainstream Teachers and Special Educators

Most studies that examine evaluating teacher stress levels focus upon teachers in general without differentiating between the educational program in which they teach or the teaching level in which the teachers are teaching. Williams and Gersch (2004) compared the stress level of mainstream teachers to that of special school teachers. In the United Kingdom, teachers who teach in special school are similar to the teachers who teach in special education in Canada. The findings suggested that their stress levels were similar but the factors causing stress were different. In brief, when the responses to the survey from the two types of teachers (i.e. mainstream teachers and special education teachers) were analyzed without distinguishing between groups, Williams and Gersch observed that the factors reported as the most likely to cause stress were (listed in order of importance) the teachers’ inspections by administrators, the workload (too much work), the administrative work, the bureaucracy, and the lack of time to spend with individual pupils. When looking at the data for each group, mainstream teachers reported themselves to be most stressed by the noisy students, the lack of time to spend with individual pupils, teachers’ inspections, and students’ poor attitude to work. In contrast,
special education teachers reported that the shortages of equipment were their major source of stress.

Differences in Stress Level Among Elementary teachers and Secondary Teachers

Schaefer (2003) reported differences in the sources of stress as identified by elementary teachers and secondary teachers. There were many notable differences among the stress factors that were identified by the two groups. For example, the elementary teachers were more likely to rate the following items as highly stressful than the secondary teachers: producing report cards (19% vs. 8%), class composition (50% vs. 41%), inclusion of students with special needs (40% vs. 24%), unmet needs of students (48% vs. 33%), child poverty (26% vs. 16%), and students from dysfunctional family environment (41% vs. 34%). On the contrary, secondary teachers were more likely than the elementary teachers to rate the following items as highly stressful: lack of control over the environment (55% vs. 45%), and the attitude/actions of government (34% vs. 22%). Schaefer pointed out that an important question that was not included in the survey that should be included in future research is to ask teachers to rate their own teaching-related stress levels overall. Another point to note concerning the results is that the elementary teachers outnumbered the secondary teachers. Among the respondents, there were 341 elementary teachers and 214 secondary teachers. It is possible that the higher percentage of elementary teachers that rated certain items as highly stressful emerged because they were represented in greater proportion of participants than the secondary teachers. Finally, considering that Naylor (2001a) reported that, in general, female teachers experienced a higher level of stress it is surprising to see that gender differences among elementary and secondary teachers were not addressed.
Teacher Stress and Burnout

Taylor, Zimmer, and Womack (2005) conducted a study to identify the causes of teacher stress and burnout. Interestingly, the respondents to their survey did not appear to experience stress or did not show symptoms of burnout. Although the results of this study appear to contradict other studies, it contains many elements that are of interest when analyzing studies on teacher stress especially with regard to the stress factors that were investigated.

First, in the introduction to their study, Taylor et al. (2005) focused on the low level of retention in the profession (Byrne, 1998) with novice teachers leaving the profession in the first five years (DeCicco & Allison, 1999). According to the authors, many young teachers and even some more experienced teachers leave the profession probably because of the level of stress they experienced. The researchers’ rationale to look at teacher burnout was that a prolonged period of stress might develop into a condition that is known as burnout. Teacher burnout is characterized as “the state of exhaustion, despair, and futility which results from the belief that achievement and satisfaction in teaching is either not possible or not worth the effort required to produce it.” (Flint, 1982). They focused on four areas that might affect the level of stress experienced by teachers: administrative support, attitudes about students, job satisfaction, and professional self-esteem. The reason for investigating job satisfaction and professional self-esteem might reside in the researchers’ interests in investigating not only the factors causing stress but also the ones related to burnout. Also, when going back to their literature review, in which they cite studies that report high rates of teachers leaving the profession, the idea of looking into job satisfaction appears logical since
dissatisfied teachers are more likely to leave the profession (Borg & Riding, 1991; Naylor 2001a, 2001b; Naylor & Malcomson, 2001; Schaefer 2001a).

In order to find answers to their questions, Taylor et al. (2005) developed a Likert-type survey to measure teachers’ perceptions regarding the factors that cause stress and burnout. At the end of the survey, teachers were asked to add any comments or recommendations they had in relation to teacher stress. The teachers in this study were mostly veteran teachers with five years or more teaching experience. There is no information about the gender distribution. Even more surprising, when one keeps in mind the introduction of the study that focused on young teachers leaving the profession, there was no grouping of the participants according to age or teaching experience, as was reported in Naylor (2001a). In doing so, the researchers might have found some fluctuations in the answers provided by the respondents, according to their age, their teaching experience, and gender.

Taylor et al. (2005) pointed out that of the 123 surveys they sent, only 37% returned. On this they advanced that maybe the teachers experienced such little stress that they did not see the interest in taking the time to answer the questionnaire. In contrast, they also advanced that maybe some teachers were so overwhelmed with work that they did not have time to answer the survey. It might have been valuable to indicate at which period of the school year the study was conducted. As Naylor (2001) indicated, there seemed to be peak periods in which teachers were busier than other times during the year.

Concerning the analysis and the presentation of the results (Taylor et al. 2005), there is one table included that presented the 42 questions with the mean and the standard deviation for each response. However, looking at correlations among answers could have been interesting, especially after the researchers realised that the data did not show what
they expected to find. For example, question 13 (in the section attitudes about student) “I feel physically threatened by certain students at times”, could have been paired with question 31 (in the section job satisfaction) “I dread going to work” to see if the two answers were correlated because in other studies, disruptive pupils has been identified as a source of stress, and stress appeared to have an effect on the job satisfaction level (Bindhu et al, 2006; Naylor, 2001a). Another major difference between this study and other studies, which could explain why the respondents did not appear to experience stress or did not show symptoms of burnout, is that the researchers did not examine teachers’ workload in relation to stress level as it was done in other studies (Ferguson 1984; Naylor, 2001). Had they examined this factor, combined with the job satisfaction and the professional self-esteem, their findings could have been different.

Stress and Coping Strategies

Numerous studies have examined strategies that are used to cope with stress. Kyriacou (2001) reported two main types of coping strategies: direct action techniques and palliative techniques. The first one refers to the actions a teacher can take to eliminate the source of stress whereas the latter refers to the actions taken to reduce the feeling of stress that is perceived. He added that the palliative techniques can be mental or physical. For instance, trying to put everything in perspective would be classified as a mental palliative technique. In contrast, taking yoga lessons would be classified as physical palliative techniques.

In his literature review, Arikewuyo (2004) noted that four major strategies in managing stress have been reported in various studies (Allegrante, 1998; Attridge and Lapp, 2000; Gaziel, 1993; Orioli, 1996). These strategies are inactive behavioural
activities (i.e. engaging in physical or recreational activities in order to escape from the source of stress), active behavioural activities (any attempt to alter or confront the source of stress), inactive cognitive activities (conforming to the demands while feeling helpless and resentful), and active cognitive activities (assessing the problem, talking about it and tackling it).

In Williams and Gersch (2004), similar to Kyriacou (2001), two types of coping strategies are identified: direct and indirect. Direct coping strategies are those related directly to how you deal with the job during school hours. Teachers have reported using time management skills, having clear and simple weekly plans, prioritising and list making, having a positive attitude, and being realistic about what can be achieved. Indirect strategies are the ones related to how you deal with the job after school hours. In this case, teachers have reported attending social events, travelling, and engaging in relaxation techniques.

In the reports published by British Columbia Teachers’ Federation (Naylor, 2001b; Naylor & Malcomson, 2001b; Schaefer, 2001a, 2003), there was no distinction made as to the type of coping strategies employed. Among the strategies used, teachers mentioned taking sick leave and practicing a sport. Also, teachers reported they adapted their teaching methods to face the heavy workload rather than trying to answer pedagogical needs. This resulted in the development of less effective teaching activities in order to devote more time to preparation and marking. Other teachers have mentioned switching to a part-time position, or simply leaving the profession, which suggests a low job satisfaction.

In Nigeria, a study looked into the strategies used by secondary teachers to manage job-related stress (Arikewuyo, 2004). For this study, 3466 secondary school
teachers (2041 male and 1425 female) from Nigeria who had 5 years or more of teaching experience completed a questionnaire. The researcher was interested in discovering the coping strategies used by the teacher and if these strategies differ according to the teacher’s gender, qualification, and geographical location.

The instrument used (Arikewuyo, 2004) was the Occupational Stress Questionnaire by Newton and Keenan (1985), adapted by Gaziel (1993) and the 17 items on the questionnaire belonged to either one of the four major strategies mentioned by the author (i.e. active and inactive behavioural activities, and active and inactive cognitive activities). Percentages and chi-square were used to analyse the data. Results suggested that teachers frequently used active behavioural cognitive strategies. All the respondents (100%) reported frequently using the strategies: try to stay organized, talk to people (other than a supervisor), and give extra attention to planning and scheduling. Arikewuyo (2004) explained that the preference for these strategies suggests that when teachers feel stressed, they know they can overcome the problem and their duties will not be interfered by the situation. Some items from the inactive behavioural strategies were also frequently used with 93% of the respondents answering that they keep away from the situation, 96% answering that they do their best to get out of the situation gracefully, and 96% answering that they try to separate themselves as much as possible from the people who created the situation. However, the results showed that over 93% of the respondents answered that they never watch movies or engage in physical activities in order to cope with stress. This, according to the author, can be explained by the lack of recreational facilities and or the teachers’ ignorance that these facilities could be beneficial to lowering the stress level. Also, teachers reported taking time to discuss the problem and trying to find ways to correct the situation that is creating stress. The inactive cognitive strategies were also
reported as frequently used with 94% of the respondents answering that they remind themselves that work is not everything, 96% answering that they try not to be concerned by it, and 96% answering that they try to anticipate the negative consequences in order to be prepared. Finally, the results suggested that the active cognitive strategies were not popular with over 90% of the teachers responding that they never try to see the situation as an opportunity to learn and develop new skills, think about the challenge they can find in this situation, or try to get additional people involved in the situation, or decide what they think should be done and explain this to people who are affected. In addition, the researcher reported that teachers’ gender, qualifications, and geographical location had a significant relationship with the strategies used to cope with stress.

