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## Emotional Intelligence & Mental Health in the Classroom: Experiences of Canadian Teachers

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A thesis submitted in partial fulfillment of the requirements for the Master of Arts degree in  
Education

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### **Abstract**

Teaching has been noted to be one of the most demanding careers, yet, there is limited research exploring teachers' experiences with respect to mental health or wellness. Research suggests that emotional exhaustion and mental health concerns may be on the rise among teachers; this not only has a negative impact on teachers' well-being, but also on students' learning, academic engagement and stress levels. While there is promising research that identifies emotional intelligence (EI) may be a protective factor in teacher wellness, there is a paucity of research exploring possible connections. The current study explores EI in relation to teacher mental health and burnout. Data was collected through an online survey via two teacher organizations in Canada. Findings revealed that as emotional intelligence increases, mental health concerns and feelings of burnout decrease. Caregiving responsibilities outside of work were not found to influence this relationship. Additionally, the well-being component of EI was identified as the most important predictor of mental health in teachers. These results highlight the importance of building EI skills for teachers as well as adjusting educational policies to support teachers' well-being.

**Keywords:** teacher mental health, trait emotional intelligence, EI, burnout, Canadian teachers, emotionality, sociability, self-control, well-being, employee mental health, caregiving responsibilities

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## **Introduction**

Mental health continues to be a pandemic in Canadian society, with 1 in 5 individuals experiencing a mental health concern (Mental Health Commission of Canada, 2012). Canadian statistics parallel this rate with the yearly incidence for individuals with a diagnosable mental illness at about 2.7 million (Statistics Canada, 2012). When exploring the lifetime prevalence, it is clear mental health is a leading public health concern, with over 9.1 million Canadians aged 15-64 having been diagnosed with a mental illness at some point in their life (Statistics Canada, 2012). Indeed, mental health is not just a concern in Canada; the World Health Organization (2004) has reported that mental health problems continue to increase worldwide and are predicted to become the second the largest contributor to the burden of disease in middle and high income countries worldwide by the year 2020. Thus, mental health should remain a top priority for all helping professionals, government agencies and researchers, so that effective prevention and intervention services can be provided to limit the burden of mental health concerns in the future. It is important to note that the numbers reported here are based on self-report and service utilization data, hence, the number of individuals struggling with mental health issues is likely higher than what has actually been reported.

### **Mental Health in the Workplace**

Mental health concerns not only negatively impact the individual's well-being, but also place a significant strain on families, communities, systems of care, and the economy (Smetanin et al., 2011). In Canada alone, mental illness is estimated to cost over \$50 billion annually (Mental Health Commissions Canada, 2012), with approximately \$6 billion of this being attributable to loss in productivity due to absenteeism and presenteeism (i.e., attending work while sick resulting in poor work quality, inefficiency, and mistakes; Smetanin et al., 2011). Notably, it is estimated that cumulatively over the next 30 years, mental health problems will

likely mount to costing the Canadian economy a total well over \$2.5 trillion (Smetanin et al., 2011).

Unfortunately, efforts to alleviate these burdens and improve supports for mental health concerns have been limited, particularly in the workplace, in comparison to efforts to improve knowledge, supports, and/or treatments for physical health problems (Jorm, 2000). As a result, many employers have limited awareness and understanding of mental health, leaving many employees struggling at work without support (World Health Organization, 2000). In fact, the Mental Health Commission of Canada (2012) has reported slightly higher prevalence of mental health struggles in Canadian employees in comparison to the general population (about 25% vs. 20%). There are several factors that could be contributing to this, such as the immense amount of stress and pressure Canadians are experiencing while at work. Statistics Canada (2012) has reported over 8.4 million Canadians rate their job as slightly to moderately stressful, and an additional 5.4 million people rate their job as extremely stressful. Given the growing body of research linking stress to poor physical and mental health (for a review see Cooper, 2013), these statistics on workplace stress are worrisome. Additionally, there is some evidence to suggest that work experiences may exacerbate personal struggles or trigger mental health concerns (Blustein, 2008; Fouad & Bynner, 2008). Namely, research has shown psychosocial risk factors (e.g., role stressors, having to deal with work demands outside of job description) and working conditions (e.g., policy changes outside of one's control, work transitions, compensation) as perpetuating factors for employees' mental health concerns (Sauter, Murphy & Hurrell, 1990; Fouad & Bynner, 2008). Taken together, the mental health of workers is of significant concern and needs to be explored further in order to improve employee supports, establish better pathways to care, and implement preventative practices to promote the well-being for all.

Another important factor to consider when exploring workplace mental health is an individual's work-life conflicts due to caregiving responsibilities. A study by Duxbury and Higgins (2012), explored the work-life experiences of over 25,000 Canadian employees. The results revealed that the majority of individuals (60%) reported working more than 45 hours per week outside the home (36% work 35-44 hours per week; 4% work less than 35 hours per week) and more than half (54%) took work home, amounting to on average of an additional 7 hours of work per week. Two thirds of the sample had children and half of the sample was responsible for childcare on a regular basis, totalling to an average commitment of 21.3 hours per week outside of work. Additionally, 73% of individuals were responsible for caring for one or more elderly dependents (20% care for one elderly, 22% care for two elderly, 31% care for three or more elderly persons), with a significant portion of elderly dependents living more than an hour away from the caregiver (42%). A third of the participants had caregiving responsibilities for both their children and elderly dependents. Importantly, the researchers highlighted that approximately half of the respondents had many different high energy/demanding roles (e.g., 4-9), which often came into in conflict with one another. Of these, employment and family roles were listed as being most often in conflict, with one in three participants identifying work-family conflicts as an ongoing concern. Furthermore, one in four reported that work-life conflicts have negatively affected their work, most commonly resulting in decreased productivity, increased absences, and decreased total hours worked. Additionally, one in three participants reported work-life conflict has greatly impacted the amount of sleep they get, their energy level, and the amount of time they can allocate to self-care and social activities. One in five participants experienced high levels of caregiver role strain due to these conflicts, which often resulted in physical challenges, feeling emotionally overwhelmed, and financial burdens (Duxbury & Higgins, 2012).

Another study on work-life conflicts by Glavin and Peters (2015) revealed that individuals with caregiving responsibilities (e.g., for children and/or elders) do not adjust their work or employment commitments to compensate for their heightened personal demands, rather, they actually have very similar employment experiences, in terms of hours of working, to those without caregiving responsibilities. As a result, caregivers report higher levels of work-family conflicts, role overload, caregiver strain, and more work-to-family as well as family-to-work spillover than non-caregivers. Interestingly, women caregivers reported higher levels of psychological distress and lower levels of mastery than women who were not caregivers. This relationship was not present for male caregivers. The authors concluded that women are “more adversely affected by care giving demands than men” and that caregiving responsibilities should be considered when exploring the mental health of professional women (Glavin & Peters, 2015). Duxbury and Higgins (2003) also highlight the need to explore caregiver roles as they have found that “the role of the working mother is quantifiably different from the role of working father and these differences are having a negative impact on the mental health of working mothers”. It is possible that social, workplace or family factors are influencing this, however that is yet to be determined.

Therefore, it is evident from the recent published literature that the majority of employed Canadians are working long hours *and* are responsible for providing ongoing care to their children and/or senior family members. Additionally, they do not adjust their work schedule to accommodate their life demands (specifically, caregiving), which often generates work-life conflicts. This in turn, creates feelings of caregiver strain, and for women, psychological distress and decreases in feelings of mastery. Thus, it is imperative that caregiving responsibilities are

considered when examining employee mental health, particularly in occupations where the workforce is predominantly women.

### **Teacher Mental Health**

In exploring mental health in the workplace, particular attention has been paid to the professions that are characterized by high demands and social interactions such as those within the health care or social service systems (Maslach, Schaufeli & Leiter, 2001). Professionals within the education system often face similar levels of work demands and social pressures at work, but are largely ignored in research on workplace mental health. Indeed, the majority of the psychological literature pertaining to schools or the education system more broadly, focus on student mental health (e.g., Kutcher, Venn, & Szumilas, 2009), teacher reactions to violence in schools (e.g., Wilson, Douglas & Lyon, 2011), and occupational stress (e.g., Betoret & Artiga, 2010; Fernet, Guay, Senecal & Austin, 2012; Reichel, 2013). Even though literature on occupational stress fails to consider many factors that influence teacher mental health (e.g., personal psychological factors such as self-control, context of teaching etc.) it can provide some insight into the psychological well-being of teachers for the purposes of this research.

Teachers and educational professionals comprise a significant portion of the work force, with 1.2 million workers employed in educational services across Canada (Statistics Canada, 2012). Although there is a lack of research that has reported the prevalence of mental illness within the teaching population, it can be inferred from the prevalence of mental health in the working population that approximately 25% of educators are struggling with their mental well-being in some way. Significantly, with over 440,000 educational professionals residing in Ontario (Statistics Canada, 2012), it can be hypothesized that over 110,000 educators in Ontario alone could be experiencing a mental health issue.

To parallel findings regarding stress from workplace mental health literature, stress is frequently experienced by and become a distressing concern for teachers. Indeed, research has consistently demonstrated that teaching professionals are vulnerable to experiencing high levels of occupational stress (Ferguson, Frost & Hall, 2012; Vesely, Saklofske & Leschied, 2013). A recent survey in Ontario revealed that 70% of teachers experienced an increase in their level of stress in the past several years (OSSFT, 2014 as cited in Rodger et al., 2015). Furthermore, a study conducted by Martin, Dolmage and Sharpe (2012) indicated that approximately 43% of teachers experience high levels of emotional exhaustion regularly, and 61% have a stress-related illness. Of the 61% of teachers who have a diagnosed stress-related illness, a mental and/or behavioural disorder (e.g., anxiety, depression etc.) was the second most common condition, only after migraine headaches. The same study revealed that the majority of teachers in the sample experienced frequent emotional problems, such as symptoms of depression and other mood disorders. Thus, the results from this study suggest a strong link between elevated occupational stress and poor mental health in teachers (Martin et al., 2012). Other researchers have also begun to highlight the link between stress and mental health in teachers, with findings that propose that high levels of occupational stress can result in chronic frustration, decreased job satisfaction, as well as increased anxiety, irritability, psychosomatic symptoms, emotional exhaustion and depressive symptoms (e.g., Vesely et al., 2013; see Chan, 2006 for a review). Therefore, despite the limited research specifically looking at teacher mental health, there is now evidence to support the link between stress and mental health in teachers as well as evidence suggesting that many teachers are struggling with mental health concerns.

## **Teacher Burnout**

Teaching has been noted to be one of the most important careers in modern day (Vesely et al., 2013), yet, there is a very concerning trend in the profession; burnout. Teachers have been shown to have the highest burnout rate of any profession, with 30-50% of teachers leaving within the first five years of employment (Ingersoll & Smith, 2003; Reichel, 2013). Burnout in this context, can be defined as emotional or physical exhaustion that occurs when an individual's coping, stress responses and resources are drained in response to their occupational demands (Betoret & Artiga, 2010; Fernet et al., 2012). Burnout is often characterized by feelings of emotional exhaustion, inadequacy and depersonalization (Maslach et al., 2001). Individuals struggling with these symptoms often lack the social and psychological resources to offer support to others and can become detached and develop an apathetic attitude towards work in general (Maslach et al., 2001). Additionally, teachers experiencing burnout can be at risk of developing mental health concerns due to low self-esteem, social withdrawal, reduced concentration, self-blame, and depressive moods and symptoms (Papastylianou, Kaila & Polychronopoulos, 2009). Research has also linked feelings of burnout with poor job satisfaction (Skaalvik & Skaalvik, 2010), negative perceptions of self-efficacy (Brouwers & Tomic, 2000; Schwarzer & Hallum, 2008; Skaalvik & Skaalvik, 2010), decreased physical health (Hakanen, Bakker & Schaufeli, 2006), lower motivation (Hakanen et al., 2006; Schaufeli & Salanova, 2007), increased doubt towards teaching ability (Schwarzer & Hallum, 2008; Skaalvik & Skaalvik, 2010), and intention to leave profession (Leung & Lee, 2006). In fact, burnout is thought to be the top reason why teachers leave the profession early in their career (Oberle & Schonert-Reichl, 2016). Evidently, it is important to take a closer look at teachers' mental health

and explore the context of teaching in order to understand how to better support teachers and prevent burnout.