Stress and Job Satisfaction, Career Intention, and Career Commitment

In Ferguson’s (1984) study, respondents were asked to rank school items and non-school items in order to identify the ones giving them satisfaction as a teacher. The results allowed the researchers to see that teachers ranked “seeing a student grow” as the most satisfying element of their job and “student attitude or performance” as the least satisfying element. However, no question directly asked about the overall job satisfaction or the desire to leave the profession in the near future. Consequently, this part of the study investigated the items providing satisfaction in the profession rather than the overall job satisfaction. When examining the answers provided by teachers in British Columbia to the open-ended questions (Naylor & Malcomson, 2001), many respondents answered that they were considering leaving the profession or asking for a reduction in teaching hour.
Borg and Riding (1991) investigated occupational stress, job satisfaction, absenteeism, career intention, career commitment and self-image among Maltese secondary school teachers. Based on their analysis of the studies conducted in numerous countries, teacher stress appeared to be a cross-cultural phenomenon that not only affects the teacher’s well being but also has adverse effects on the students’ learning. The researchers wanted to investigate the (1) correlation between teacher stress with job satisfaction and teacher self-image, (2) the correlation between teacher stress and absenteeism and career intention and career commitment, and (3) teachers’ self-image with job satisfaction, absenteeism, career intention and career commitment.

Borg and Riding (1991) justified their interest in looking into teachers’ absenteeism by citing studies (Kyriacou & Sutcliffe, 1977, 1978a, 1978b, 1979a, 1979b; Simpson, 1962, 1976) that suggested that both female and male teachers reported a higher frequency of absences in the beginning of their career with female teachers taking more sick days than their male counterparts. Career intention (i.e., the desire to stay or leave the profession) and career commitment (i.e., the desire take up teaching again as a profession) were also thoroughly researched. They reported that in the United Kingdom, Kyriacou and Sutcliffe (1979b) suggested that 23.5% of the probationary teachers answered that it was fairly or very unlikely that they would remain in the profession. In Australia, Solma and Feld (1989) reported that 27% of the secondary teachers in catholic schools answered that they were very or fairly unlikely to remain in the profession. In the United States, Farber (1984) reported that 21% of the teachers answered that they would not become teachers if they were to start again.

Concerning the job satisfaction (Borg and Riding 1991), 67.7% of the respondents answered that they were either fairly satisfied or very satisfied with their job. In addition,
significant interactions were noted for gender and type of teaching post, between
curriculum/subjects taught and size of school. Also, female teachers who had teaching
duties only were more satisfied than male teachers who had additional responsibilities in
addition to their teaching duties. Finally, it was also reported that teachers who taught in
junior levels reported a higher level of satisfaction than the teachers teaching in
secondary levels. Concerning absenteeism, the results indicated that on average teachers
were absent 4.33 days a year and that female teachers reported a greater number of total
days absent than their male colleagues. As for career commitment and career intention,
23.3% of the respondents indicated that they were fairly unlikely or very unlikely to
remain in the teaching profession within the next 10 years and that 46.2% of the
respondents were very unlikely or fairly unlikely to choose teaching as a career if they
were to start all over again. Finally, concerning the teachers’ self-image, as they had
predicted, the majority of the teachers rated themselves as average or better than average
teachers. There was no significant correlation between teachers’ self-image and teacher
stress or between teacher stress and job satisfaction.

In their discussion, Borg and Riding (1991) remarked that it is difficult to explain
why male teachers reported a greater level of stress than their female counterparts. They
advance that perhaps with age, men become increasingly intolerant or more stressed by
certain factors. They also pointed out that since taking sick days had been observed as a
stress coping strategy (Fletcher & Payne, 1982; Simpson, 1976), they were surprised to
see that women reported a lower level of stress but a greater level of absenteeism. They
had assumed that since men reported a higher level of stress, they would also report a
greater level of absenteeism. One could argue against this observation by suggesting that
perhaps women reported a lower level of stress precisely because they had a higher level of absenteeism.

Bindhu and Sudheeshkumar (2006) looked at gender as a variable to evaluate the stress coping skills and job satisfaction of primary teachers. In this case, the stress coping skills are not analogous to the coping strategies that were previously discussed. They include the participants’ overall reaction to stress and ability to cope with stress rather than the strategies employed to reduce stress. The researcher’s assumptions were that teaching is a stressful profession and teachers must have the capacity to cope with stress in order to be effective in their job. Also, they were interested in finding out whether there was a relationship between job satisfaction and stress coping skills. The sample consisted of 500 teachers, 165 males and 335 females.

Results indicated a statistically significant difference between male and female teachers on the Job Satisfaction Scale but no difference was observed on the Stress Coping Skills Inventory. Further analyses were conducted to investigate the relationship between job satisfaction and stress coping skills. There was a positive correlation between the total job satisfaction and four stress coping skills: self-reliance, pro-active attitude, adaptability and flexibility, and stress coping skills. These results suggested that the more the teachers relied on these coping skills, the higher their job satisfaction level. Finally, the researchers concluded their study by making some recommendations in order to increase job satisfaction and improve stress coping skills. They suggested improvements in working conditions, in the level of recognition, and in the possibilities for advancement and growth. They also suggested providing clear guidelines as to the teacher’s role and offering guidance and counselling could help teachers better cope with
stress. Interestingly, these recommendations, although made by the researchers, had some resemblance to the ones made by teachers.

Ho and Au (2006) created a Teaching Satisfaction Scale (TSS) and investigated the relationships among this scale and teachers’ self-esteem, psychological distress, and teaching stress. A total of 202 primary and secondary teachers in Hong Kong participated in the study (135 female and 67 male). To conduct their study, Ho and Au (2006) designed a two-part questionnaire. The first part of the questionnaire collected demographic data and the second part, which comprised 6 scales, collected data about job satisfaction, stress, and self-esteem.

The Teaching Satisfaction Scale that Ho and Au (2006) created had 5 items. Teachers were asked to answer on a five-point scale (from “I strongly disagree” to “I strongly agree”) to the following items: In most ways, being a teacher is close to my ideal.” “My conditions of being a teacher are excellent”; “I am satisfied with being a teacher”; “So far I have gotten the important things I want to be a teacher”; and “If I could choose my career over, I would change almost nothing.” Two other job satisfaction scales were used (Brayfield & Rothe, 1951; Warr et al., 1979) in addition to the Teacher Stress Inventory (TSI), Goldberg’s (1972) General Health Questionnaire (GHQ), and Rosenberg’s (1965) Self-Esteem Scale (SES). Ho and Au (2006) found moderate correlations, which suggested that teachers with lower job satisfaction were more likely to experience psychological distress, stress, classroom misbehaviours, and to report inadequate resources.
Teachers’ Recommendations

Several studies have reported what teachers feel that more needs to be done to help them reduce their level of stress. Ferguson (1984) reported that teachers indicated that they would like to see changes in time management, in classroom sizes, and in facilities. It is interesting to see that almost twenty years later, teachers in British Columbia made almost the same recommendations. Naylor (2001b) pointed that teachers identified four essential factors that were lacking for a manageable workload: time, resources, help, and respect.

At the end of the survey they administered, Taylor, Zimmer, and Womack (2005) asked the respondents for their suggestions concerning teacher stress and burnout. Their recommendations were abundant and could easily be paired with the ones reported in BCTF reports (Naylor, 2001b; Naylor & Malcomson, 2001b; Schaefer, 2001a, 2003). Indeed, teachers also made suggestions about their time management. For example, they suggested eliminating unnecessary and unbeneficial teacher in-service as well as giving more time to work and less time to meetings. They also made suggestions concerning the lack of respect they perceived. They would like teachers to be respected as professionals and they also would like their opinions to be valued and included in the various decision-making levels. They also made valuable comments concerning the curriculum and the resources available. For instance, they suggested that when a curriculum requires certain activities, all the resources should be available to complete the activities. They also made recommendations concerning the increase in administrative support and the increase in the parental involvement in their children’s education.

To summarize, numerous studies have examined occupational stress among teachers and the factors contributing to it as well as the relationship between stress and
job satisfaction. However, it has been observed that most studies were concerned with evaluating the stress level of teachers in general without differentiating between the educational program, such as English Language or French Immersion in which the teachers are teaching. Age, experience, and gender appeared to be important variables when measuring stress level in teachers (Ferguson, 1984; Kyriacou, 2001; Miller et al., 1999; Naylor, 2001a, 2001b; Schaefer, 2001a). As well, many contributing factors to teacher stress have been highlighted. Heavy workload, (Ferguson, 1994; Naylor, 2001b; Williams & Gersch, 2004), lack of resources (Naylor, 2001; Williams & Gersch, 2004), class composition (Borg & Riding, 1991; Ferguson, 1984; Schaefer, 2003), and student-related issues (Betoret, 2006; Naylor, 2001b) were among the challenges identified by teachers as more likely to increase their stress. Also, findings suggested that the coping strategies teachers adopt to deal with the difficulties they face may help reduce the occupational stress they experience (Arikewuyo, 2004; Kyriacou, 2001; Williams & Gersch, 2004). Concerning the relationship between job satisfaction and teacher stress, Ho and Au (2006) suggested that teachers with lower job satisfaction were more likely to experience stress. However, Borg and Riding (1991) did not find a significant correlation between teacher stress and job satisfaction.

For the present study, the following research questions were addressed:

3. Do French Immersion Program teachers experience the same level of stress and job satisfaction as English Language Program teachers?

4. Do French Immersion Program teachers and English Language Program teachers differ in work-related challenges?
3. Do French Immersion Program teachers and English Language Program teachers report different levels of workload?