### **The Context of Teaching**

Literature pertaining to occupational stress and efforts to alleviate the impact of such are fairly well documented in many professions (e.g., Richardson & Rothstein, 2008), however much of the research cannot be applied to teachers or school settings. This is due to the fact that teaching is a very unique profession that has many distinctive contextual factors and responsibilities that separate it from other occupations. Namely, teachers have a unique role in supporting the lives of youth, they have distinct pressures not experienced by other professionals, and teaching is one of the only professions where novice workers are given the same amount of responsibilities as experienced workers. To provide greater context for the unique role teachers have, each of these will be explored in detail below.

First, teachers have a unique role in supporting the lives of children and youth. Teachers' occupational competencies directly affect the social, cognitive, and emotional development of all the children they teach on a daily basis (Darling-Hammond, 2008). This not only has significant implications for the intellectual achievements and the emotional well-being of students long term (Darling-Hammond, 2008), but also for society as a whole, as teachers are responsible for shaping the generations to come (Physical & Health Education Canada, 2014). Furthermore, teachers are acting in *loco parentis*, meaning they take on some of the responsibilities and functions of a parent, for up to 30 children at a time (Pianta, Nimetz & Bennett, 1997; Kiuru et al., 2012). This is especially significant for younger students in critical developmental periods, as teachers have been shown to facilitate the development and maintenance of interpersonal, self-regulatory, and task-oriented competencies (Pianta et al., 1997). In no other occupation are



professionals placed in such a momentous position to influence the intellectual and social learning for a large group of youth on a daily basis.

Second, teachers face many unique challenges and have a significant amount of pressure not experienced in other occupations. To start, teachers must understand the different academic abilities of each student in their class and tailor lesson plans accordingly, within the boundaries of the strict curriculum guidelines mandated of them (Darling-Hammond, 2000). This becomes difficult when teachers are trying to manage multiple students' individualized challenges, such as intellectual disabilities, externalizing behaviours (e.g., aggression, hyperactivity), language barriers (i.e., English as Second Language), social concerns, mental illnesses etc. (Rothi, Leavey & Best, 2008). To add to the complexity, in today's classroom, there often is not just one student that requires specialized support, but rather upwards of 7 students out of a maximum of 30 students in each classroom (Research and Assessment Services, 2015). This highlights the necessity for teachers to be knowledgeable and competent in facilitating learning in tailored ways *and* supporting students in ways that are above and beyond their general job descriptions with very little support. In a recent survey of teachers in Ontario, Canada the majority of teachers (79%) stated they "changed the way they interacted with students they perceived as having emotional or behavioural issues to reach the students more effectively" (Research and Assessment Services, October 2015). Examples of actions taken by the teachers were: listening to what child had to say and provided empathetic support, advocating for the child and seeking consultation with the guidance counsellor/social worker/support staff, implementing proactive plans to support the child's behavioural needs in the classroom, and developing a collaborative plan with the student. Thus, it is clear that teaching lesson plans is only the beginning of what teacher's do and are responsible for on a daily basis. Additionally, Linda Darling-Hammond

(2000), a researcher from Stanford University, states teaching requires immense perspective taking and a great understanding of the diverse experiences of students with regards to culture, privilege, skills, and the base level knowledge they bring into the classroom. Furthermore, teachers must deal with complex classroom dynamics and facilitate learning even in the presence of conflicts between students (Rothi et al., 2008). Teachers must also be able to observe their student's behaviour and tendencies over time and adjust their communication style to build a relationship with each student (Physical & Health Education Canada, 2014). These types of complex social and emotional demands are very unique to teaching and require ongoing responsiveness and adaption on behalf of the educator.

Third, teaching is one of the only professions where novice workers are given the same level of responsibilities as experienced workers. Thus, teachers are expected to perform as an expert immediately when they enter the workforce (Feiman-Nemser, 2003), possibly contributing to the elevated levels of stress and risk of burnout in the first five years of teaching (Reichel, 2013).

It is important to note too, that teachers have received increased pressure in the past few years to be on the front line of children's mental health efforts, whether that be prevention, early identification, intervention programming, or ongoing treatment support, with little to no training or support for this new responsibility (Physical & Health Education Canada, 2014). In fact, no teacher training programs in Canada mandate preservice students to take any type of psychology class throughout their training (Darling-Hammond, 2000; Rothi et al., 2008; Physical & Health Education Canada, 2014) – a failure on behalf of the education system many are trying to change.

Certainly it is evident that teaching is a unique profession, carrying a high level of responsibility and pressures not experienced by other working professionals, as well as dynamic and ever changing working conditions. Therefore, research and interventions on general workplace mental health cannot be generalized to front line educational professionals. Indeed, teaching warrants specialized attention in the field and deserves to be prioritize for research and practical endeavours in the years to come. In order to do so, however, it must be understood how teachers' mental health and feelings of burnout actually impact teaching abilities and student's well-being and performance.

### **The Implications of Teacher Mental Health & Burnout**

Research has demonstrated that many factors influence a teacher's ability to perform in the classroom, with psychological health being increasingly recognized as one of the most important factors in teacher efficacy (Chang, 2009; Fernet et al., 2012; Vesely et al., 2013). This originally stems from literature suggesting emotional well-being affects teachers' perceptions and experience of stress in the workplace, as well as generating vulnerability to emotional exhaustion and burnout (Ferguson et al., 2012; Martin et al., 2012; Antoniou, Ploumpi, & Ntalla, 2013). However, more recently, studies have shown teachers' psychological well-being as a facilitator of competency as well. Not surprisingly, poor mental health can have serious consequences on teachers' well-being, job satisfaction, and productivity, and can lead to work alienation (Chan, 2006). Further, poor psychological well-being has been linked to decreased caregiver sensitivity (Gerber, Whitebook & Weinstein, 2007), which is a key component of teacher-child relationships. Research suggests beneficial teacher-child relationships facilitate positive early educational experiences and favourable developmental outcomes for children (Pianta et al., 1997; Gerber et al., 2007). More generally, mental illness has been linked with increases in

absenteeism, poor mental alertness, emotional exhaustion, sleeping problems, and poor physical health, all of which can have negative effects on work performance and in turn, students' abilities to learn (Danna & Griffin, 1999).

Accordingly, poor teacher mental health can have serious detrimental effects on the academic outcomes of students (Chan, 2006), as teachers play a vital role in student learning and achievement (Darling-Hammond, 2000; Vesely et al., 2013; Physical & Health Education Canada, 2014) and are unlikely to perform optimally when they are struggling with their own mental health concerns. Support for this was published in a recent study by Arens & Morin (2016), which found a direct link between teacher's levels of emotional exhaustion and elementary student's academic achievement. Specifically, teachers who were suffering from high levels of emotional exhaustion had students who performed significantly worse on standardized tests than students who were taught by teachers who were not emotional exhausted. The authors believed teachers who were emotionally exhausted possibly lacked the ability to provide high quality instruction that would be necessary to properly prepare their students to meet curriculum standards. This study also revealed a negative correlation between teachers' emotional exhaustion and student's school satisfaction and ratings of teacher support (Arens & Morin, 2016).

Student behaviour has also been shown to be closely related to teacher stress and behaviour (Physical & Health Education Canada, 2014); teachers who have difficulty regulating their emotions or who display more negative emotions at school tend to have students who experience more negative emotions in the classroom (Ciarrochi & Mayer, 2007). To conceptualize this trend, Jennings & Greenberg (2009) developed a model that proposes a cyclical pattern between teacher and students' well-being and reactivity; as emotionally exhausted teachers experience

cumulative stressors in the classroom, they are more likely to use more reactive and punitive management strategies rather than responsive strategies. This in turn leads to classrooms where the emotional needs of the students are not met, causing students to also act reactively and they manifest disruptive behaviours. This can create more stress for both the students and the teacher, contributing to the teacher's feelings of burnout and a negative classroom environment for all (Jennings & Greenberg, 2009). One of the most important research findings connecting student and teacher stress was published by Oberle & Schonert-Reichl in 2016. Oberle & Schonert-Reichl (2016) discovered students' morning cortisol levels (a measure of stress) significantly predicted teachers' level of burnout, even after controlling for age, gender, and time of waking up in the morning. The findings also revealed that teacher burnout was predictive of students' cortisol levels. These results are crucial as this is the first time teacher's stressful occupational experiences have been directly linked to students' biological stress response levels and the first time students' levels of stress have been clearly linked to stressors in the school environment.

Considering the potential negative outcomes of poor teacher mental health on both the teachers' own well-being and their students' well-being and learning, it is important to explore how to best support teachers. Furthermore, it is important to explore how to help teachers improve upon their own personal skills, competencies and well-being to become more effective and engaged professionals.

### **Emotional Intelligence**

Emotional intelligence (EI) is a concept that has recently received increased attention within psychological literature and popular culture over the last several decades (Petrides & Furnham, 2001). Generally, when talking about emotional intelligence, the concept refers to one's abilities to identify, regulate, and process emotions (Vesely, Saklofske & Nordstokke,

2014). However, since the emergence of EI in the early 1980's (e.g., Gardner, 1983 or Payne, 1986, as cited by Petrides & Furnham 2001), the term has transitioned through several theoretical advances and has now split into two distinct perspectives; the ability model and the trait model (Petrides, Furnham & Mavrovelo, 2008; Nelis, Quoidbach, Mikolajczak & Hansenne, 2009). The ability model is a cognitive-emotional framework that defines emotional intelligence as a linear progression of one's ability to identify, use, understand, and process emotions (Mayer, Salovey & Caruso, 2004; Nelis et al., 2009). In contrast, the trait model describes EI as behavioural dispositions and self-perceived abilities part of one's personality that are related to emotional self-efficacy (Petrides & Furnham, 2001; Petrides, Perez-Gonzalez, & Furnham, 2007). The two are not mutually exclusive constructs and co-exist within individuals, as everyone has the *ability* to experience emotions (Petrides & Furnham, 2001; Petrides et al., 2008). However, researchers suggest the trait model is more consistent with literature in psychology and theories on individual differences in personality and emotionality (Petrides et al., 2008), thus it will be the focus in this research. Additionally, there is extensive empirical evidence linking trait EI to a variety of behaviours and abilities (Petrides & Furnham, 2001), with an overall consensus that trait EI facilitates individuals' well-being, quality of life, and success (Austin, Saklofske & Egan, 2005; Nelis et al., 2009). One of the most important elements of trait EI that makes it stand out from other similar social, emotional, or intellectual constructs, is that it can be taught and individuals can show improvements that will have lasting effects on their life (Nelis et al., 2009; Vesely et al., 2013).

### **Theory of Trait Emotional Intelligence**

The basic philosophy underlying the theory of trait emotional intelligence (EI) is the idea that cognitive abilities are *not* the only predictor of success and adaptation; rather, emotional

competencies are important factors to consider as well (Nelis et al., 2009). Again, trait emotional intelligence, sometimes referred to as trait emotional self-efficacy, can be seen as a constellation of emotional and behavioural dispositions of personality, including empathy, social intelligence, and emotional knowledge and abilities, among others (Petrides & Furnham, 2001). Trait EI concerns an individual's self-perception of abilities and is complementary to the ability model of EI (Petrides & Furnham, 2001). Mayer and colleagues (2004) add to this by suggesting trait EI is comprised of abilities that operate on and with emotional information – that is, those which concern one's understanding of the meaning of emotion, emotional patterns, and the appraisals of relational interactions that evoke emotions. Thus, a large component of trait EI involves understanding relationships and processing emotional and social information (Mayer et al., 2004).

Petrides and Furnham (2001) developed a comprehensive inventory to outline all of the aspects of trait EI. The general framework incorporates 15 specific **facets**: adaptability, assertiveness, appraisal of emotion in self/others, emotion expression, emotion management of others, emotion regulation, impulsiveness, relationship skills, self-esteem, self-motivation, social awareness/competence, stress management, trait empathy, trait happiness, and trait optimism (Petrides & Furnham, 2001; see Appendix A for an example of each facet). However, the theory has grouped these facets into broader categories, called **factors**, which summarize individuals' abilities on the 15 different facets (Petrides, 2011). There are four factors of trait emotional intelligence: Well-being, Self-control, Emotionality, and Sociability (Petrides & Furnham, 2001; Petrides, 2011; see Appendix B for outline of which facet belongs with each of the four factors). It is important to note that the four factors are correlated to one another and should not always be looked at as distinct features of EI in real life applications (Austin et al., 2005; Petrides &

Furnham, 2001). Nonetheless, the factor groupings are an easy way to conceptualize emotional intelligence, and thus will be utilized to understand EI in this context.