4. Is there a relationship between work-related challenges, job satisfaction, and self-reported stress?

7. Is there a relationship between the self-reported total stress, job satisfaction, and the coping strategies?

8. What are the recommendations made by teachers to improve their career satisfaction and effectiveness as educators?
CHAPTER THREE

METHOD

This chapter focuses on the method used to investigate the challenges that both French Immersion Program and English Language Program teachers in Nova Scotia face in the exercise of their profession and the relationship between these challenges and teachers’ stress and job satisfaction. Participants and measures are outlined as well as ethical concerns.

Participants

Sixty-six full time teachers from Grades primary to 12 participated in the study. The participants (English Language Program teachers, \( n = 34 \), French Immersion Program teachers, \( n = 32 \)) were predominantly female (92.4%) and their age ranged form 25 to 57 years old. Although substitute teachers and administrators also experience challenges that may cause them stress or job dissatisfaction, they were excluded from this study because their daily experiences differ greatly from those of full-time teachers.

Instruments

A questionnaire (Appendix A), was developed based on the ones used in previous. The questionnaire, which had seven parts, was a word document that was attached to an e-mail. The first part consisted of questions to collect demographic data: gender, age, teaching experience, grade(s) taught, program taught, and subject(s) taught.

The second part addressed questions concerning the teachers’ workload. This section was partially reproduced from a section of Naylor’s (2001a, 2001b) study on teacher workload and stress, with the author’s permission. Some changes were made to
correspond to the believed experiences of the French Immersion Program teachers and the English Language Program teachers. The item “running records” (reading assessments) was added. The reason for this addition was that many French Immersion Program teachers teach and assess both French and English. Therefore, the assumption was that the French Immersion Program teachers would report more hours executing this task than the English Language Program teachers. While in the BCTF questionnaire, participants were asked to compute hours spent on the specified activities during school hours, including lunch and recess, it was decided that the hours spent during school hours should not include recess and lunch, since teachers are not supposed to be working during these two times, unless specified in their contract. As a result, hours spent on specific activities during school hours were divided from the hours spent on the same activities during recess and lunch.

The third part used likert-type scales to collect data concerning the affective challenges. Teachers were asked to rate how frequently they experience eight symptoms, reported to reflect stress (e.g. physical, mental, behavioural, and emotional). These affective challenges were selected based on numerous studies on occupational stress and burnout (Ferguson, 1984; Miller et al., 1999; Naylor, 2001a, 2001b; Welch, 1983; Williams & Gersch, 2004) and on Kyriacou and Sutcliffe’s (1978a) definition of teacher stress.

The fourth part used likert-type scales to collect data concerning the sources of affective challenges. The affective challenges were selected based on the studies reviewed in the literature review of the present study (Ferguson, 1984; Miller et al., 1999; Naylor, 2001a, 2001b; Taylor et al., 2004; Welch, 1983; Williams & Gersch, 2004).
The fifth part used a likert-type scale to collect data concerning the coping strategies and their effectiveness. In this case, the coping strategies, direct action techniques and palliative techniques, as defined by Kyriacou (2001) were investigated. The 12 coping strategies used during school hours and the 12 coping strategies used after school hours were selected based on the studies examined in the present literature review that dealt with this topic (Arikewuyo, 2004; Naylor & Malcomson, 2001; Williams & Gersch, 2004). An additional question was created concerning teacher absenteeism since Borg and Riding (1991) had observed that women reported a lower level of stress than men but women reported a greater level of absenteeism than men. The researchers assumed that since men reported a higher level of stress, they would also report a greater level of absenteeism. It is possible that women reported a lower level of stress precisely because they had a higher level of absenteeism and this is why the following question was added in the coping strategy section, “In the previous teaching year, how many sick days did you take related to work issues?”

The sixth part consisted of questions about the job satisfaction, career intention, and career commitment based on the observations and findings of authors of studies on the topic (Borg & Riding, 1991; Naylor, 2001b, Schaefer, 2003).

A seventh part was included in which respondents were invited to add any additional comments to better identify and explain their most significant aspect of workload and stress in their actual position. The reason for this addition was to allow teachers to express the challenges they face in a way that is not as limiting as putting a check mark in a box. Also, the purpose of this section was to allow teachers to make recommendations they might have to improve their working conditions.
Procedure

In January 2008, following ethical approval from both the Mount Saint Vincent University and a school board in Atlantic Canada, 32 school principals were contacted either by phone calls or by email to request their assistance in contacting teachers from their school to participate. Ten school principals, which provided a pool of 241 potential participants, agreed to forward the information to their teachers. The researcher made sure that the time frame of the study did not interfere with the report card period to ensure a higher response rate. The principals who agreed to forward the questionnaire to the full-time French Immersion Program and English Language Program of their school received through an e-mail a copy of the informed consent form and the questionnaire. The principals were asked to forward to the teachers, using their own list serve, an e-mail highlighting the purpose of the study and a short invitation to participate, the informed consent form, and the questionnaire. To increase participation, participants could enter their name for a draw of a $25.00 gift certificate at Chapter’s. At the beginning of April 2008, a reminder, via e-mail, was sent to indicate that the data collection would end shortly. The return rate was 27%.

Data Analysis

Questionnaires were coded and analysed. Means and standard deviations were calculated for all the items. Independent sample $t$-tests were conducted to examine group differences among French Immersion Program teachers and English Language Program teachers. Four scales were created: the self-reported stress scale, the interpersonal challenges scale, the student-related issues scale, and the outside influences scale.
Self-reported Stress Scale

The first scale to be created was the self-reported stress scale, using the items of the section C, Affective Challenges, from the questionnaire. These items were: feeling tired, headaches, difficulty sleeping, frustration, anxiousness, anger, irritability, and impatience. Cronbach alpha for the scale measured .73.

Interpersonal Relationships

Three other scales were created by grouping some items of the section D, Sources of Affective Challenges, from the questionnaire. The interpersonal challenges scale was created with the items that dealt with relationships. These items were parental expectations, communicating with parents/guardians, supervision of your teaching by administrators, meetings, relationships with other teachers in the school, and relationships with administration. Cronbach alpha for the interpersonal challenges scale measured .73.

Student-related Issues

The student-related issues scale was created using the four following items: disruptive students, students' attitudes toward learning, meeting students' individual needs, and teaching students with special needs. Cronbach alpha for the student-related issues scale measured .70.
Outside Influences

Finally, the outside influences scale was created using the 7 following items: changes to the curriculum, teaching subjects for which you feel unqualified, class size, provincial and school board exams, completing report cards, salary, and lack of involvement in decision making. Cronbach alpha for the outside influences scale measured .76.

Pearson correlations were calculated to investigate relationships among the self-reported total stress scale, the interpersonal challenges scale, the outside influences scale, the current level of job satisfaction, and the coping strategies.

The answers provided by the teachers to the open-ended question at the end of the questionnaire were grouped according to similarities and differences in the comments expressed by teachers from both programs.

Ethical Concerns

In the informed consent form (Appendix B), participants were reminded that the participation to this study was voluntary and were told that by completing the questionnaire and returning it, they were agreeing to participate in the study. To ensure anonymity of the participants, the teachers who agreed to participate were asked to complete the questionnaire and return it directly to the thesis supervisor using the e-mail address that was provided. The thesis supervisor was the first person to have access to the completed questionnaires and was responsible for coding the questionnaires and deleting information that would have allowed the graduate student researcher to identify any individual or school.
CHAPTER FOUR

RESULTS

Stress in the workplace has been reported by teachers across the world (Arikewuyo, 2004; Schroeder et al., 2001). There is an increased awareness that stress among teachers has an impact on their health and their level of job satisfaction, and these can have detrimental effects on the classroom environment (Arikewuyo, 2004; Farber, 1984; Kyriacou, 1990; Manthei & Solman, 1988; Taylor et al., 2005). Williams and Gersch (2004) investigated differences in the stress level of special education teachers and mainstream teachers and Schaefer (2003) examined differences in stress level and workload between elementary and secondary teachers. Research however has not compared the stress levels of French Immersion Program teachers and English Language Program teachers.

The purpose of this study was to compare the challenges that French Immersion Program and English Language Program teachers experience in their profession and investigate the relationship between these challenges and teachers’ stress and job satisfaction. As well, specific focus was placed upon identifying the strategies used by teachers to cope with job related stress and the impact of these strategies on their job satisfaction. Six research questions were developed for this study.

1. Do French Immersion Program teachers experience the same level of stress and job satisfaction as English Language Program teachers?

Means and standard deviations for stress and job satisfaction are reported in Table 1. Independent sample t-tests were conducted to examine group differences in stress and job satisfaction. Results indicated that French Immersion Program teachers and English
Language Program teachers did not differ in self-reported stress, $t(61) = -.757, p = .452$. French Immersion Program teachers and English Language Program teachers did not differ in current job satisfaction, $t(61) = -.286, p = .776$. These results suggest that the teachers for both programs experienced similar levels of stress and job satisfaction.

Insert Table 1 about here.

2. Do French Immersion Program teachers and English Language Program teachers differ in work-related challenges?

Means and standard deviations for each work-related challenges scale are reported in Table 1. Independent sample $t$-tests were conducted to examine group differences in sources of affective challenges. Results indicated that French Immersion Program teachers reported higher level of interpersonal challenges than English Language Program teachers, $t(61) = -2.47, p = .016, d = .62$. There was no significant difference between French Immersion Program teachers and the English Language Program teachers in outside influences, $t(61) = -1.79, p = .780$. English Language Program Teachers reported higher student-related issues than French Immersion Program teachers, $t(61) = 2.50, p = .020, d = .63$.