Trait EI has been fairly extensively studied in regards to personality theories, such as the Five Factor Model and Eysenck's Factor Model (Petrides & Furnham, 2001). Research suggests that trait EI is "a composite construct that belongs on the lower-order stratum of established personality taxonomies" (Petrides & Furnham, 2001). This means that trait EI is not one of the core elements of personality (e.g., in the Five Factor Model, EI does not belong on the same level as Openness or Agreeableness), but rather belongs on a sub factor level because it is highly correlated with several core traits (Petrides & Furnham, 2001).

### **Emotional Intelligence & Mental Health**

Literature regarding the link between trait emotional intelligence (EI) and health, particularly mental health, is limited (Austin et al., 2005). However, trait EI (referred to as EI from this point forward) has been associated with a wide range of positive behavioural outcomes, greater life satisfaction, and increased quality of life (Mayer et al., 2004; Austin et al., 2005). Nelis and colleagues (2009) summarized an extensive scope of literature and suggested that there is great support for the positive relationship between EI and well-being (e.g., Petrides, Pita & Kokkinaki, 2007), and some research to support a negative relationship between EI and psychopathology (e.g., depression; Dawda & Hart, 2000; Slaski & Cartwright 2002). Some researchers also hypothesize that individuals with higher levels of EI are less likely to engage in self-destructive behaviours than those with lower EI (Mayer et al., 2004). More generally, high EI is associated with greater academic performance, enhanced communication skills, higher levels of openness and agreeableness, better quality of social interactions, and greater occupational success – all attributes that can increase one's mental well-being (Mayer et al.,



2004; Austin et al., 2005; Nelis et al., 2009). Additionally, EI has been shown to be a significant moderator of stress responses and is associated with higher job performance, especially for jobs with high levels of interpersonal contact, such as teaching (Nelis et al., 2009; for a review see Daus & Ashkanasy, 2005).

### **Emotional Intelligence in the Context of Teaching**

As previously mentioned, the significant demands placed on teachers has led to high levels of stress, poor coping, and high rates of emotional exhaustion and, in some cases, burnout (Vesely et al., 2013). With recent literature suggesting EI as a promising mechanism that can help limit occupational stress and improve mental health (Nelis et al., 2009), it is possible that these negative experiences do not have to be the norm for teachers.

Some research is beginning to emerge on teacher EI and its relation to teaching abilities. For example, there is some evidence that teachers with higher EI are more attuned to the emotional needs of others, are better able to regulate their own emotional responses, and are more effective at teaching overall (Won, Won & Peng, 2010; Perry & Ball, 2007). Socially and emotionally competent teachers are also more self-aware and have the social awareness and skills to develop strong, supportive relationships with their students (Jennings & Greenberg, 2009). Additionally, teachers with high EI respond more effectively in negative situations (Perry & Ball, 2007) and perceive teaching demands to be more of a challenge than a threat, which can help alleviate distress and make tasks more manageable (Vesely et al., 2013). More generally, EI could potentially promote and maintain effective teaching (Perry & Ball, 2005) due to the fact that many of the facets of trait EI parallel the skills that contribute to teacher competency (e.g., social skills; Vesely et al., 2013). Thus, EI is a promising avenue to explore when trying to

understand teachers' well-being and subsequently, when trying to help teachers improve their personal and professional abilities.

### **Increasing EI with Intervention Programs**

There is a significant amount of research linking EI with positive outcomes, abilities, and skills, and more recently, linking EI to mental health (e.g., Petrides et al., 2008). Given these relationships, the next step would be to assess how to improve EI through intervention programming. Despite research showcasing effective programs for increasing employees' EI in the workplace (e.g., Hansen, Garder, & Stough, 2007), very few studies exist showcasing EI programs for teachers, and even less with positive outcomes. As mentioned, teaching is a very unique workplace with high level of social interaction, unique and dynamic responsibilities, and distinctive environmental features that make it unlike any other profession (Darling-Hammond, 2000). Thus, the lack of significant improvement in teachers' abilities from general EI interventions is likely due to the programs being generalized to this occupational group without consideration of different contextual factors.

To date, only a few studies have been published that have tailored EI interventions to target teachers' emotional and learning needs. This is possibly due to the fact that teachers' experiences in schools and their mental health are topics largely ignored in research, so there is a lack of understanding as to how the programs could be effectively changed or improved to suit their unique needs. One recent study explored an EI training program to increase pre-service teacher well-being using a Canadian sample (Vesely et al., 2014). Results showed some success in increasing EI scores after a 6 week program, but a small sample size and inability to control for extraneous variation leaves this EI program limited in its generalizability to the larger population. Additionally, this was a sample of pre-service teachers, so their current pressures and

level of coping might be significantly different from teachers in service, especially from those that have a decade or more of direct teaching experience. As a result, the authors highlight the significant need for future studies to explore the connection between trait EI and teacher mental health in a Canadian sample, in order to understand how to improve EI intervention targets. Note, looking at a Canadian sample is vital because school systems in each country differ significantly in their systemic set up (Perry & McConney, 2013), thus, results from other countries about the experiences or intervention components may not be generalizable to conditions of educators working in Canadian educational institutions.

### **Purpose of the Study & Rationale**

The purpose of the current study is to explore the association between trait emotional intelligence and the mental health of Canadian teachers in relation to feelings of burnout. As identified previously, mental health continues to be an ongoing concern for Canadian employees, and teachers are no exception. In fact, teachers are often at an increased risk for high occupational stress (Vesely et al., 2013), which has been shown to contribute to mental health difficulties and the highest burnout rate among all professions (Reichel, 2013). Given the unique makeup of the teaching profession and the significant role teachers have in supporting and shaping the next generation, it is imperative that we provide teachers with the skills and support they need to perform effectively and maintain positive mental health (Vesely et al., 2013). Research has suggested emotional intelligence may be the key teachers are missing (Vesely et al., 2013). Not only have high levels of EI been linked to positive psychological health, but also higher levels of teacher motivation and competency (Perry & Ball, 2005; Vesely et al., 2013).

On the contrary, there is very limited research focused on the mental health of teachers, especially within a Canadian context. Additionally, little is known about how EI specifically

relates to teacher mental health in modern day and if all elements of EI are important for teachers. It may very well be that certain factors or facets of EI are more influential in helping teachers cope with occupational stress and overcome feelings of burnout to perform effectively at their jobs. Therefore, more research is needed to explore the link between trait EI, teacher mental health and burnout in Canada. It is important to note too, that well-established researchers have highlighted a significant need to explore trait EI with different populations widely unstudied and in different contexts to fully understand the breadth of EI in practice (Mayer et al., 2004). Furthermore, large scale samples using rigorous research methodologies are of utmost value at this time based on the state of the current literature (Mayer et al., 2004). The current study aims address these requests.

### **Research Questions & Hypotheses**

Given that this is an exploratory study, the research questions and hypotheses are stated broadly. This was done in order to provide some guidance for the research but to limit biases in interpretations. Two research questions were established, with corresponding hypotheses.

1. To what degree is emotional intelligence associated with Canadian teachers' mental health? It was hypothesized that emotional intelligence will have a negative relationship with mental health, such that the higher an individual's emotional intelligence, the lower their mental health distress (i.e., the better their mental well-being).
2. What aspect of emotional intelligence is most predictive of mental health in teachers? It was hypothesized that Self-control would be most highly correlated with mental health in teachers due to the factor of Self-control encompassing emotion regulation, stress management and impulse control skills.

## **Methodology**

### **Design**

The current study was an exploratory investigation into teacher mental health, emotional intelligence, and feelings of burnout. The study was conducted as a descriptive field design using an online questionnaire administered between December 2014 and January 2015. The survey was titled “Teacher Mental Health and Wellness Survey” and only required anonymous self-report responses. The primary researchers collected the data and a secondary data analysis was conducted for the purposes of this research.

### **Participants**

In order to be eligible to participate, individuals had to be a member of either the selected teachers’ federation or the selected teachers association during the time period in which the survey was active. Teachers and educational professionals who were not part of one of these organizations were ineligible.

The total sample of individuals who completed the survey ( $n = 600$ ) included teachers and other educational professionals, such as learning support staff, social workers and department chairs. For the purposes of this study, only teachers were included. Therefore, other educational professions ( $n = 133$ ) were removed from the sample due to their occupational role. The final sample consisted of 467 teachers who were employed in Canada at the time of the study. Full-time classroom teachers comprised 90.8% of the sample, which includes those on long term contracts and occasional teaching status working full time. Part time classroom teachers made up the remainder of the sample at 9.2%. More descriptive statistics about the sample are found below under results.

**Procedure**

Participants were recruited through two partnering organizations: a provincial federation and a national professional association. The federation placed a recruitment script (see Appendix C) and the link to the survey on their webpage. The association put the recruitment script in their regular electronic monthly newsletter and emailed it to all the members on their email subscription list.

The survey was hosted by Qualtrics, a secure online server associated with Western University, and was available from December 9, 2014 until January 22, 2015 to current members of OSSFT and PHE Canada. Participants could complete the survey at their leisure on any computer with internet access. Once subjects were linked to the survey, they were presented with a letter of information (see Appendix D) outlining the purpose of the study, inclusion/exclusion criteria, the procedure, possible risks/benefits, compensation, confidentiality, and the contact information of the researchers. The participants were also informed that their participation was completely voluntary and they could withdraw their participation from the study at any time, for any reason without consequence. At the end of the letter of information, participants confirmed their consent. After the completion of the survey, participants were provided with a list of mental health resources in their area (see Appendix E) and were encouraged to contact one if they experienced any emotional distress as a result of answering the survey. No identifying information was collected, therefore all responses were anonymous. The questionnaire took approximately 30 minutes to complete and consisted of 9 measures (see Measures below). There was no incentive to participate.

### **Protection of Human Rights**

The primary researchers obtained ethics approval from the Western University Research Ethics Board (see Appendix F) before administering and collecting data for the “Teacher Mental Health and Wellness Survey”. The researchers were committed to ethical practice and all research was conducted according to strict ethical guidelines. Protocols for data access and storage were maintained as per the ethical guidelines set by the Western University Research Ethics Board, including having all data and statistical files stored on password protected computers. Note that all data was anonymous so there was no risk of linking answers to individual respondents, increasing protection for participants.

### **Measures**

The teacher mental health survey was comprised of 9 inventories: a demographic questionnaire, WHO Quality of Life Survey, Attitudes Towards Seeking Professional Psychological Help Scale, Stigma Towards Seeking Professional Psychological Help, Stigma Scale for Receiving Psychological Help, Sources of Stress scale, Stress in the Workplace scale, Teacher Burnout Measure (TBM), K6 Mental Health Screening Tool, and the Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF). For this research study, only the K6 Mental Health Screening Tool, the Teacher Burnout Measure, and the TEIQue-SF were used to explore the relationship between mental health, teacher burnout, and emotional intelligence within a sample of Canadian teachers. The demographic questionnaire was utilized to provide sample descriptive statistics and to control for potential confounding variables.

#### **K6 Mental Health Screening Tool**

The K6 Mental Health Screening Tool (see Appendix G) was developed by the National Centre for Health Statistics in the United States for the purposes of capturing serious mental

health concerns within the general adult population for the U.S. National Health Interview Survey (NHIS; National Comorbidity Survey, 2005; Kessler et al., 2010). This measure is a 6-item assessment tool utilizing a 5-point Likert scale (with 0 = all of the time, and 4 = none of the time) to identify the frequency and impact of negative feelings (Zaslavsky, 2011). Kessler and colleagues (2010) suggest a score of 13 or above to indicate the presence of a severe mental illness, which has been validated in other research to be clinically sound (Prochaska et al., 2012). The K6 has demonstrated excellent validity across a variety of racial/ethnic groups and reliability in capturing a diverse range of mental health concerns (Prochaska et al., 2012). The Cronbach's Alpha reliability statistic for the items on the K6 for the present study was .822 ( $n = 8$ ).

### **Teacher Burnout Measure**

The Teacher Burnout Measure (TBM; see Appendix H) was developed by researchers Wrench, Richmond, and Gorham (2001) as a way to capture the frequency and severity of burnout symptoms experienced by teachers. This measure is a 20-item assessment tool utilizing a 5-point Likert scale with 1 indicating "strongly disagree" and 5 indicating "strongly agree" (Richmond, Wrench & Gorham, 2001). The item responses are summed to generate a total score. The higher the score, the higher the feelings of burnout. Based on research from the developers (Richmond, Wrench & Gorham, 2001), a score between 56 and 70 indicates substantial burnout feelings and a score over 71 indicates severe burnout experience. The Cronbach's Alpha reliability statistic for the items on the TBM using this survey data was .919 ( $n = 20$ ).

### **Trait Emotional Intelligence Questionnaire – Short Form**

The Trait Emotional Intelligence – Short Form (TEIQue-SF; see Appendix I) was developed by Petrides and Furnham (2006) to measure trait emotional intelligence in adults. It captures the four different factors of EI (Emotionality, Sociability, Self-control, and Well-being)



using 30 items. Participants respond to each statement on a 7-point Likert scale, with 1 meaning “completely disagree” and 7 representing “completely agree”. Response values are totaled and the higher the overall value, the greater level of global trait emotional intelligence. Four factor scores are also generated using the 30 items, with certain item scores being totalled for each factors score: Emotionality (n = 8), Sociability (n = 6), Self-control (n = 6), and Well-being (n = 6). Research provides evidence for high criterion (Petrides, Perez-Gonzalez & Furnham, 2007), construct and incremental validity (Siegling, Vesely, Petrides & Saklofske, 2015) as well as good test-retest reliability (Cooper & Petrides, 2010). Additionally, a Cronbach’s alpha of .88 for males and .87 for females has been reported, representing high internal consistency (Petrides, Perez-Gonzalez & Furnham, 2007). The Cronbach’s Alpha reliability statistic for the items on the TEIQue-SF for the present study was .889 (n = 30).

### **Analysis**

Data from the online survey was entered into the Statistical Package for the Social Science (SPSS) 24. Frequencies and descriptive statistics were run for each of the scales and their items. One score was generated from the K6 to represent overall mental health, one score was generated from the Teacher Burnout Measure to represent overall experiences of burnout, and one score was generated for the TEIQue-SF representing global trait emotional intelligence. Additionally, four scores were created from the TEIQue-SF, each representing functioning level for each of the four factors of trait emotional intelligence: Emotionality, Sociability, Well-being, and Self-control. Bivariate correlations were run to produce Pearson R correlation coefficients between mental health (K6 total score), burnout (TBM total score), and emotional intelligence (TEIQue-SF global score). Next, a multiple regression analysis was conducted using the four EI factors as combined predictors of mental health (measured by the K6 score). Correspondingly, a step-wise

regression was run to determine how each of the four factors of EI predicted mental health (using the K6). Additionally, a MANCOVA was run using mental health (K6) and burnout (TBM) as dependent variables and caregiving responsibilities as an independent variable. Emotional intelligence (TEIQue-SF) was used as a covariate to remove any variance due to the correlation between EI and mental health as well as burnout.

## Results

There were 467 teachers who completed the survey from December 2014 – January 2015.

### Demographic Information

Table 1 highlights the general demographic information of the Canadian teachers who completed the survey. The majority of the sample was female (68%; 31% male; 1% transgender), and although this might appear to be skewed, this is an accurate representation of the educational landscape in Canada (Rice & Prince, 2000; Statistics Canada, 2014). The mean age of the sample was 42.98 years ( $SD = 9.02$ , range = 24-70) and the majority were married (78%; 22% single) and had at least one child (70%; 30% had no children). Approximately 21% of teachers were also caring for at least one family member, most commonly an aging parent or an adult sibling with a disability. Further, 14% of teachers were caring for both their own children and a family member. It is important to note as well, that the majority of the sample was currently living in a neighbourhood with a population below 200,000 (79%,  $n = 324$ ).

Table 2 presents school information pertaining to the teachers in the sample. Teachers had on average 15.5 years of experience ( $SD = 7.93$ , range = 1-43). Participants identified how many levels (i.e., primary, junior, intermediate, senior, alternate, other) they had taught in within the past year and the largest number of responses were recorded for “two levels” (48%), closely followed by “one level” at 45%. About half of teachers ( $n = 233$ ; 50%) had selected “intermediate” as their first selection for current teaching level. Additionally, the majority of teachers had taught in 3 schools or less throughout their careers (58%), but some have taught in up to 10 different schools. A significant portion of the sample volunteer extra time at their school (81%) and a considerable percentage of the teachers also volunteer externally on a regular basis (46%).

Table 1

*Teacher Demographics: General Information*

General Information	N	%
Gender	457	
Male	141	30.9
Female	311	68.1
Transgender	5	1.1
Age	451	
24-36	115	25.5
37-42	118	26.2
43-50	111	24.6
51-70	107	23.7
Marital Status	465	
Married	362	77.8
Single	103	22.1
Children	466	
No	139	29.8
Yes	327	70.2
Ages 0-2	53	11.3
Ages 3-6	85	18.2
Ages 7-11	91	19.5
Ages 12-18	102	21.9
Ages 19-25	84	17.9
Ages 26+	34	7.3
Support Parents/Adult Siblings	450	
No	354	78.7
Yes	96	21.3
Support Children & Parent/Sibling	467	
Care for neither	109	23.3
Care for children or parent/sibling	293	62.7
Care for both children & parent/sib	65	13.9
Population of Community	409	
Under 5,000	44	10.8
Between 5,001 & 15,000	47	11.5
Between 15,001 & 50,000	52	12.7
Between 50,001 & 100,000	59	14.4
Between 100,001 & 200,000	122	29.8
Between 200,001 & 500,000	40	9.8
Between 500,001 & 1,000,000	19	4.6
Over 1,000,001	26	6.4

Table 2

*Teacher Demographics: School Information*

School Information	N	%	M	Median	SD	Range
# of years teaching	464		15.52	14	7.93	1-43
# of schools taught at	463		3.62	3	2.34	1-10
Level(s) taught in past year	465		1.62	2	.64	1-4
1	211	45.4				
2	222	47.5				
3	28	6.0				
4	4	.9				
Level teaching (first selected)	465					
Primary	34	7.3				
Junior	15	3.2				
Intermediate	233	50.1				
Senior	157	33.8				
Alternative	12	2.6				
Other	14	3.0				
Occupational Title	467					
Full-time Classroom Teacher	396	84.8				
Full-time LTO Teacher	17	3.6				
Full-time Occasional Teacher	11	2.4				
Part-time Classroom Teacher	24	5.1				
Part-time LTO Teacher	6	1.3				
Part-time Occasional Teacher	13	2.8				
Volunteer work at school	431					
No	80	18.6				
Yes	351	81.4				
A little (under 10 hours)	162	37.6				
A fair amount (11-20 hours)	104	24.1				
A lot (over 21 hours)	85	19.7				
Volunteer work outside of school	445					
No	239	53.7				
Yes	206	46.3				
A little (under 10 hours)	130	29.2				
A fair amount (11-20 hours)	50	11.2				
A lot (over 21 hours)	26	5.8				

Table 3 outlines the demographic information pertaining to the teachers' mental health history. When asked, "since becoming a teacher, has mental health distress interfered with your work and/or every day activities", 73% of the teachers responded "yes". About half of the sample had received counselling (n = 224; 51%) through various sources (see Table 3), and 71% of those who received help found it useful. Approximately half of the teachers who sought help, did so for complex reasons, meaning for two or more concerns that had an impact on all areas of life. For those who wished to go to counselling but never sought help, financial restrictions and privacy issues were the top listed reasons for not accessing services. Other reasons included counselling not being accessible in their community, time constraints, and "other" which included having a previous bad experience and fear of the unknown.

Table 3

*Teacher Demographics: Mental Health Information*

Mental Health Information	N	%
Mental health distress as a teacher	444	
No	120	27
Yes	324	73
Received counselling	443	
No	219	49.4
Yes	224	50.6
Privately paid therapy	132	28.3
Family doctor	142	30.4
Clergy member	21	4.5
Psychiatrist	53	26.8
Employee Assistance Provider	125	26.8
Crisis/Help Line via Telephone	11	2.4
Walk-in clinic	14	3.0
Other	20	4.3
Reason for seeking help	206	
Depression/Suicide Ideation	17	8.3
Anxiety/OCD	14	6.8
Stress/Burnout/Overwhelmed	17	8.3
Family/Relationship Problems or Grief	33	16
Complex (2+reasons impacting whole life)	103	50
Workplace Stressor Triggering Mental Health	21	10.2
Addictions	1	.5
Was source of support helpful	219	
No	20	9.1
Yes	155	70.8
I'm not sure	44	20.1
If never counselled, reason why	285	
Financial restrictions	46	16.1
Not available in community	15	5.3
I never wished to go	152	53.3
Privacy issues	46	16.1
Time constraints	15	5.3
Other	11	3.9

### Descriptive Statistics for Measures

Table 4 outlines the scores from the K-6 Mental Health Screening Tool (Kessler et al., 2010), the Teacher Burnout Measure (Kessler et al., 2010) and the Trait Emotional Intelligence Questionnaire (TEIQue-SF; Petrides & Furnham, 2006). The K6 tool has a suggested cut-off score of 13 (Kessler et al., 2010), meaning a score of 13 or higher indicates an individual is experiencing significant mental health distress. In this sample, 56 teachers (14%) had total scores equal to or above 13, and importantly, over 50% of teachers ( $n = 208$ ) fell into the moderate range for their scores on the K6, indicating they have potential disruptions to their mental well-being. Additionally, scores revealed that within the last month, 82% of teachers felt at least a little bit nervous, 56% of teachers have felt hopeless, 82% of teachers have felt restless or fidgety, almost 45% of teachers have felt so depressed that nothing would be able to cheer them up, over 80% have felt that everything was requiring lots of effort, and 44% have felt worthless.

The TEIQue-SF (Petrides & Furnham, 2006) generates a total score of global trait emotional intelligence and 4 main factor scores: Well-being, Self-control, Emotionality, and Sociability. Each factor is made up of at least 6 items which sum to generate a total factor score. The higher the total score for that factor, the higher the emotional intelligence in that area. The factor with the highest score was Well-being ( $M = 5.36$ ,  $SD = 1.11$ ), closely followed by Emotionality ( $M = 5.14$ ,  $SD = .89$ ), then Sociability ( $M = 4.62$ ,  $SD = .98$ ), and finally Self-control ( $M = 4.46$ ,  $SD = 1.00$ ). The item that was rated the highest among all items was “I feel that I have a number of good qualities” ( $M = 5.86$ ,  $SD = 1.12$ ), which falls under the Well-being factor. The item that was rated as the lowest among all was “Others admire me for being relaxed” ( $M = 3.87$ ,  $SD = 1.79$ ) which falls under the Self-control factor. The average global trait EI score was 4.95.



The Teacher Burnout Measure (Wench, Richmond & Gorham, 2001) is a 20-item questionnaire that reveals feelings of burnout. The higher the score the more substantial the feelings are, with a score above 71 indicating the individual is experiencing strong feelings of burnout currently. The average global score was 38.7 indicating teachers were experiencing mild signs of burnout. The range of scores highlights teachers' vastly different experiences of burnout symptoms, yet also showcases that some teachers are definitely are at the higher end of the spectrum with scores as high as 70.

Table 4

*Total Scores from Measures K6, TEIQue-SF, and Teacher Burnout Measure*

Scales & Subscales of Measures	N	%	M	Mode	SD	Range
<b>K-6 Mental Health Screening Tool</b>						
Total Score	412		6.98	4	4.80	0-24
<i>Nervous</i>	420		3.56	4	.98	
<i>Hopeless</i>	417		4.05	5	1.01	
<i>Restless</i>	417		3.47	3	1.04	
<i>Depressed</i>	417		4.27	5	.97	
<i>Effort</i>	417		3.38	4	1.17	
<i>Worthless</i>	416		4.28	5	.98	
<i>Frequency of Above Items</i>	416		3.80	4	1.88	
Groups Based on Total Score*	412					
<i>Low (0-4.9)</i>	148	35.9				
<i>Moderate (5-12.9)</i>	208	50.5				
<i>High (13-24)</i>	56	13.6				
<b>Teacher Burnout Measure</b>						
Global Score	385		38.69	41	11.70	20-100 17-70
<b>TEIQue-SF</b>						
Global Trait EI	309		4.95	5.1	.75	1-7 2.9-6.7
Well-being	350		5.36	6.17	1.11	1.67-7.00
Self-Control	346		4.46	4.17	1.00	2.17-6.83
Emotionality	346		5.14	5.38	.89	2.38-7.00
Sociability	343		4.62	4.83	.98	1.83-7.00

*Note:* For the K6 items of nervous, hopeless, restless, depressed, effort, and worthless, a score of 1=all of the time, a score of 5=none of the time (Kessler et al., 2010). Thus, the lower the score the less mental health distress. TEIQue-SF = Trait Emotional Intelligence Questionnaire Short Form (Petrides & Furnham, 2006). Items on this measure are scored on a scale of 1=completely disagree, 7=completely agree. The Teacher Burnout Measure is scored on a 5-point Likert scale with 1 indicating "strongly disagree" and 5 indicating "strongly agree" (Richmond, Wrench & Gorham, 2001).