3. Do French Immersion Program teachers and English Language Program teachers report different levels of workload?

Means and standard deviations for workload are reported in Table 2. Using independent sample $t$-tests, several significant group differences were found. Compared to French Immersion Program teachers, English Language Program teachers reported
spending more time providing extra help to students during recess and lunch, \( t(63) = 2.76, p = .007, d = .70 \), more time providing extra help to students before, after school and evenings, \( t(61) = 3.81, p < .001, d = 1.07 \), more time doing paperwork during school hours, \( t(58) = 3.31, p = .001, d = .90 \), more time doing paperwork during recess and lunch, \( t(58) = 2.18, p = .030, d = .57 \), and more time on extra curricular activities, before, after school, evenings, \( t(58) = 2.03, p = .030, d = .57 \). In contrast, French Immersion Program teachers reported spending more time than English Language Program teachers teaching assigned classes during school hours, \( t(62) = -2.06, p = .010, d = 3.62 \) and more time on preparing report cards, \( t(59) = -3.20, p = .002, d = .83 \). In addition, compared to English Language Program teachers, French Immersion Program teachers reported a higher increase in their workload since they started teaching, \( t(62) = -2.06, p = .040, d = .52 \).

Insert Table 2 about here.

4. Is there a relationship among work-related challenges, job satisfaction, and self-reported stress?

Correlation coefficients among work-related challenges (interpersonal challenges, outside influences, and student-related issues), job satisfaction, and self-reported stress are reported in Table 3. Interpersonal challenges, outside influences, and student-related issues were positively correlated to stress. These results suggested that the more challenging these items were perceived, the higher the self-reported stress. Student-related issues were negatively correlated with the job satisfaction level. This result suggested that the more challenging the interactions with the students are perceived to be,
the lower the level of job satisfaction. Finally, stress was negatively correlated with job satisfaction level.

Insert Table 3 about here.

5. Is there a relationship among self-reported total stress, job satisfaction, and the coping strategies?

First, means were calculated for all the coping strategies from the questionnaire. There were no group differences found. Means and standard deviations are reported in Tables 4 and 5.

Insert Table 4 about here.

Insert Table 5 about here.

Correlations among coping strategies, self-reported stress, and current level of job satisfaction are reported in Tables 6 and 7. Separate correlations were calculated for during school hour and for after school hours. For the coping strategies used during school hours, set priorities, and discuss issues with the administration were positively correlated with the job satisfaction level. These results suggested that the more these strategies were rated as effective, the higher the level of job satisfaction. Also, set priorities, maintain a positive attitude, set realistic goals, and discuss issues with the administration were negatively correlated with the self-reported stress, suggesting that the more these strategies were rated as effective, the lower the perception of self-reported
stress. No significant correlations were found among the current level of job satisfaction, the self-reported total stress, and the coping strategies used after the school hours.

6. What are the recommendations made by teachers?

At the end of the questionnaire, teachers were invited to leave additional comments or recommendations concerning their work experience that they felt this study did not address. There were comments that were made by both the French Immersion Program teachers and the English Language Program teachers and there were comments that were specific to each group.

Common Recommendations

Both French Immersion Program teachers and English Language Program teachers made comments concerning the paperwork, the teacher task, and the Planning for Improvements.

“Talk to others, create professional collaboration.”

“Fewer "extras" required of classroom teachers - more focus on actual teaching.”
“Teachers are expected more than academic material which results in less time to cover curriculum.”

“No more planning for improvements.”

“We need more time to work in collegiality”

Recommendations from French Immersion Program Teachers

French Immersion Program teachers commented about their lack of both curriculum and human resources in French.

“More effective material resources in our classroom.”

“More publishers to provide appropriate materials for the language level of the students. Most resources available are excellent but a vast majority is in English, so we have to translate.” Translated from French.

“Increase the resources available in French so that we don’t have to translate.”

(Translated from French.)

“More resource (help) time available for students in need.”

“Have specialists teach English; not the homeroom teacher.”
“Provide resources (extra help) in French. Resource centres are in English.”

(Translated from French.)

Also, French Immersion Program teachers made comments concerning the report cards, suggesting that the format be changed. Five teachers recommended that the number of outcomes be reduced, and four teachers recommended more preparation time.

Recommendations from English Language Program Teachers

English Language Program teachers voiced numerous challenges they face with their students and their need for more support coming from parents and administrators. Two teachers recommended that the split class be abolished and 6 teachers suggested that the class size be reduced.

“To have smaller classes in the more challenging subject areas/learning levels. A restricted number of IPP's per class.”

“French immersion students switching to English programs should first be assessed and then placed in the appropriate grade (present grade upon transfer or previous grade to acquire necessary concepts/skills)”

“Cap on class sizes, including consideration for IPP/adaptations/behaviour plans.”

They also made recommendations about their tasks that were different from those made by French Immersion Program teachers. A teacher mentioned that he or she would
appreciate more focus on actual teaching. Another teacher suggested that teaching load should be reduced for new teachers so they can develop their teaching. Two high school teachers recommended that teachers teach fewer courses. While 5 French Immersion Program teachers recommended that the number of outcomes be reduced, the English Language Program teachers recommended changes in the way the curricula are taught, developed, and evaluated. One teacher expressed the need for less pressure to conform, suggesting that all teachers cover the same material at the same time and evaluate achievement in the same way. Another teacher recommended that teachers be allowed to have input into curriculum issues and changes.
CHAPTER FIVE

DISCUSSION

The purpose of this study was to compare the challenges that French Immersion Program and English Language Program teachers experience in their profession and investigate the relationship between these challenges and teachers’ stress and job satisfaction. As well, specific focus was placed upon identifying the strategies used by teachers to cope with job related stress and the relationship between these strategies, stress, and job satisfaction. Studies have investigated differences in teacher stress between teachers of students with special needs and mainstream teachers (Williams & Gersch, 2004), or between elementary and secondary teachers (Schaefer, 2003) but finding differences in the stress-related work experiences among French Immersion Program teachers and English Language Program teachers have been absent from the literature.

Level of Stress and Job Satisfaction

When comparing stress and job satisfaction levels of French Immersion Program teachers and English Language Program teachers, no differences were found. These results suggested that teachers from both programs experienced similar levels of occupational stress. William and Gersch (2004) when comparing the stress level of teachers who teach in mainstream and special education, came to the same conclusion. With regards to job satisfaction level, on a scale of 1 to 10, on average French Immersion Program teachers rated it as 7.45 and English Language Program teachers rated it as 7.34. It appeared that teachers from both programs were quite satisfied with their job since they ranked their current level job satisfaction as mid-high. This result is in line with Borg and
Riding’s (1991) findings which suggested that 67.7% of the respondents answered that they were either fairly satisfied or very satisfied with their job.

The findings of this study suggested that teachers in both French Immersion Program and English Language Program reported similar level of occupational stress and job satisfaction, their perception of stress-related experiences were different.

Differences in Work-related Challenges

When comparing the perception of the work-related challenges, the English Language Program teachers were more likely to report the student-related issues as challenging. An explanation for these results might be that the English Language Program teachers for this study reported having more students on Individual Personal Programs (IPPs), $t(61) = 3.82, p < .001$, and adaptations $t(64) = 3.02, p = .004$ in their classroom than the French Immersion Program teachers. These results echoed the findings of previous studies which have highlighted the student-related issues as a factor related to teacher stress (Betoret, 2006; Ferguson, 1984; Naylor, 2001).

There was no significant difference between French Immersion Program teachers and the English Language Program teachers in outside influences suggesting that they have similar perceptions of how challenging these issues are. These results support the importance of examining outside influences and suggest that these issues extend beyond teacher contexts found in previous studies (Ferguson, 1984; Naylor, 2001b; Taylor et al., 2005). The items that comprised this scale (e.g., changes to the curriculum, teaching subjects for which you feel unqualified) are all situations that are outside the influence of the teachers regardless of the subject taught or the educational program in which the teachers are teaching.
It is difficult to explain why the French Immersion Program teachers were more likely to report the interpersonal challenges as challenging. Perhaps, as pointed in Dicks’ report (2001), it is possible that the English Language Program teachers’ and administrators’ perception of the students in French Immersion is that they are smarter and better behaved and therefore, do not offer much support to the French Immersion Program teachers when they seek for help or advice. Since this present study did not inquire about the English Language Program teachers’ perceptions of the abilities or the achievement of the students enrolled in the French Immersion Program and vice versa, as was done by Dicks (2001), these results are difficult to interpret. However, dealing with parental expectations and communicating with parents, were two items present in the scale Interpersonal challenges of the present study. These two items might have contributed to the fact that French Immersion Program teachers were more likely than the English Language Program teachers to report the interpersonal challenges as challenging.

As Noel (2003) pointed, a lack of communication between home and school, a lack of resources, and a lack of empowerment in helping their children with homework were areas of concern identified by parents. Perhaps some parents might feel unable to provide the extra help that their child might need because of their lack of knowledge of the French language and therefore heavily rely on the teacher to cater to their child’s specific needs. This situation could result in unpleasant altercations between parents and the teachers, especially when the teacher is ill equipped to help a student with special needs. As one French Immersion teacher commented, the Resource Centres provide extra help in English and therefore cannot assist the students with their specific needs they might have regarding the learning of the second Language. As well, Yagil (1998) found that
inexperienced teachers (less than 3 years of teaching experience) identified the interactions with parents as one of the main sources of stress.