\*The K6 groups are based on previously established cut off scores (Kessler et al., 2010).

## Correlations

Bivariate correlations were calculated (see Table 5) to detect relationships between emotional intelligence (TEIQue-SF global score), teacher burnout (TBM total score) and mental health (K6 total score). Only individuals who filled out the survey to obtain scores on the TEIQue-SF, TBM, and the K6 were included in this analysis. Results revealed that emotional intelligence and mental health were associated ( $r = -.464, p < .01$ ), indicating that the higher emotional intelligence, the lower the mental health distress (i.e. more positive mental health). Additionally, a significant correlation was found between emotional intelligence and teacher burnout ( $r = -.508, p < .01$ ), such that the higher the emotional intelligence, the lower the feelings of teacher burnout. Mental health and teacher burnout were also significantly correlated ( $r = .622, p < .01$ ), revealing that the higher the feelings of burnout, the higher the level of mental health distress.

Table 5

### *Correlations between Emotional Intelligence, Teacher Burnout and Mental Health*

Measure	TEIQue-SF	K6	TBM
TEIQue-SF	-	-.464*	-.508*
K6	-.464*	-	.622*
TBM	-.508*	.622*	-

\*Correlation is significant at the 0.01 level (2-tailed)

## Multivariate Analysis of Co-Variance (MANCOVA)

A fixed-factor MANCOVA was performed to evaluate the effect of teachers' caregiving responsibilities outside of work has on their mental distress and feelings of burnout. Caregiving responsibilities represents the independent variable (fixed factor) with three levels: no full-time caregiving responsibilities (n=65), caregiving for own child(ren) OR aging/disabled family member (n=182), and caregiving for both own child(ren) AND aging/disabled family member

( $n=40$ ). Dependent variables were mental health (K6 total score) and teacher burnout (TBM total score). Emotional intelligence (TEIQue-SF total score) was used as a covariate given the significant correlations between emotional intelligence and mental health as well as burnout. Box's test of Equality of Covariance Matrices was non-significant, meaning the assumption of equal covariance was met. Results revealed no statistically significant differences in the model of caring responsibilities with regards to mental health or burnout when adjusted to include emotional intelligence,  $F(4,564) = .996$ ,  $n. s.$ ,  $\eta^2 = .007$ . However, there was a main effect of emotional intelligence,  $F(2,282) = 60.25$ ,  $p < .001$ ,  $\eta^2 = .299$ , such that, as emotional intelligence increases, mental health concerns and feelings of burnout decrease. Levene's Test of Equality of Error Variances was non-significant indicating assumption of equal variance on the DV across groups was met.

Table 6

*Multivariate Analysis of Co-Variance*

Variable	Value	F	Significance	Partial Eta Squared	Observed Power
EI total	.701	60.25	.000	.299	1.000
Caregiving Responsibility	.986	.996	.409	.007	.316

Table 7

*Tests of Between-Subjects Effects*

Source	Dependent variable	Mean Square	F	Significance	Partial Eta Squared	Observed Power
EI total	K6 Total	1394.82	83.58	.000	.228	1.000
	TBM Total	9608.55	96.11	.000	.254	1.000
Caregiving	K6 Total	16.23	.97	.379	.007	.218
	TBM Total	19.39	.19	.824	.001	.080

### Multiple Regression

A multiple regression analysis was performed to evaluate the extent to which the four factors of emotional intelligence predicted mental health in teachers (see Table 8). The dependent variable was the K6 total score and the predictors were the Sociability, Emotionality, Well-being and Self-Control factor scores (from the TEIQue-SF). The results indicated that the four EI factors combined accounted for 34.6% of the variance in mental health scores,  $R^2 = .346$ ,  $F(4,305) = 40.37$ ,  $p < .001$ . A step-wise regression was also run to determine how each of the four factors of EI predicted mental health. Results revealed the Well-being factor accounted for 31.4% of the variance of mental health (as measured by the K6),  $R^2 = .314$ ,  $F(1,308) = 141.1$ ,  $p < .001$ . Self-control was a statistically significant second-step predictor, accounting for an additional 1.6% of the variance,  $R^2 = .330$ ,  $F(1,307) = 7.40$ ,  $p < .01$ . Further, results revealed a significant third-step predictor, Emotionality, accounted for another 1.3% of the variance,  $R^2 = .344$ ,  $F(1,306) = 6.22$ ,  $p < .05$ .

Table 8

#### *Stepwise Regression with Emotional Intelligence Factors as Predictors of Mental Health*

	Variable	Beta	R Square	R Square Change	Significance
1	Well-being	-.560	.314	.314	.000
2	Well-being	-.475	.330	.016	.007
	Self-control	-.153			
3	Well-being	-.535	.344	.013	.013
	Self-control	-.167			
	Emotionality	.134			

### **Discussion**

The present study was a secondary data analysis of a teacher mental health and wellness survey administered online between December 2014 and January 2015. Teachers were recruited through two Canadian teaching organizations, a provincial federation and a national association. The purpose of this study was to explore the relationship between trait emotional intelligence and mental health in teachers. Feelings of burnout and caregiving responsibilities outside of work were also explored to determine their impact on the mental health of teachers.

Information from the demographic questionnaire points to a sample of teachers who are well established in their careers. In fact, the average number of years teaching for this sample is 15.5 years. This is important to consider, as this group of teachers are survivors in a profession where burnout is all too common (Reichel, 2013). These are the teachers who, despite possible feelings of emotional exhaustion and at times, mental health difficulties, have persevered and continue to be engaged in their profession. These teachers have also endured many transitions during their careers; teachers reported teaching at numerous levels (e.g., junior, intermediate), in the past year and have worked in approximately 4 schools throughout their careers. These results help to expose the numerous job stressors that inadvertently contribute to the mental health concerns of teachers. Certainly, transitioning between grade levels or switching schools completely generates disruption to routines, alters expectations for teaching, and at times forces teachers to teach outside their experienced teaching level or subject area. This could add to the levels of distress, as could trying to navigate a new school environment, understanding the new school climate, and trying to adjust to new social and political dynamics. Thus, this sample of teachers has provided valuable insights into the daily stressors and longer term emotional difficulties that teachers may face throughout their career.

### **Mental Health & Burnout**

The majority of teachers in this sample had reported experiencing mental health distress since becoming a teacher and about half had sought counselling for these concerns. The avenues in which teachers sought help were quite varied, which possibly highlights the lack of security teachers felt in seeking support through their place of employment (e.g. privacy concerns, stigma) or the lack of fit between their concerns and the services covered by the employee assistance plans (Dunning, 2014). It would be important to explore this further to determine how employment assistance programs could provide services that more accurately meet the mental health needs of teachers.

It is important to acknowledge that the majority of teachers sought help for complex difficulties, meaning they were struggling with two or more concerns that were impacting their entire life. Thus, it is not that teachers are only feeling stressed or overwhelmed due to job responsibilities, but rather they are dealing with numerous concerns that impact their overall well-being on an ongoing basis. This was paralleled in the responses from the K6 questionnaire and is consistent with other literature on teacher's mental health (Martin et al., 2012). Altogether, the K6 questionnaire placed the majority of teachers into the moderate range of mental health concerns, suggesting most teachers were experiencing elevated levels of stress and related mental health symptoms. Therefore, it can be concluded that the majority of teachers are not experiencing crisis-type or severe symptoms on an ongoing basis but are consistently dealing with wellness concerns that are putting them persistently at risk for developing more serious mental health or physical health problems. Nonetheless, it should not be minimized that approximately 14% of teachers are in the severe range for mental health concerns as per the results on the K6 questionnaire. Given the responsibilities teachers have in working with

vulnerable youth on a daily basis, it is paramount that these teachers are provided with treatment and support they need to improve their well-being.

The results from the Teacher Burnout Measure (TBM) revealed that the majority of teachers were experiencing mild feelings of burnout. This was surprising given the results from the K6 questionnaire revealed fairly concerning mental health symptoms and the strong correlation between mental health distress and feelings of burnout. It is possible that this group of experienced teachers have found effective ways to cope with and manage their moderate mental health concerns such that it does not interfere significantly with their social and emotional competencies at work or that their work is not the primary source of the distress that triggers or perpetuates these symptoms. Accordingly, it is also reasonable that teachers have been able to seek supports when they began to feel mild symptoms of burnout and through this, they were able to limit the escalation of these symptoms despite ongoing mental health struggles. Indeed, the majority of teachers have sought out counselling and most found it helpful. Overall, the results from the TBM coincide with other literature in the field suggesting that the majority of teachers indicate some feelings of burnout and experience emotional exhaustion (Oberle & Schonert-Reichl, 2016).

A MANCOVA evaluated the effect teachers' caring responsibilities outside of work had on their mental health and feelings of burnout, as previous literature highlighted work-life conflicts stemming from caregiving responsibilities causes significant distress and influences individuals' abilities to cope (Glavin & Peters, 2015; Duxbury & Higgins, 2003). No main effect was found, indicating that the caregiving responsibilities teachers have outside of work do not directly affect their mental health or feelings of burnout. This is surprising given the previous literature highlighted caregiving responsibilities, particularly for women, was an important factor and

contributor to distress (Glavin & Peters, 2015). However, this also provides reasoning to switch focus as it appears that an individual's emotional intelligence and personal attributes are more important factors to consider than the level of external responsibilities. This is explored in more detail below.

### **Emotional Intelligence**

The first research question sought to determine whether emotional intelligence was associated with Canadian teachers' mental health. Measures of association (bivariate correlations) revealed support for the first hypothesis. Namely, emotional intelligence has a negative relationship with mental health, such that the higher an individual's emotional intelligence, the lower their mental health distress (i.e., better mental well-being). This corresponds with current literature indicating that those who have low emotional intelligence struggle more with psychopathology (e.g., Slaski & Cartwright, 2002) and are more likely to struggle with managing stress (Mayer et al., 2004). The bivariate correlation also revealed a negative correlation between emotional intelligence and teacher burnout. This makes sense given that burnout is defined by feelings of emotional exhaustion and often provokes an individual to feel they lack the social and psychological resources to cope and/or offer support to others (Maslach et al., 2001). Thus, it could be that those with high emotional intelligence would not be experiencing feelings of burnout due to the nature of skills and competencies that make up emotional intelligence. A bivariate correlation also revealed a significant positive relationship between teacher burnout (TBM total score) and mental health distress (K6 total score), indicating that as mental health distress increases, so do feelings of burnout. This lends additional support to existing literature suggesting those who are struggling with mental health concerns are more at risk for experiencing symptoms of burnout (Papastylianou et al., 2009).



The MANCOVA revealed a significant main effect of emotional intelligence, such that as emotional intelligence increases, mental health distress and feelings of burnout decrease. This makes sense given the results from the correlation analyses and the previous literature linking EI to mental well-being (e.g., Mayer et al., 2004). This finding helps to build the link between EI and mental health in practice and provides support for the necessity to explore emotional intelligence competencies when looking to improve the mental health of teachers, as well as for other individuals who experience high levels of occupational stress.

In order to test the second research hypothesis, a multiple regression analysis was employed. Scores on each of the four subscales of the measure of emotional intelligence (TEIQ-SAF; Petrides & Furnham, 2006) were entered, along with the total score. The combined four EI factors accounted for approximately 35% of the variance in scores of mental health, which provides compelling support for emotional intelligence as a fundamental factor in teachers' mental health, as well as a key concept to address in intervention programming. The stepwise regression revealed the Well-being factor as the most prominent predictor of teachers' mental health, accounting for just over 31% of the variance in mental health scores. This did not lend support for the research hypothesis as it was anticipated that the EI factor Self-control would be the most influential factor in teachers' mental health. When exploring the composition of the different factors of EI, the factor of Self-control is made up of competencies in emotion regulation, impulse control and stress management (see Appendix A; Petrides 2011). These are all attributes that were hypothesized to be the most important for teachers due to Self-control encompassing the skills and abilities to think critically before one acts, control own feelings in order to help others regulate their feelings, to remain calm in upsetting or stressful situations, and manage the pressures and stress of activities in order to perform well (Petrides, 2016). On the

other hand, the Well-being factor was found to be the most important predictor of mental health and thus warrants more focus here. The EI factor Well-being is composed of trait happiness, trait optimism and self-esteem (Petrides, 2011). More specifically, it determines how content one feels about their current situation, how positive one feels about the future, if there is a tendency to emphasize the negative aspects of one's life, how critical one is of him/herself, and general feelings of self-respect (Petrides, 2016). Therefore, these findings suggest teachers' mental health is significantly influenced by their perspective of the future, their abilities to evaluate the current situation accurately, and their overall self-confidence. It may be that teachers are constantly overemphasizing negative experiences and aspects of their life that then become internalized as negative beliefs. This could lead to a cycle of self-blame and a lack of self-respect, which could not only make it difficult to feel optimistic about their life circumstances, but also could trigger or exacerbate mental health symptoms.

Interestingly, Well-being was the EI factor teachers scored highest on and it was the most predictive of mental health distress; yet teachers' scores for mental health distress were moderately high overall. It would be anticipated that higher Well-being factor scores would mean lower mental health distress scores. This theoretically is true given the negative correlation between EI and mental health distress; however, it is still interesting that teachers scored the highest on this factor given its strong influence. When looking at the scores for Well-being more closely, it is clear that teachers are neutral to moderate in their ratings, with an average score of 5.36 on a scale where 1 is low, 4 is neutral, and 7 is high. This suggests that on average, teachers do not have extremely high competencies in this area, but are doing better in this area than the others. It is important to note, however, that the mean scores for the other factors are not too far off of this Well-being score, and it is unclear whether they are significantly different from each

other when it comes to real life applications. Indeed, the means for the factors range from 4.62-5.36, which means there is less than a full response value difference between them. Therefore, despite having slightly higher ratings on the Well-being factor, teachers are fairly consistent in their EI abilities across all factors. Nonetheless, Well-being was shown to be the strongest predictor of mental health distress in this research and thus, this relationship should be explored further to unpack the specific elements of the EI factor Well-being that might be most influential to mental health.

### **Strengths & Limitations**

The present study adds to the current literature by documenting the present mental health concerns of *Canadian* teachers. To date, teachers in Canada have been a largely ignored population, especially in relation to mental health and experiences of burnout. Additionally, the study was fortunate to have a large sample size consisting of teachers from across the country at various grade levels, roles and levels of experience. These factors helped to increase the external validity of the study. This research project also utilized a comprehensive list of standardized measures with strong reliability statistics, which not only allowed for the validity of the findings, but also enabled extraneous variables to be controlled for. The online and anonymous nature of the study helped to minimize social desirability, which is a large priority when exploring sensitive topics such as mental health concerns.

With all research projects, there are limitations which could be improved upon in future explorations of this topic. First, due to the setup of the online questionnaire, participants were not able to save their responses and return to the questionnaire at a later time, possibly generating some attrition. Second, the survey was only available in English, which could limit the diversity of the sample and make it more difficult for individuals to respond if English is not the preferred

language. Third, due to avenues of recruitment, the sample was predominantly made up of teachers teaching at the intermediate or senior level and did not capture many teachers just entering the profession where feelings of burnout are most commonly experienced (Ingersoll & Smith, 2003). Volunteer bias could also be at play here, as the teachers who participated in the survey regularly volunteer both at school and in the community. Thus, it is possible that there is a subsection of teachers unwilling to volunteer their time that are not captured in this study. Further, teachers feeling extremely burnt out could have been reluctant to participate in research where they would be asked to report these feelings. Finally, the Teacher Burnout Measure was chosen as the measure of teacher burnout over the more established Maslach Burnout Inventory due to financial and public access restrictions.

### **Implications & Future Directions**

This research provides compelling evidence for a strong relationship between emotional intelligence and mental health in Canadian teachers. This study also revealed EI as a predictor of mental health, which lends support to use EI as a way to improve teacher mental health using targeted interventions focusing on the EI factor Well-being. However, it would be important for future research to expand upon these findings and explore how to teach elements of EI, particularly competencies involved in Well-being, to teachers to improve their mental health and prevent feelings of burnout. Future research could also aim for a more diverse sample of teachers, including more of those teaching at the primary and junior level as well as those just beginning their career. This would allow for a greater understanding of how EI is associated with mental health in this professional population as well as enable more concrete conclusions to be drawn around the practical implications of EI for beginner teachers. With more resources, researchers could look at including a qualitative or longitudinal component to capture a more

comprehensive picture of the ongoing struggles of teachers and the possible trends of mental health concerns over time. Such a design could also help show how EI programs or competencies could help stabilize teachers' well-being over time. Additional research is also warranted to determine the psychometric properties as well as the reliability and validity of the Teacher Burnout Measure.

This exploratory research study can serve as both the foundation for future research and as a reserve of information about Canadian teachers' experiences. It provides fundamental knowledge about EI and helps to build the link between EI and mental health in real life applications. These new understandings about the relationship between mental health and EI will help to inform intervention and teacher-training programs about the skills or attributes teachers need to target and develop through professional and personal initiatives. Previous research has demonstrated that EI is teachable and that these learnings are maintained to create real, lasting changes (Nelis et al., 2009). With this research demonstrating that the EI factor Well-being accounts for over 31% of the variance in mental health distress scores in teachers, and all four factors combined account for over 34% of mental health distress scores, there is tremendous reason to pursue EI interventions as a way to support teachers and prevent burnout.

Helping professionals, such as counsellors, are likely to benefit from this research as well, as they can become more informed about the everyday realities of teaching and the skills that could be helpful for teachers to develop in a therapeutic setting. Additionally, counsellors and other helping professions have an ethical obligation to be informed about current events and advocate for clients and populations that are in need of support. Through this research, it has become increasingly evident that teachers are a population in need of immediate support and advocacy due to the prevalence of moderate to severe mental health concerns. Indeed, there is a

lack of support currently for teachers, in helping them manage both their own and their students' mental health difficulties. Counsellors could play a fundamental role in bridging the gap between teachers' needs and the resources that could help improve well-being. This could include fostering connections between community agencies and the education system to fast track services, presenting psychoeducation presentations to teaching staff and/or students, advocating for reducing stigma for teacher mental health concerns, being a liaison and prioritizing knowledge translation from research to practice, as well as providing more accessible and tailored services for teachers. Furthermore, it would be imperative for counsellors and other care providers through the Employee Assistance Programs to be informed of these research findings and be strong advocates for emotional intelligence training and additional supports for teachers on an ongoing basis.

This research will also directly impact teachers and other educational staff, as they could find comfort in learning they are not alone in their mental health concerns or feelings of burnout. As a result of raising awareness of the commonness of these experiences, stigma may be reduced and teachers may be able to look for social support during difficult times. When making strides towards improving one's mental health, it is often most helpful to understand what competencies to focus on and seek out resources to target those that are shown to be empirically supported. This study helps to inform teachers about where to target their efforts if they are time- and/or resource-limited; namely, focusing on the Well-being factor of EI. Some ways teachers could do this would be to explore areas of their life that provide them with joy and make them feel satisfied with their life, and try to prioritize or schedule more time for these activities. This will help expand the amount of time teachers are engaged in an activity that makes them feel confident and cheerful, thereby increasing optimism and feelings of happiness. To improve

elements of self-esteem, teachers could reflect on past successes and recall how they were personally able to achieve those goals or overcome those challenges. Additionally, teachers could try to establish a routine of celebrating small successes in their everyday personal and professional lives, and build upon their current strengths and resilience.

In a larger way, this research can inform school administrative staff and policy makers. These results provide compelling evidence for the need to reform the professional practice of teaching in order to better support both student and teacher mental well-being. Initiatives such as allowing more prep-time in school, providing more opportunities for social support and community connections, or initiating mental health days in addition to sick days could be a great start in supporting the wellness needs of teachers. Opportunities for developing EI through workshops and professional development activities could also be an avenue to pursue in addition to making mental health or EI training mandatory for all student-teachers at some point throughout their degree.

### **Conclusion**

Taken together, the economic burden of mental health has become a national concern. With one in five individuals experiencing difficulties with mental health (Mental Health Commission of Canada, 2012), a large portion of the workforce is struggling to overcome these concerns, which has an impact on not only the individual's well-being but also their abilities to work (e.g., work quality, productivity, days sick etc.; Smetanin et al., 2011). In the education sector, teachers are of utmost importance as their job performance and stress level has a direct impact on student achievement and student well-being (Arens & Morin, 2016). Unfortunately, teachers regularly experience high levels of stress, emotional exhaustion and mental health symptoms which places them at risk for occupational burnout (Martin et al., 2012). In order to reduce these symptoms and improve teacher well-being, research such as this study point to building up emotional intelligence competencies in teachers. In fact, this research provides compelling evidence for a strong relationship between emotional intelligence (EI) and mental health in Canadian teachers and suggests that targeted interventions focusing on the EI factor Well-being is a promising route to improve teacher mental health overall. This research not only highlights a necessity to support teachers but also why it is important to teach teachers the appropriate EI skills and provide ongoing support. Applying these findings to real life applications could help change the practice of teaching to better support teachers' well-being, which could also have lasting effects on teaching quality, student achievement and student well-being.



### References

- Antoniou, A., Ploumpi, A., & Ntalla, M. (2013). Occupational stress and professional burnout in teachers of primary and secondary education: The role of coping strategies. *Scientific Research, 4*(3A), 349-355.
- Arens, A. K., & Morin, A. J. S. (2016). Relations between teachers' emotional exhaustion and students' educational outcomes. *Journal of Educational Psychology, 108*(6), 800-813.
- Austin, E. J., Saklofske, D. H., & Egan, V. (2005). Personality, well-being and health correlates of trait emotional intelligence. *Personality and Individual Differences, 28*, 547-558.
- Betoret, F. D., & Artiga, A. G. (2010). Barriers perceived by teachers at work, coping strategies, self-efficacy and burnout. *The Spanish Journal of Psychology, 13*(2), 637-54.
- Blustein, D. L. (2008). The role of work in psychological health and well-being: A conceptual, historical, and public policy perspective. *American Psychologist, 63*, 228-240.
- Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self-efficacy in classroom management. *Teaching and Teacher Education, 16*, 239-253.
- Chan, D. W. (2006). Emotional intelligence and components of burnout among Chinese secondary school teachers in Hong Kong. *Teaching and Teacher Education, 22*, 1042-1054.
- Chang, M. L. (2009). An appraisal perspective of teacher burnout: Examining the emotional work of teachers. *Educational Psychology Review, 21*, 193-218.
- Ciarrochi, J., & Mayer, J. D. (2007). *Emotional Intelligence: A Practitioner's Guide*. New York: Psychology Press.
- Cooper, C. L. (2013). *From Stress to Wellbeing: The Theory and Research of Occupational Stress and Wellbeing*. (Vol. 1). England, UK: Macmillan Publishers Limited.

- Cooper, A., & Petrides, K. V. (2010). A psychometric analysis of the Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF) using item response theory. *Journal of Personality Assessment, 92*(5), 449-457.
- Danna, K., & Griffin, R. W. (1999). Health and well-being in the workplace: A review and synthesis of the literature. *Journal of Management, 25*(3), 357-384.
- Darling-Hammond, L. (2000). How Teacher Education Matters. *Journal of Teacher Education, 51*(3), 166-173.
- Darling-Hammond, L. (2008). Teacher learning that supports student learning. In B. Z. Presseisen (2nd Eds)., *Teaching for Intelligence* (91-106). Thousand Oaks, CA: A SAGE Company.
- Daus, C. S., & Ashkanasy, N. M. (2005). The case for an ability-based model of emotional intelligence in organizational behavior. *Journal of Organizational Behavior, 26*, 453-466.
- Dawda, D., & Hart, S. D. (2000). Assessing emotional intelligence: reliability and validity of the Bar-On Emotional Quotient Inventory (EQ-i) in university students. *Personality and Individual Differences, 28*, 797-812.
- Dunning, M. (2014, May 1). Employee Assistance Programs Underutilized by Employees. *Business Insurance*. Retrieve from:  
<http://www.businessinsurance.com/article/20140105/NEWS03/301059979>
- Duxbury, L., & Higgins, C. (2003). Work-Life Conflict in Canada in the New Millennium: A Status Report. For the Healthy Communities Division Health Canada.
- Duxbury, L., & Higgins, C. (2012). Revisiting Work-Life Issues in Canada: the 2012 National Study on Balancing Work and Caregiving in Canada.
- Fouad, N. A., & Bynner, J. (2008). Work transitions. *American Psychologist, 63*, 241-251.