Workload

When analyzing hours spent on specific tasks as reported by teachers from both programs, some differences were noted. Compared to French Immersion Program teachers, English Language Program teachers reported spending more time providing extra help to students during recess and lunch, more time providing extra help to students before, after school and evenings, more time doing paperwork during school hours, more time doing paperwork during recess and lunch, more time on extra curricular activities, before, after school, evenings. Again, the results obtained must be interpreted with caution. First, the number of respondents for each task varied greatly as reported in Table 2. For instance, 10 French Immersion Program teachers, out of 32 participants and 5 English Language Program teachers out of 34 provided the hours they spent teaching assigned classes during recess and lunch. If more participants had taken the time to answer this question, the results might have been different. Also, the English Language Program teachers who taught at the high school level outnumbered the French Immersion Program teachers. It appears reasonable that the teachers at the junior high and high school levels spend more time than the elementary teachers for extra curricular activities because extra curricular activities mostly take place at this level. Finally, since the teachers were asked to estimate the number of hours spent on each task and considering that the data collection spread over 4 months, teachers might have underestimated or overestimated the time spent on certain tasks.
French Immersion Program teachers reported spending more time than English Language Program teachers teaching assigned classes during school hours and more time on preparing report cards. The results obtained can be explained by the fact that French Immersion Program teachers at the elementary level teach and assess one more subject than the English Language Program teachers. The French Immersion Program elementary teachers in this sample reported teaching and assessing both French and English languages, whereas the English Language Program elementary teachers reported teaching only the English language. In addition, compared to English Language Program teachers, French Immersion Program teachers reported a higher increase in their workload since they started teaching. In their report, Naylor and Malcomson (2003) highlighted that the English teachers reported an increase in their workload over the last years and considered the school organization to be responsible for the perception of increase of the workload. When grouping the answers to the open-ended questions provided by 644 respondents (elementary and secondary teachers) to the question “What do you consider to be the most significant aspects of workload and stress?” Naylor (2001b) reported that teachers commented on the volume of work during a teacher’s day and the expectations that the teachers would address a wide range of issues. It is difficult to pinpoint exactly why the French Immersion Program teachers were more likely to report that their workload had increased since they started teaching. Based on some of the comments made by the teachers at the end of the questionnaire, it could be the class size, the presence of students with special needs, the increase of students on adaptations, the changes in the curriculum combined to the necessity for the teachers to adapt and translate didactic materials.
Relationship among Work-related Challenges, Job Satisfaction, and Stress

When investigating the relationship between work-related challenges, job satisfaction, and self-reported stress, results suggested that the more challenging the interpersonal challenges, student-related issues, and outside influences, were perceived, the higher the perception of self-reported stress. These results are in line with Williams and Gersch’s findings (2004), which suggested that teachers identified noisy students and students’ poor attitude to work as a major source of stress. Betoret (2006) also advanced that interaction with students was reported as the most challenging aspect of the teaching profession. As for the outside influences in relation to perception of self-reported stress, results suggested that the more curriculum changes, teaching subjects for which you feel unqualified, increase class size, provincial and school board exams, completing report cards, salary, lack of involvement in decision making were perceived as challenging, the higher the level of self-reported stress. The present study seems to be the first one to examine items that reflect challenges outside the influence of the teachers (i.e. the outside influences scale) and correlate these to stress. The items used to create the scale were drawn from the comments and recommendations made by teachers at the end of the questionnaires in Ferguson’s study (1984) and in Naylor’s report (2001b). Although these comments were highlighted in previous studies, they were not correlated to self-reported stress as was done in the current study.

The only item that was negatively correlated with the job satisfaction level was the student-related issues. These results suggest that the more challenging the interactions with the students are perceived, the lower the level of job satisfaction. These results are partially in line with Ho and Au’s (2006) findings, which suggested that teachers with lower job satisfaction reported more classroom misbehaviours. In the present study,
disruptive students, students' attitudes toward learning, meeting students' individual needs, and teaching students with special needs were the items that constituted the student-related issues scale which was negatively correlated to stress.

Stress was negatively correlated with job satisfaction level suggesting that higher the level of self-reported stress, the lower the job satisfaction level. This finding is in line with Bindhu and Sudheeshkumar (2006) and Ho and Au (2006), but contradicts Borg and Riding’s (1991) findings. Borg and Riding (1991) had not found any correlation between stress and job satisfaction. They asked only one question concerning teachers stress level (how stressful do you find teaching) whereas in the present study, teachers were asked to rate how frequently they experience eight symptoms, believed to be effects of stress. A self-reported stress scale was then created and used to investigate the relationship between stress and job satisfaction.

Relationship Among Self-reported Stress, Job Satisfaction, and Coping Strategies

When investigating the relationship between the self-reported stress, job satisfaction, and the coping strategies used during school hours, set priorities, and discuss issues with the administration were positively correlated with the job satisfaction level, suggesting that the more these strategies were rated as effective, the higher the level of job satisfaction. These coping strategies were reported in previous studies (Naylor, 2001b; Naylor & Malcomson, 2001b; Schaefer, 2001a, 2003; Williams & Gercsh, 2004).

Also, set priorities, maintain a positive attitude, set realistic goals, and discuss issues with the administration were negatively correlated with the self-reported total stress, which suggested that the more these strategies were rated as effective, the lower the perception of self-reported stress. These results suggested that direct coping strategies
seemed to be preferred to the indirect coping strategies by the respondents and appeared as more effective to reduce stress.

When investigating the relationship between the self-reported stress, job satisfaction, and the coping strategies used after the school hours, no significant correlations were found suggesting that there is no relationship between the coping strategies used after school hours to reduce the feeling of stress that is perceived and stress or job satisfaction. These results suggested that although teachers used strategies after school hours, the ones used during school hours seemed more effective to reduce stress and increase the job satisfaction level. Furthermore, these results echoed the findings of previous studies (Arikewuyo, 2004; Williams & Gersch, 2004) in which indirect coping strategies were the strategies less favoured by teachers. However, Arikewuyo, (2004) and Williams and Gersch (2004) did not report calculating correlations between the coping strategies, the self-reported stress, and job satisfaction as it was done in the present study.

No significant differences among teachers in the two programs in the coping strategies used during and after school hours were found. Since differences in the stress related work experiences were found, it was expected to find differences in the actions teachers take to eliminate the source of stress or to reduce the feeling of stress that is perceived.

Most studies were concerned with identifying the coping strategies used by teachers and recognized as effective to lessen the influence of stress (Arikewuyo, 2004; Naylor, 2001b; Naylor & Malcomson, 2001b; Schaefer, 2001a, 2003; Williams & Gersch, 2004) but few had investigated the relationship between these strategies, stress, and job satisfaction. However, Ho and Au (2006) investigated the correlations among the
coping strategies, the stress and the job satisfaction of teachers, as was done for the present study and they found moderate correlations suggesting that teachers with lower job satisfaction were more likely to experience psychological distress, stress, classroom misbehaviours, and to report inadequate resources. It is surprising that discussing issues with administration was favoured over discussing issues with colleagues. Perhaps, since this study was conducted in schools that offer two streams (French Immersion and English Language Programs), teachers feel that they cannot discuss issues because their experiences differ. It is also possible that the conflicting perceptions that teachers have of the two programs, as identified by Dicks (2001), hinder their capacity or desire to exchange about the challenges they experience. These results partially contradicted Arikewuyo’s findings (2004), which suggested that all the respondents reported frequently using the three following strategies: try to stay organized, talk to people (other than a supervisor), and give extra attention to planning and scheduling. However, Arikewuyo (2004) did not correlate the coping strategies with self-reported stress or job satisfaction as it was done in the present study. Again, it is difficult to explain why discussing issues with administration was favoured to discussing issues with colleagues by the respondents because the questionnaire did not ask specific questions about the teachers’ perception of their administrators. Also, considering that the participants were recruited through the help of 10 principals, the results reported reflect the participants’ work experience with those 10 administrators. As well, it appears reasonable to advance that principals who decided to forward the information to their staffs were the ones who nurtured a healthy work relationship with the teachers and were interested in their answers about their work-related experiences. Perhaps the principals who did not accept
to forward the information had tense work relationships with their teachers and the prospect of a study allowing the latter to identify their challenges appeared intimidating.

Recommendations Made by Teachers

Finally, when analyzing the comments and recommendations made by teachers, many were similar to those made by teachers in both Ferguson’s (1994) studies and Naylor’s (2001b) report. Both French Immersion Program teachers and English Language Program teachers made comments concerning the paperwork (reduce the amount), the teacher task (more time to work in collegiality, fewer extra curricular), and the planning for improvements (abolish them). There were also differences observed in the nature of the comments and recommendation made by French Immersion Program teachers and the English Language Program teachers. French Immersion Program teachers commented about their lack of curriculum resources in French and some problems experienced in their profession whereas the English Language Program teachers voiced numerous challenges they face with their students and their need for more support coming from the parents and the administrators. Teachers’ comments emphasized some of the differences in the working experiences of the teachers in both programs and corroborated some of the findings from this study. English Language Program teachers were more likely to identify the student-related issues as a factor contributing to stress and many of the comments they left were linked to this topic. French Immersion Program teachers, who identified the interpersonal challenges as a factor more likely to relate to their perception of stress, did not leave comments or recommendations that could have reinforced this finding. Instead, they commented about their needs for more didactic resources adapted to their students’ needs to reduce the time
spent translating and the need for more resources (help) for the students who are experiencing difficulties.

Implications

Although conducted on a small scale, this study has implications for current and future teachers, administrators, and unions because it identified differences in the work related challenges as experienced by French Immersion Program teachers and English Language Program teachers. French Immersion Program teachers were more likely to identify the interpersonal challenges as challenging issues whereas the English Language Program teachers were more likely to identify the student-related issues as challenging. In addition, interpersonal challenges, student-related issues, and outside influences were related to stress suggesting that the higher the perception of these items as challenging, the higher the stress. Also, stress was negatively correlated to job satisfaction suggesting that the higher the level of self-reported stress, the lower the level of job satisfaction.

Studies like this may be used to help better prepare and inform student teachers of the numerous challenges they will face and the strategies they can utilize to cope with stress. Administrators can also use the information provided by this study to better cater the various needs of the French Immersion Program teachers and the English Language Program teachers and help them implement strategies that were identified as effective. This study also provides information to the teachers’ unions who could use the comments and the recommendations made by teachers as well as the data gathered concerning the workload of the teachers to improve the working conditions of the teachers.
Limitations

The first limitation involves the small sample size. Sixty-six full time teachers from grades primary to 12 participated in the study (English Language Program teachers, $n = 34$, French Immersion Program teachers, $n = 32$). A total of 32 school principals were contacted, and only 10 agreed to allow their teachers to participate. Further research, with a larger sample should be conducted to deepen our understanding of the realities of the teachers from both programs.