- Feiman-Nemser, S. (2003). What new teachers need to learn. *Educational Leadership*, 60(8), 25-29.
- Ferguson, K., Frost, L., & Hall, D. (2012). Predicting teacher anxiety, depression, and job satisfaction. *Journal of Teaching and Learning*, 8(1), 27-42.
- Fernet, C., Guay, F., Senecal, C., & Austin, S. (2012). Predicting intraindividual changes in teacher burnout: The role of perceived school environment and motivational factors. *Teaching and Teacher Education: An International Journal of Research and Studies*, 28(4), 514-525.
- Gerber, E. B., Whitebook, M., & Weinstein, R. S. (2007). At the heart of child care: Predictors of teacher sensitivity in center-based child care. *Early Childhood Research Quarterly*, 22, 327-346.
- Glavin, P., & Peters, A. (2015). The cost of caring: Caregiving strain and work-family conflict among Canadian workers. *Journal of Family and Economic Issues*, 36, 5-20.
- Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, 43, 495-513.
- Hansen, K., Gardner, L., & Stough, C. (2007). Improving occupational stress through emotional intelligence development. *Organizations and People*, 14, 70-75.
- Ingersoll, R. M., & Smith, T. M. (2003). The wrong solution to the teacher shortage. *Educational Leadership*, 60(8), 30-33.
- Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, 79(1), 491-525.

- Jorm, A. F. (2000). Mental health literacy: Public knowledge and beliefs about mental disorders. *British Journal of Psychiatry, 177*, 396-401.
- Kessler, R. C., Green, J. G., Gruber, M. J., Sampson, N. A., Bromet, E., Cuitan, M., . . . Zaslavsky, A. M. (2010). Screening for serious mental illness in the general population with the K6 screening scale: Results from the WHO world mental health (WMH) survey initiative. *International Journal of Methods in Psychiatric Research, 20*(1), 62.
- Kiuru, N., Aunola, K., Torppa, M., Lerkkanen, M., Poikkeus, A., . . . Nurmi, J. (2012). The role of parenting styles and teacher interactional styles in children's reading and spelling development. *Journal of School Psychology, 50*, 799-823.
- Kutcher, S., Venn, D., & Szumilas, M. (2009). Mental health: The next frontier of health education. *Education Canada, 49*(2), 44-45.
- Leung, D., & Lee, W. (2006). Predicting intention to quit among Chinese teachers: Different predictability of burnout components. *Anxiety, Stress, and Coping: An International Journal, 19*, 129-141.
- Martin, R. R., Dolmage, R., & Sharpe, D. (2012). *Seeking Wellness: Descriptive Findings From the Survey of the Work Life and Health of Teachers in Regina & Saskatoon*. Saskatoon, SK, Canada: Saskatchewan Teachers Federation.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*, 397-422.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Emotional intelligence: Theory, findings, and implications. *Psychological Inquiry, 15*(3), 197-215.
- Mental Health Commission of Canada (2012). *Stigma [Brochure]*. Ottawa, Canada: Mental Health Commission of Canada. Retrieved from:

[http://www.mentalhealthcommission.ca/English/system/files/private/document/Opening%20Minds%28preview%29\\_0.pdf](http://www.mentalhealthcommission.ca/English/system/files/private/document/Opening%20Minds%28preview%29_0.pdf)

- National Comorbidity Survey (2005). K10 and K6 Scales. In association with the Harvard Medical School. Retrieved from [http://www.hcp.med.harvard.edu/ncs/k6\\_scales.php](http://www.hcp.med.harvard.edu/ncs/k6_scales.php)
- Nelis, D., Quoidbach, J., Mikolajczak, M., & Hansenne, M. (2009). Increasing emotional intelligence: (How) is it possible?. *Personality and Individual Differences, 47*, 36-41.
- Oberle, E., & Schonert-Reichl, K. A. (2016). Stress contagion in the classroom? The link between classroom teacher burnout and morning cortisol in elementary school students. *Social Science & Medicine, 159*, 30-37.
- Papastyliaou, A., Kaila, M., & Polychronopoulos, M. (2009). Teachers' burnout, depression, role ambiguity and conflict. *Social Psychology of Education, 12*(3), 295-314.
- Perry, C., & Ball, I. (2005). Emotional intelligence and teaching: Further validation evidence. *Issues in Educational Research, 15*, 175-192
- Perry, C., & Ball, I. (2007). Dealing constructively with negatively evaluated emotional situations: The key to understanding the different reactions of teachers with high and low levels of emotional intelligence. *Social Psychology of Education, 10*, 443-454.  
doi:10.1007/s11218-007-9025-z
- Perry, L. B., & McConney, A. (2013). School socioeconomic status and student outcomes in reading and mathematics: A comparison of Australia and Canada. *Australian Journal of Education, 57*(2), 124-140.
- Petrides, K. V. (2011). *Trait emotional intelligence*. Thomas International Limited. Retrieved from <http://thomasinternational.net>

- Petrides, K. V. (2016). *TEIQ-SF Sample Report*. Copyright Thomas International Ltd. Retrieved from: <https://www.thomasinternational.net/getmedia/5b941765-7452-413f-abca-0117f8331324/TEIQue-Sample-Report-2016.pdf>
- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality, 15*, 425-448.
- Petrides, K. V., & Furnham, A. (2006). The role of trait emotional intelligence in a gender-specific model of organizational variables. *Journal of Applied Social Psychology, 36*, 552-569.
- Petrides, K. V., Furnham, A., & Mavroveli, S. (2008). *Trait emotional intelligence: Moving forward in the field of EI*. In: Matthews, G., Zeidner, M., & Roberts, R. (1<sup>st</sup> Eds.) *Emotional Intelligence: Knowns and Unknowns* (pp.151-162). Oxford University Press: Oxford.
- Petrides, K. V., Perez-Gonzalez, J. C., & Furnham, A. (2007). On the criterion and incremental validity of trait emotional intelligence. *Cognition and Emotion, 21*(1), 26-55.
- Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British Journal of Psychology, 98*, 273-289.
- Physical & Health Education Canada (2014). *Mental Health Education in Canada: An Analysis of Teacher Education and Provincial/Territorial Curricula*. Retrieved from: <http://www.phecanada.ca/sites/default/files/mentalhealtheducationincanada.pdf>
- Pianta, R. C., Nimetz, S. L., & Bennett, E. (1997). Mother-child relationships, teacher-child relationships, and school outcomes in preschool and kindergarten. *Early Childhood Research Quarterly, 12*, 263-280.

- Prochaska, J. J., Sung, H., Max, W., Shi, Y., & Ong, M. (2012). Validity study of the K6 scale as a measure of moderate mental distress based on mental health treatment need and utilization. *International Journal of Methods Psychiatric Research, 21*(2), 88-97.
- Reichel, J. (2013, February 20). Overwhelmed Canadian Teachers Quitting in Droves. *The Epoch Times*. ON, Canada.
- Research and Assessment Services (2015). *Mental Health Literacy and Capacity Survey for Educators: Comparative Results from 2010 and 2015 Surveys*. [Draft Report presented by Karen Edgar at Annual Conference on Advancing School Mental Health, November 2015 in New Orleans, LO]. In Association with Thames Valley District School Board.
- Richardson, K. M., & Rothstein, H. R. (2008). Effects of occupational stress management intervention programs: A meta-analysis. *Journal of Occupational Health Psychology, 13*(1), 69-93.
- Rice, J. J., & Prince, M. J. (2000) *Changing Politics of Canadian Social Policy*. Canada: University of Toronto Press Incorporated.
- Rodger, S. Bourdage, R., Hancock, K., Hsiang, R., Masters, R., & Leschied, A. (2015). Supporting students: A GRADE analysis of research focusing on teacher wellness and support. [*Manuscript draft August 2015*].
- Rothi, D. M., Leavey, G., & Best, R. (2008). On the front-line: Teachers as active observers of pupils' mental health. *Teaching and Teacher Education, 24*(5), 1217-1231.
- Sauter, S. L., Murphy, L. R., & Hurrell, J. J. (1990). Prevention of work-related psychological disorders: A national strategy proposed by the National Institute for Occupational Safety and Health (NIOSH). *American Psychologist, 10*, 1146-1158.

- Schwarzer, R., & Hallum, S. (2008). Perceived teacher self-efficacy as a predictor of job stress and burnout: Mediation. *Applied Psychology: An International Review*, *57*, 152–171.
- Schaufeli, W. B., & Salanova, M. (2007). Efficacy or inefficacy, that's the question: Burnout and work engagement, and their relationships with efficacy beliefs. *Anxiety, Stress, and Coping: An International Journal*, *20*, 177–196.
- Siegling, A. B., Vesely, A. K., Petrites, K. V., & Saklofske, D. H. (2015). Incremental validity of the Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF). *Journal of Personality Assessment*, *97*(5), 525-535.
- Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education*, *26*, 1059–1069.
- Slaski, M., & Cartwright, S. (2002). Health performance and emotional intelligence: An exploratory study of retail managers. *Stress and Health*, *18*, 63-68.
- Smetanin, P., Stiff, D., Briante, C., Adair, C., Ahmad, S., & Khan, M. (2011). *The life and economic impact of major mental illnesses in Canada: 2011 to 2041*. RiskAnalytica, on behalf of the Mental Health Commission of Canada.
- Statistics Canada (2012) *Mental Health Profile, Canadian Community Health Survey – Mental Health (CCHS) by age, group and sex, Canada and the provinces*.
- Statistics Canada (2014). *Back to School...by the numbers: Teachers and Professors*. Table 282-0009. Retrieved from: [http://www.statcan.gc.ca/eng/dai/smr08/2014/smr08\\_190\\_2014#a4](http://www.statcan.gc.ca/eng/dai/smr08/2014/smr08_190_2014#a4)
- Vesely, A. K., Saklofske, D. H., & Leschied, A. D. W. (2013). Teachers – The vital resource: The contribution of emotional intelligence to teacher efficacy and well-being. *Canadian Journal of School Psychology*, *28*(1), 71-89.



- Vesely, A. K., Saklofske, D. H., & Nordstokke, D. W. (2014). EI training and pre-service teacher wellbeing. *Personality and Individual Differences, 65*, 81-85.
- Wench, J. S., Richmond, V. P., & Gorham, J. (2001). *Communication, affect and learning in the classroom*. Acton, MA: Tapestry Press.
- Wilson, C. M., Douglas, K. S., & Lyon, D. R. (2011). Violence against teachers: Prevalence and consequences. *Journal of Interpersonal Violence, 26*(12), 2353-2371.
- Wong, C. S., Wong, P. M., & Peng, K. Z. (2010). Effect of middle-level leader and teacher emotional intelligence on school teachers' job satisfaction: The case of Hong Kong. *Educational Management, Administration, & Leadership, 38*, 59-70.
- World Health Organization (2000). *Mental Health and Work: Impact, Issues and Good Practices*. Geneva, Switzerland: World Health Organization. Retrieved from: [http://www.who.int/mental\\_health/media/en/712.pdf](http://www.who.int/mental_health/media/en/712.pdf)
- World Health Organization (2004). *Summary Report on Promoting Mental Health; Concepts, Emerging Evidence and Practice*. Geneva, Switzerland: World Health Organization. Retrieved from: [http://www.who.int/mental\\_health/evidence/en/promoting\\_mhh.pdf](http://www.who.int/mental_health/evidence/en/promoting_mhh.pdf)
- Zaslavsky, A. M. (2011). Screening for serious mental illness in the general population with the K6 screening scale: Results from the WHO world mental health (WMH) survey initiative. *International Journal of Methods in Psychiatric Research, 20*(1), 62.

## Appendices

### Appendix A

#### Facets of Trait Emotional Intelligence (EI)

<b>Facets</b>	<b>High scorers perceive themselves as...</b>
<i>Adaptability</i>	...flexible and willing to adapt to new conditions.
<i>Assertiveness</i>	...forthright, frank, and willing to stand up for their rights.
<i>Emotion perception (self and others)</i>	...clear about their own and other people's feelings.
<i>Emotion expression</i>	...capable of communicating their feelings to others.
<i>Emotion management (others)</i>	...capable of influencing other people's feelings.
<i>Emotion regulation</i>	...capable of controlling their emotions.
<i>Impulsiveness (low)</i>	...reflective and less likely to give in to their urges.
<i>Relationships</i>	...capable of having fulfilling personal relationships.
<i>Self-esteem</i>	...successful and self-confident.
<i>Self-motivation</i>	...driven and unlikely to give up in the face of adversity.
<i>Social awareness</i>	...accomplished networkers with excellent social skills.
<i>Stress management</i>	...capable of withstanding pressure and regulating stress.
<i>Trait empathy</i>	...capable of taking someone else's perspective.
<i>Trait happiness</i>	...cheerful and satisfied with their lives.
<i>Trait optimism</i>	...confident and likely to "look on the bright side" of life.