It was difficult to investigate gender differences in perception of stress and job satisfaction due to the sample that was constituted of 5 male teachers and 61 female teachers. Differences in perception of occupational stress and job satisfaction according to age and teaching experience were also impossible to assess since it was impossible to group the participants in relatively equal age groups or experience groups. Studies with a larger sample size identified gender differences among teachers with regards to their perception of stress. Ferguson (1984) reported differences in the stress factors reported between males and females. Borg and Riding’s (1991) findings suggested that male teachers reported a higher level of stress than female teachers, except for teachers under 31 years of age. Naylor and Malcomson (2001) reported that English teachers presented symptoms of stress, and both age and gender were important variables that affected stress perception and the capacity to cope with stress, with 56% of the respondents in their 20s answered that they were “coping somewhat” or “not coping” with fatigue while the results falls to 25% for the respondents who were in their 60s.

Further research with a larger sample size and with equal number of teachers at each level (i.e. elementary, junior high, and high school) investigating workload differences among French Immersion Program teachers and English Language Program
teachers should be conducted. There were 16 English Language Program teachers and 1 French Immersion Program teacher who reported teaching at the high school level. It is at the high school level that the number of students on IPPs or adaptations was reported as highest and this might have skewed the results obtained on the student-related issues scale. While the present study found differences in a few areas, such as the hours spent on certain tasks, such teaching assigned classes, doing report cards, doing paperwork, monitoring extra-curricular activities, and providing students extra help. However, the number of respondents varied greatly from one item to the other and the levels taught were unevenly represented. With a greater sample, there is reason to believe that differences between French Immersion Program teachers and English Language Program teachers in the hours spent on certain tasks might emerge. Using only the workload section from the questionnaire, teachers from specific schools could be asked to compute the hours spent on each task within a specific time frame. This would provide a more accurate picture of the workload of the teachers from both programs, at each level. In addition some of the French Immersion Program teachers commented that they devoted a considerable amount of time on translating materials, but the data suggested that they devoted as much time on lesson planning as their English Language Program colleagues. Perhaps, this is due to the sample size. Maybe a majority of the French Immersion Program respondents had been teaching the same subject or the same grade level for more than a year, resulting in them reusing materials prepared in the previous years. Yagil (1998) advanced that inexperienced teachers or teachers less familiar with a given curriculum reported a higher level of stress possibly because they were not as comfortable or prepared with their curriculum-tasks as their more experiences
counterparts. Again, this is why conducting the workload section of this study with a larger sample and within a specific time frame would probably provide different results.

Another limitation has to do with the lack of evidence provided to explain clearly why the French Immersion teachers were more likely to report the Interpersonal Challenges as challenging. A focus group with the French Immersion Program teachers to understand the nature of the interactions they have with the parents, the administrators and the other teachers would deepen our understanding of the results found. Also, a questionnaire could be developed to better understand the interpersonal challenges that the French Immersion Program teachers face.

Three other limitations are related to the questionnaire. First, the method of delivery of the questionnaires placed the responsibility of distributing them on the school principals. Thus, there is no way to ensure if the questionnaires were actually forwarded to the teachers even though the principals had agreed to do it. The return rate of 27% may actually be underestimated as not all teachers may have received the e-mail inviting them to participate. School principals were contacted both by phone and e-mail to remind them to distribute the questionnaire among their teachers. Also, a few questions could have been added to the questionnaire to help interpret the results obtained. First, a question should be added to ask teachers for how long they have been teaching this specific subject (for the junior high and high school teachers and the specialists) or this grade (for the elementary teachers) because planning time is suspected to take longer for teachers who are new to teaching a certain subject or at a grade level than for those who have been teaching the same subject or level for a couple of years. Experience was identified as a factor contributing to stress in previous studies (Ferguson, 1994; Miller et al., 1999, Yagil, 1998). Due to the sample size and the absence of a question asking
teachers to clarify their experience in the position they held at the moment of the data collection, it was impossible to analyse the data according to the teachers’ level of experience.

Second, although there were strategies on the questionnaire related to the time spent on individual instructions and related to the ways in which covering the objectives of the curriculum were handled, there were no coping strategies listed in regards to the managing of disciplinary issues or the interpersonal relationships. Maybe the addition of a few coping strategies that pinpoints the identified work-related challenges specific to the teachers of each program would have produced different results. Third, an item that could be added to the workload section is to ask teachers the amount of preparation time they are allotted. The reason for this addition is that French Immersion Program teachers who participated in this study did not appear to be spending more time on lesson planning than the English Language Program teachers and yet, appeared to be spending more time teaching assigned class. Also, the French Immersion Program teachers who teach at the elementary level, starting in Grade 3 reported teaching both French and English Language Arts, which was one more subject than their English Language Program colleagues.
REFERENCES


APPENDIX A: LETTER OF INFORMED CONSENT
“Voices of the Teachers: The relationship between stress and job satisfaction of French Immersion Program and English Language Program Teachers”

Dear teachers,

I am a graduate student at the Mount Saint Vincent University and I kindly request your participation in my thesis research project. My study is designed to explore the range of challenges teachers experience, the types of strategies and the effectiveness of the strategies they use to lessen the influence of the challenges, and the impact of these challenges upon their perceptions of job satisfaction. In this project, you will be asked to complete a questionnaire that should take you approximately 15 minutes to complete. Findings from this study will allow us to understand better both the challenges teachers face and the strategies that teachers find effective to reduce the influence of the challenges they experience. This information can be used by experienced teachers and novice teachers to anticipate potential challenges they might face and manage current challenges they are experiencing.

I do not foresee any risks in your participation in this study. Your participation is entirely voluntary. If there is a question or section of the questionnaire that makes you feel uncomfortable, you do not have to complete this question or section. Also, you may withdraw from this study without any reason at any point. Every effort will be made to ensure anonymity. The Informed Consent Forms along with your completed questionnaire will first be directed to my supervisor, Dr. Derek H. Berg who will be responsible for preserving the anonymity of participants. Prior to delivering the questionnaire to me, Dr. Berg will delete any information within the questionnaires that could be used to identify any participant or school. As well, only he will have access to the Informed Consent Forms and he will secure these forms in a locked location. Only the study’s researcher and her thesis supervisor, who have no direct link to the Teachers Union, will have access to the data. Completed questionnaires and the informed consent forms will be destroyed following completion of the written results of the study. A summary of the research will be made available to the HRSB and to participants who request a copy.

If you have any questions or concerns, please contact Dr. Derek H. Berg my supervisor for this research project by phone at 902-457-6734 or via email at derek.berg@msvu.ca. If you have any questions or concerns about how this study is being conducted and wish to speak with someone who is not directly involved in the study, you may contact the Chair of the University Research Ethics Board, by phone at 902-457-6350 or by e-mail at research@msvu.ca.

By completing the questionnaire and returning it, you are indicating that you fully understand the above information and agree to participate in this study.

At the end of the questionnaire, you can choose to enter you name into a draw for a $25.00 gift certificate for Chapters. An additional draw will be held for every 50 teachers who participate (up to 200 teachers total). The draw will be conducted by the thesis supervisor (Dr. Derek H. Berg) and the thesis committee member (Dr. Mary Jane Harkins) to ensure anonymity of the participants. I will not see the names of participants in the draw. The draw will be held at the completion of data collection, estimated April 2008. Dr. Berg will contact winners via email.

Thank you for your time and consideration,

Kathleen Carter
APPENDIX B: QUESTIONNAIRE
This questionnaire, which should take you approximately 20 minutes to complete, is designed to assess the various challenges that you experience in the daily exercise of your profession as a teacher in either the French Immersion program or the English Language program. We are also interested in investigating the various actions you take to face these challenges and the impact of these challenges on your job satisfaction level. This information can then be used by school boards, administrators, unions, and universities that train future teachers to help them implement effective strategies that will help alleviate some of the difficulties you face in order to increase your job satisfaction.

To fill in this questionnaire, click on the grey zones. Once you have completed it, save it to your desktop and send it back (as an attached file) to the following e-mail address:
derek.berg@msvu.ca

Thank you for your time.

**Section A: Biographic Information**

1. Gender:  □ Male  □ Female

2. How old are you?   years old.

3. By the end of this school year, for how many years will you have been teaching?

4. What is your employment contract?
   □ Permanent  □ Probationary  □ Term  □ Long-term

5. What is your teaching assignment?
   □ English Language Program  □ French Immersion

6. What grade(s) are you teaching this school year?

7. Do you have students on Individual Program Plans (IPPs)?
   □ No  □ Yes   If yes, how many

8. Do you have students on adaptations?  □ No  □ Yes   If yes, how many
9. Please check the subjects that you are responsible for teaching:

- [ ] English/Language Arts
- [ ] Science
- [ ] French
- [ ] Social Studies
- [ ] Mathematics
- [ ] Music
- [ ] Physical Education
- [ ] Visual Arts
- [ ] Health
- Other (please specify)

Section B: Workload

10. Compared to when you started teaching, would you say that your workload has:

- [ ] increased
- [ ] decreased
- [ ] stayed the same

11. How many hours, approximately, do you spend in an average week on the following activities, and when do you spend them. Print the hours in the grey zone.

<table>
<thead>
<tr>
<th>Activity</th>
<th>During school hours excluding recess and lunch</th>
<th>During recess/lunch</th>
<th>Before and after school, and evenings</th>
<th>Weekends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching assigned classes</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Student extra-help outside class time</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson planning and preparation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marking</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Running records</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Paperwork and record keeping</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attending meetings</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Extra curricular activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication with parents/guardians</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other job-related tasks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Last semester, how many hours did you spend on making report cards?

Section C: Affective Challenges

13. How often do you experience the following?
Experiences Never Occasionally Frequently Always

Feeling Tired

Headaches

Difficulty Sleeping

Frustration

Anxiousness

Anger

Irritability

Impatience

Section D: Sources of Affective Challenges

14. To what extent do the factors listed below pose challenges to you? (i.e., are the cause of unpleasant, negative emotions, such as anger, anxiety, tension, frustration).

<table>
<thead>
<tr>
<th></th>
<th>Not Challenging</th>
<th>Challenging</th>
<th>Very Challenging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental expectations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication with parents/guardians</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disruptive students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students’ attitudes toward learning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching students with special needs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Society’s perceptions of the teaching profession</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting students’ individual needs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson planning and preparation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes to the provincial curriculum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervision of your teaching by administrators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meetings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquiring resources or materials</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class size</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching subjects for which you feel unqualified</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time spent on marking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting curricular outcomes in these subjects:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language Arts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>French</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Studies</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Science

<table>
<thead>
<tr>
<th>Assessing the following subjects:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>English writing skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English speaking and listening skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>French writing skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>French speaking and listening skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>French reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completing report cards</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationships with other teachers in the school</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provincial and school board exams/tests</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of teaching hours per week</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of involvement in school decision-making</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncertainty about your teaching position next</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship with administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Section E: Coping Strategies

15. Which of the following coping strategies do you use? (Check the ones that apply and rate how effective to you think they are.)

<table>
<thead>
<tr>
<th>Strategies used AFTER school hours</th>
<th>Use</th>
<th>How effective do you find the strategy? (check the number)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Not effective</td>
</tr>
<tr>
<td>Preparing units/lessons during summer months</td>
<td>☐</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Attending social events</td>
<td>☐</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Traveling</td>
<td>☐</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Spending time with friends</td>
<td>☐</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Engaging in relaxation techniques</td>
<td>☐</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Consulting with a counsellor</td>
<td>☐</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Discussing issues with administration</td>
<td>☐</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Playing sports</td>
<td>☐</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Devoting time to a hobby</td>
<td>☐</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Volunteering</td>
<td>☐</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Spending time with family</td>
<td>☐</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Discussing issues with colleagues</td>
<td>☐</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
16. In the previous teaching year, how many sick days did you take related to work issues?

Section F: Career Satisfaction

17. How would you rate your level of career satisfaction?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10

Low                                               Medium                                               High

18. Since you started teaching, would you say that your career satisfaction has:

☐ Increased ☐ Decreased ☐ Stayed the same

19. If you were given the opportunity, would you change teaching program (e.g., from French Immersion to English Language Program or vice versa)?

☐ No ☐ Yes ☐ Not Possible

20. If you were given the opportunity, would you change school? ☐ No ☐ Yes

21. If you were given the opportunity, would you change your teaching assignment (e.g., grade)?

☐ No ☐ Yes ☐ Not Possible
22. If you could start over again, how likely is it that you chose teaching as a profession?

☐ very unlikely ☐ unlikely ☐ likely ☐ very likely

23. Approximately, how many more years do you intend to be in the teaching profession?

24. Currently, how challenging do you find teaching?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10

Low ☐ ☐ ☐ ☐ ☐ Medium ☐ ☐ ☐ ☐ High

Section G: Sources of Challenges

25. Use the space provided to list/describe your recommendations for reducing the challenges that teachers face in order for them to improve their career satisfaction and effectiveness as educators.
APPENDIX C: TABLES
Table 1

Descriptive Statistics for Stress, Job Satisfaction, and Work-Related Challenges

<table>
<thead>
<tr>
<th>Measures</th>
<th>FIP (n = 31)</th>
<th>ELP (n = 32)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Stress</td>
<td>18.45</td>
<td>3.73</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>7.45</td>
<td>1.46</td>
</tr>
<tr>
<td>Work-Related Challenges</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal Challenges</td>
<td>4.29</td>
<td>2.40</td>
</tr>
<tr>
<td>Outside Influences</td>
<td>5.32</td>
<td>3.04</td>
</tr>
<tr>
<td>Student-related Issues</td>
<td>4.61</td>
<td>1.94</td>
</tr>
</tbody>
</table>

*Note.*  FIP = French Immersion Program teachers; ELP = English Language Program teachers.
Table 2
Descriptive Statistics for Workload

<table>
<thead>
<tr>
<th>Measures</th>
<th>FIP</th>
<th>ELP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Perception of changes in your workload</td>
<td>2.73 (30)</td>
<td>0.52</td>
</tr>
<tr>
<td>Teaching assigned classes during school hours</td>
<td>1505.00 (30)</td>
<td>56.47</td>
</tr>
<tr>
<td>Teaching assigned classes during recess and lunch</td>
<td>18.00 (10)</td>
<td>40.50</td>
</tr>
<tr>
<td>Student extra help during lunch and recess</td>
<td>55.81 (31)</td>
<td>69.18</td>
</tr>
<tr>
<td>Student extra help after school and evening</td>
<td>15.00 (30)</td>
<td>29.21</td>
</tr>
<tr>
<td>Lesson planning and preparation during school hours</td>
<td>134.83 (30)</td>
<td>93.94</td>
</tr>
<tr>
<td>Lesson planning and preparation during recess and lunch</td>
<td>106.21 (29)</td>
<td>93.93</td>
</tr>
<tr>
<td>Lesson planning and preparation before, after school, evenings</td>
<td>405.50 (30)</td>
<td>262.84</td>
</tr>
<tr>
<td>Lesson planning and preparation during the weekends</td>
<td>154.00 (30)</td>
<td>125.74</td>
</tr>
<tr>
<td>Minutes spent on making report cards</td>
<td>1062.00 (30)</td>
<td>440.39</td>
</tr>
<tr>
<td>Marking during school hours</td>
<td>67.67 (30)</td>
<td>65.00</td>
</tr>
</tbody>
</table>
Table 2 (continued)

<table>
<thead>
<tr>
<th>Measures</th>
<th>FIP</th>
<th>ELP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Marking during lunch and recess</td>
<td>60.54 (28)</td>
<td>75.55</td>
</tr>
<tr>
<td>Marking before, after school and evenings</td>
<td>148.57 (28)</td>
<td>109.20</td>
</tr>
<tr>
<td>Marking during weekends</td>
<td>96.72 (29)</td>
<td>193.74</td>
</tr>
<tr>
<td>Running records during school hours</td>
<td>75.00 (29)</td>
<td>60.80</td>
</tr>
<tr>
<td>Paperwork during school hours</td>
<td>54.62 (26)</td>
<td>53.23</td>
</tr>
<tr>
<td>Paperwork during lunch and recess</td>
<td>27.04 (27)</td>
<td>59.41</td>
</tr>
<tr>
<td>Paperwork before, after school, evenings</td>
<td>79.26 (27)</td>
<td>78.59</td>
</tr>
<tr>
<td>Paperwork during weekends</td>
<td>42.12 (26)</td>
<td>50.56</td>
</tr>
<tr>
<td>Attending meetings during school hours</td>
<td>44.23 (26)</td>
<td>48.35</td>
</tr>
<tr>
<td>Attending meetings during lunch and recess</td>
<td>36.73 (26)</td>
<td>32.21</td>
</tr>
</tbody>
</table>
Table 2 (continued)

<table>
<thead>
<tr>
<th>Measures</th>
<th>FIP</th>
<th>ELP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( M )</td>
<td>( SD )</td>
</tr>
<tr>
<td>Attending meetings, before, after school, evenings</td>
<td>54.46 (28)</td>
<td>43.91</td>
</tr>
<tr>
<td>Extra curricular activities during school hours</td>
<td>18.46 (26)</td>
<td>42.49</td>
</tr>
<tr>
<td>Extra curricular activities during lunch and recess</td>
<td>26.67 (27)</td>
<td>48.77</td>
</tr>
<tr>
<td>Extra curricular activities before, after school, evenings</td>
<td>38.08 (26)</td>
<td>89.62</td>
</tr>
<tr>
<td>Extra curricular activities during weekends</td>
<td>2.31 (26)</td>
<td>11.78</td>
</tr>
<tr>
<td>Communicating with parents during school hours</td>
<td>28.39 (28)</td>
<td>27.82</td>
</tr>
<tr>
<td>Communicating with parents during recess and lunch</td>
<td>25.36 (28)</td>
<td>22.85</td>
</tr>
<tr>
<td>Communicating with parents before, after school, evenings</td>
<td>45.37 (27)</td>
<td>39.76</td>
</tr>
<tr>
<td>Communicating with parents during weekends</td>
<td>10.96 (26)</td>
<td>21.45</td>
</tr>
</tbody>
</table>

*Note.* Time represented in minutes. FIP = French Immersion Program teachers; ELP = English Language Program. Values in parentheses indicate the number of participants who responded.
Table 3

Intercorrelations among work-related challenges, job satisfaction, and self-reported stress

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Interpersonal Challenges</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Outside Influences</td>
<td>.59**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Student-related Issues</td>
<td>.19</td>
<td>.30*</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Job Satisfaction</td>
<td>-.21</td>
<td>-.15</td>
<td>-.39**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>5. Stress</td>
<td>.49**</td>
<td>.45**</td>
<td>.35**</td>
<td>-.39**</td>
<td>-</td>
</tr>
</tbody>
</table>

Note.  * p < .05.  ** p < .01.
<table>
<thead>
<tr>
<th>Measures</th>
<th>FIP</th>
<th>ELP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>M</em></td>
<td><em>SD</em></td>
</tr>
<tr>
<td>Time management</td>
<td>3.93 (30)</td>
<td>0.94</td>
</tr>
<tr>
<td>Simply weekly plans</td>
<td>4.00 (31)</td>
<td>0.93</td>
</tr>
<tr>
<td>Set priorities</td>
<td>3.97 (31)</td>
<td>1.05</td>
</tr>
<tr>
<td>Maintain a positive attitude</td>
<td>4.10 (31)</td>
<td>1.08</td>
</tr>
<tr>
<td>Set realistic goals</td>
<td>3.94 (31)</td>
<td>0.93</td>
</tr>
<tr>
<td>Spend less time on individual instruction</td>
<td>2.93 (27)</td>
<td>1.07</td>
</tr>
<tr>
<td>Give fewer and shorter assignments</td>
<td>3.24 (29)</td>
<td>1.09</td>
</tr>
<tr>
<td>Cover fewer outcomes with more depth</td>
<td>3.33 (30)</td>
<td>1.01</td>
</tr>
<tr>
<td>Cover more outcomes with less depth</td>
<td>2.48 (31)</td>
<td>1.03</td>
</tr>
<tr>
<td>Discuss challenges with colleagues</td>
<td>3.97 (31)</td>
<td>0.98</td>
</tr>
<tr>
<td>Discuss challenges with administration</td>
<td>3.50 (30)</td>
<td>0.90</td>
</tr>
<tr>
<td>Take sick days</td>
<td>2.63 (30)</td>
<td>1.40</td>
</tr>
</tbody>
</table>

FIP = French Immersion Program teachers; ELP = English Language Program teachers. Values in parentheses indicate the number of participants who responded.
Table 5
Descriptive statistics for coping strategies used after school hours

<table>
<thead>
<tr>
<th>Measures</th>
<th>FIP</th>
<th></th>
<th>ELP</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Plan during the summer</td>
<td>2.81 (27)</td>
<td>1.50</td>
<td>3.27 (26)</td>
<td>1.12</td>
</tr>
<tr>
<td>Attend social events</td>
<td>3.25 (28)</td>
<td>1.21</td>
<td>3.59 (32)</td>
<td>1.29</td>
</tr>
<tr>
<td>Travel</td>
<td>3.69 (29)</td>
<td>1.20</td>
<td>3.35 (31)</td>
<td>1.43</td>
</tr>
<tr>
<td>Spend time with friends</td>
<td>3.73 (30)</td>
<td>1.26</td>
<td>4.19 (32)</td>
<td>1.00</td>
</tr>
<tr>
<td>Use relation techniques</td>
<td>3.22 (27)</td>
<td>1.31</td>
<td>3.63 (30)</td>
<td>1.30</td>
</tr>
<tr>
<td>Consult with a counsellor</td>
<td>2.39 (23)</td>
<td>1.44</td>
<td>2.46 (13)</td>
<td>1.33</td>
</tr>
<tr>
<td>Discuss challenges with administration</td>
<td>2.96 (25)</td>
<td>1.21</td>
<td>2.58 (31)</td>
<td>1.39</td>
</tr>
<tr>
<td>Play sports</td>
<td>3.52 (29)</td>
<td>1.30</td>
<td>3.84 (25)</td>
<td>1.31</td>
</tr>
<tr>
<td>Engage in hobbies</td>
<td>3.31 (29)</td>
<td>1.26</td>
<td>3.67 (30)</td>
<td>1.06</td>
</tr>
<tr>
<td>Volunteer</td>
<td>2.80 (25)</td>
<td>1.50</td>
<td>2.62 (21)</td>
<td>1.40</td>
</tr>
<tr>
<td>Spend time with family</td>
<td>4.29 (31)</td>
<td>0.78</td>
<td>4.53 (32)</td>
<td>0.80</td>
</tr>
<tr>
<td>Discuss challenges with colleagues</td>
<td>3.61 (31)</td>
<td>1.12</td>
<td>3.81 (32)</td>
<td>1.18</td>
</tr>
</tbody>
</table>

FIP = French Immersion Program teachers; ELP = English Language Program teachers. Values in parentheses indicate the number of participants who responded.
Table 6

Intercorrelations among the current job satisfaction, the total stress, and the coping strategies reported as commonly used during the school hours

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Time management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Simply weekly plans</td>
<td>.42*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Set priorities</td>
<td>.39*</td>
<td>.45*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Maintain a positive attitude</td>
<td>.28*</td>
<td>.17</td>
<td>.50*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Set realistic goals</td>
<td>.30*</td>
<td>.24</td>
<td>.59*</td>
<td>.76*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Spend less time on individual instruction</td>
<td>.12</td>
<td>.15</td>
<td>.06</td>
<td>.02</td>
<td>.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Give fewer and shorter assignments</td>
<td>.04</td>
<td>-.02</td>
<td>-.07</td>
<td>.10</td>
<td>.13</td>
<td>.41*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Cover fewer outcomes with more depth</td>
<td>.11</td>
<td>.13</td>
<td>-.07</td>
<td>.02</td>
<td>.00</td>
<td>.29*</td>
<td>.49*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Cover more outcomes with less depth</td>
<td>-.10</td>
<td>-.21</td>
<td>-.12</td>
<td>-.08</td>
<td>-.18</td>
<td>.28*</td>
<td>.04</td>
<td>-.07</td>
<td></td>
</tr>
<tr>
<td>10. Discuss challenges with colleagues</td>
<td>.07</td>
<td>.12</td>
<td>.06</td>
<td>-.06</td>
<td>-.06</td>
<td>.09</td>
<td>-.25</td>
<td>-.07</td>
<td>.10</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----</td>
<td>----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>11. Discuss challenges with administration</td>
<td>.19</td>
<td>.16</td>
<td>.28*</td>
<td>.32*</td>
<td>.29*</td>
<td>-.04</td>
<td>.08</td>
<td>.08</td>
<td>-.00</td>
</tr>
<tr>
<td>12. Take sick days</td>
<td>.16</td>
<td>.13</td>
<td>-.03</td>
<td>-.04</td>
<td>.02</td>
<td>.29*</td>
<td>.22</td>
<td>.32*</td>
<td>.08</td>
</tr>
<tr>
<td>13. Job satisfaction</td>
<td>.04</td>
<td>.02</td>
<td>.28*</td>
<td>.23</td>
<td>.12</td>
<td>-.20</td>
<td>-.15</td>
<td>-.05</td>
<td>-.16</td>
</tr>
<tr>
<td>14. Self-reported total stress</td>
<td>-.17</td>
<td>-.14</td>
<td>-.25*</td>
<td>-.31*</td>
<td>-.30*</td>
<td>.07</td>
<td>.14</td>
<td>.20</td>
<td>.04</td>
</tr>
</tbody>
</table>
Table 6 (continued)

<table>
<thead>
<tr>
<th></th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Discuss challenges with administration</td>
<td>.43**</td>
<td>-</td>
<td></td>
<td></td>
<td>.</td>
</tr>
<tr>
<td>12. Take sick days</td>
<td>.22</td>
<td>.34*</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Job satisfaction</td>
<td>.14</td>
<td>.26*</td>
<td>.05</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>14. Self-reported total stress</td>
<td>-.16</td>
<td>-.31*</td>
<td>-.16</td>
<td>-.39**</td>
<td>-</td>
</tr>
</tbody>
</table>

Note.  * p < .05.  ** p < .01
Table 7

Intercorrelations among job satisfaction, stress, and the coping strategies used after the school hours.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Plan during the summer</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Attend social events</td>
<td>.09</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Travel</td>
<td>-.12</td>
<td>.59**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Spend time with friends</td>
<td>.06</td>
<td>.54**</td>
<td>.53**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Use relation techniques</td>
<td>.15</td>
<td>.49**</td>
<td>.68**</td>
<td>.64**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Consult with a counsellor</td>
<td>.23</td>
<td>.30</td>
<td>.36*</td>
<td>.08</td>
<td>.38*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Discuss challenges with administration</td>
<td>.25</td>
<td>.41**</td>
<td>.55**</td>
<td>.41**</td>
<td>.37**</td>
<td>.34*</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Play sports</td>
<td>-.17</td>
<td>.62**</td>
<td>.69**</td>
<td>.48**</td>
<td>.70**</td>
<td>.42*</td>
<td>.36**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>9. Engage in hobbies</td>
<td>.03</td>
<td>.52**</td>
<td>.60**</td>
<td>.46**</td>
<td>.66**</td>
<td>.32</td>
<td>.49**</td>
<td>.71**</td>
<td>-</td>
</tr>
<tr>
<td>10. Volunteer</td>
<td>.12</td>
<td>.39**</td>
<td>.52**</td>
<td>.39**</td>
<td>.36*</td>
<td>.24</td>
<td>.35*</td>
<td>.47**</td>
<td>.39**</td>
</tr>
</tbody>
</table>
Table 7 (continued)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Spend time with family</td>
<td>.04</td>
<td>.43**</td>
<td>.51**</td>
<td>.46**</td>
<td>.43**</td>
<td>.19</td>
<td>.24</td>
<td>.45**</td>
<td>.51**</td>
</tr>
<tr>
<td>12. Discuss challenges with colleagues</td>
<td>.14</td>
<td>.34**</td>
<td>.29*</td>
<td>.53**</td>
<td>.36**</td>
<td>.25</td>
<td>.43**</td>
<td>.30*</td>
<td>.35**</td>
</tr>
<tr>
<td>13. job satisfaction</td>
<td>.13</td>
<td>.00</td>
<td>.08</td>
<td>.01</td>
<td>.06</td>
<td>.04</td>
<td>.13</td>
<td>-.02</td>
<td>-.00</td>
</tr>
<tr>
<td>14. Self-reported total stress</td>
<td>-.04</td>
<td>-.17</td>
<td>-.11</td>
<td>-.10</td>
<td>-.19</td>
<td>-.08</td>
<td>-.15</td>
<td>-.15</td>
<td>-.14</td>
</tr>
</tbody>
</table>
Table 7 (continued)

<table>
<thead>
<tr>
<th></th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Spend time with family</td>
<td>.31*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Discuss challenges with colleagues</td>
<td>.14</td>
<td>.43**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. job satisfaction</td>
<td>.27</td>
<td>.06</td>
<td>-.08</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>14. Self-reported total stress</td>
<td>-.21</td>
<td>-.24</td>
<td>.01</td>
<td>-.39**</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note.* *p < .05.* **p < .01.*