\*Copyrighted by Petrides, 2001, but retrieved from  
<http://www.psychometriclab.com/Default.aspx?Content=Page&id=7>

## Appendix B

## Distribution of EI Facets into Factor Categories

<u>Factor</u>	<u>Associated Facets</u>
Well-being	Trait Happiness Trait Optimism Self-esteem
Self-control	Emotion Regulation Impulse Control Stress Management
Emotionality	Empathy Emotion Perception Emotion Expression Relationships
Sociability	Emotion Management Assertiveness Social Awareness
Independent Facets (Not included in a Factor category)	Self-Motivation Adaptability

\*(Petrides, 2011)

## Appendix C

## Recruitment Script

SUBJECT LINE: An Examination of Teachers' and Education Professionals' Mental Health and Wellness

Susan Rodger and (graduate student's name), researchers from the Faculty of Education, would like to invite you to participate in a survey about stress, wellness and mental health in the lives of teachers and other education professionals. The aim of the study is to explore these topics and the experience of seeking help, balancing work life and home life, and burnout, among teachers and other education professionals. We hope to, through this project, develop an understanding of the needs, strengths and challenges faced by people who work in the education system.

Below you will find a link to the survey. Attached to this message is a Letter of Information that tells you more about the study, and a list of mental health resources.

<LINK WAS INSERTED HERE>

Please contact (graduate student's name) directly if you would like to know more.

*\*Note: Contact information has been removed for privacy purposes.*

## Appendix D

## Letter of Information



**Western  
Education**

**An Examination of Teachers' and Education Professionals' Mental Health and Wellness  
LETTER OF INFORMATION**

**Introduction**

My name is [REDACTED] and I am a graduate student at the Faculty of Education at Western University. I am conducting research into the experiences of stress, burnout and mental health in the lives of teachers and other education professionals.

**Purpose of the Study**

The aim of the study is to explore mental health and wellness, stress and the experience of seeking help, balancing work life and home life, and burnout among teachers and education professionals. We hope to, through this project, develop an understanding of the needs, strengths and challenges faced by people who work in the education system.

**Participation**

If you agree to participate in this study you will be asked to complete a survey that asks questions about stress, mental health, burnout, and your quality of life. The survey is completed electronically. Using the link provided here and in the email to which this letter is attached, you can access the survey. The survey will take about 20 minutes to complete.

**Confidentiality**

The information collected will be used for research purposes only, and neither your name nor information which could identify you will be used in any publication or presentation of the study results. Otherwise, all information collected for the study will be kept confidential.

**Risks & Benefits**

While there are no known risks to participating in this study, you might find that responding to questions about these topics is upsetting. You will also find, attached to the email where you found this letter, a list of mental health resources organized by geographical area and school board, which you may find useful.

**Voluntary Participation**

Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions or withdraw from the study at any time with no effect on your employment or connections with your professional affiliations.

**Publication**

The results of this study are intended for publication. If you choose to complete any of the free response items, we may quote you. Your name will not be used.

**Questions**

If you have any questions about the conduct of this study or your rights as a research participant you may contact Dr. Susan Rodger [REDACTED] or the Office of Research Ethics, Western University at [REDACTED]

Thank you,

**Susan Rodger, PhD., C. Psych**  
Associate Professor

[REDACTED], BA  
Master of Arts, Candidate

Faculty of Education, Western University,  
1137 Western Road, London, ON N6G 1G7

## Appendix E

### List of Resources

*\*Shown below are the grouping of resources plus a few examples. Please see attached document for a comprehensive list.*

#### **Southwestern Ontario**

Brantford Canadian Mental Health Association (519) 752-2998  
Brantford Community Healthcare System (519) 751-5544  
Cambridge Memorial Hospital (519) 621-2330

#### **Southeast/Eastern Ontario**

Dundas & Glengarry Canadian Mental Health Association (613) 933-5845  
The Family Counselling Centre of Cornwall and United Counties (613) 932-4610  
Kingston Canadian Mental Health Association (613) 549-7027

#### **Central Ontario**

Bruce County Canadian Mental Health Association (519) 371-3642  
Grey Bruce Health Services – Owen Sound Hospital (519) 376-2121  
Belleville Canadian Mental Health Association (613) 969-8874

#### **Northern Ontario**

Dryden Dryden Regional Health Centre – Mental Health & Addictions (807) 223-8201  
Patricia Centre for Children and Youth (807) 223-8550  
Elliot Lake Counselling Centre of East Algoma (705) 848-2585

#### **Provincial & National Wide**

Provincial Helpline Telehealth Ontario (866) 797-0000  
National Resources Canadian Mental Health Association [www.cmha.ca](http://www.cmha.ca)

#### **Ontario School Boards**

(For administrative assistance and information on Employee Assistance Programs)

Algoma Teresa Vavala - Manager of Human Resources (705) 945-7327 or (705) 945-7224  
Algonquin & Lakeshore (Catholic) Michelle Lamarche - Human Resources (613) 354-6257 ext. 415  
Avon Maitland District Shelley King - Human Resource Administrator (519) 527-0111 ext. 208

Appendix F

Ethics Approval Form



**Western  
Research**

Research Ethics

**Western University Non-Medical Research Ethics Board  
NMREB Amendment Approval Notice**

**Principal Investigator:** Dr. Susan Rodger  
**Department & Institution:** Education\Faculty of Education,Western University

**NMREB File Number:** 105571  
**Study Title:** An Examination of Teachers' and Education Professionals' Mental Health and Wellness  
**Sponsor:**

**NMREB Revision Approval Date:** October 30, 2014  
**NMREB Expiry Date:** February 28, 2015

**Documents Approved and/or Received for Information:**

Document Name	Comments	Version Date
Instruments	revised questionnaire	2014/10/09

The Western University Non-Medical Science Research Ethics Board (NMREB) has reviewed and approved the amendment to the above named study, as of the NMREB Amendment Approval Date noted above.

NMREB approval for this study remains valid until the NMREB Expiry Date noted above, conditional to timely submission and acceptance of NMREB Continuing Ethics Review.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario.

Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB.

The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

  
Ethics Officer, on behalf of Riley Hinson, NMREB Chair

Ethics Officer to Contact for Further Information

 Erika Basile	 Grace Kelly	 Mina Mekhail	 Vikki Tran
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*This is an official document. Please retain the original in your files.*

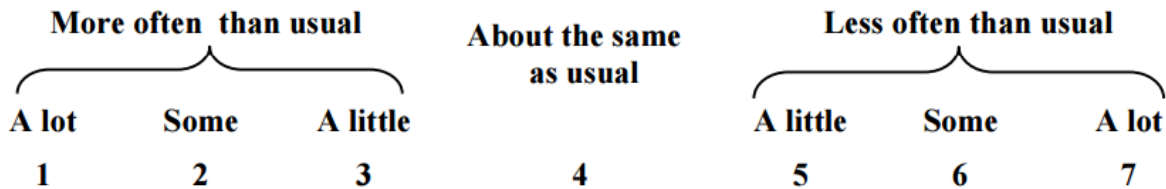
Appendix G

K6 Mental Health Screening Questionnaire

The following questions ask about how you have been feeling during the **past 30 days**. For each question, please circle the number that best describes how often you had this feeling.

<b>Q1. During the past 30 days, about how often did you feel ...</b>	<b>All of the time</b>	<b>Most of the time</b>	<b>Some of the time</b>	<b>A little of the time</b>	<b>None of the time</b>
<b>a. ... nervous?</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>b. ... hopeless?</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>c. ... restless or fidgety?</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>d. ... so depressed that nothing could cheer you up?</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>e. ... that everything was an effort?</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>f. ... worthless?</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

**Q2.** The last six questions asked about feelings that might have occurred during the past 30 days. Taking them altogether, did these feelings occur More often in the past 30 days than is usual for you, about the same as usual, or less often than usual? (If you never have any of these feelings, circle response option “4.”)



The next few questions are about how these feelings may have affected you in the past 30 days. You need not answer these questions if you answered “None of the time” to **all** of the six questions about your feelings.

**Q3.** During the past 30 days, how many days out of 30 were you totally unable to work or carry out your normal activities because of these feelings?

\_\_\_\_\_ (Number of days)



**Q4.** Not counting the days you reported in response to Q3, how many days in the past 30 were you able to do only half or less of what you would normally have been able to do, because of these feelings?

\_\_\_\_\_ (Number of days)

**Q5.** During the past 30 days, how many times did you see a doctor or other health professional about these feelings?

\_\_\_\_\_ (Number of times)

	<u>All of the time</u>	<u>Most of the time</u>	<u>Some of the time</u>	<u>A little of the time</u>	<u>None of the time</u>
<b>Q6.</b> During the past 30 days, how often have physical health problems been the main cause of these feelings?	1	2	3	4	5
					_____

## Appendix H

## Teacher Burnout Measure

- | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|-------------------|----------|---------|-------|----------------|
| 1                 | 2        | 3       | 4     | 5              |
- \_\_\_\_\_ 1. I am bored with my job.
- \_\_\_\_\_ 2. I am tired of my students.
- \_\_\_\_\_ 3. I am weary with all of my job responsibilities.
- \_\_\_\_\_ 4. My job doesn't excite me any more.
- \_\_\_\_\_ 5. I dislike going to my job.
- \_\_\_\_\_ 6. I feel alienated at work.
- \_\_\_\_\_ 7. I feel frustrated at work.
- \_\_\_\_\_ 8. I avoid communication with students.
- \_\_\_\_\_ 9. I avoid communication with my colleagues.
- \_\_\_\_\_ 10. I communicate in a hostile manner at work.
- \_\_\_\_\_ 11. I feel ill at work.
- \_\_\_\_\_ 12. I think about calling my students ugly names.
- \_\_\_\_\_ 13. I avoid looking at my students.
- \_\_\_\_\_ 14. My students make me sick.
- \_\_\_\_\_ 15. I feel sick to my stomach when I think about work.
- \_\_\_\_\_ 16. I wish people would leave me alone at work.
- \_\_\_\_\_ 17. I dread going to school.
- \_\_\_\_\_ 18. I am apathetic about my job.
- \_\_\_\_\_ 19. I feel stressed at work.
- \_\_\_\_\_ 20. I have problems concentrating at work.

Appendix I

Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF)

*Instructions:* Please answer each statement below by putting a circle around the number that best reflects your degree of agreement or disagreement with that statement. Do not think too long about the exact meaning of the statements. Work quickly and try to answer as accurately as possible. There are no right or wrong answers. There are seven possible responses to each statement ranging from ‘Completely Disagree’ (number 1) to ‘Completely Agree’ (number 7).

1 ..... 2 ..... 3 ..... 4 ..... 5 ..... 6 ..... 7  
**Completely Disagree** **Completely Agree**

1. Expressing my emotions with words is not a problem for me.	1	2	3	4	5	6	7
2. I often find it difficult to see things from another person’s viewpoint.	1	2	3	4	5	6	7
3. On the whole, I’m a highly motivated person.	1	2	3	4	5	6	7
4. I usually find it difficult to regulate my emotions.	1	2	3	4	5	6	7
5. I generally don’t find life enjoyable.	1	2	3	4	5	6	7
6. I can deal effectively with people.	1	2	3	4	5	6	7
7. I tend to change my mind frequently.	1	2	3	4	5	6	7
8. Many times, I can’t figure out what emotion I’m feeling.	1	2	3	4	5	6	7
9. I feel that I have a number of good qualities.	1	2	3	4	5	6	7
10. I often find it difficult to stand up for my rights.	1	2	3	4	5	6	7
11. I’m usually able to influence the way other people feel.	1	2	3	4	5	6	7
12. On the whole, I have a gloomy perspective on most things.	1	2	3	4	5	6	7
13. Those close to me often complain that I don’t treat them right.	1	2	3	4	5	6	7
14. I often find it difficult to adjust my life according to the circumstances.	1	2	3	4	5	6	7
15. On the whole, I’m able to deal with stress.	1	2	3	4	5	6	7
16. I often find it difficult to show my affection to those close to me.	1	2	3	4	5	6	7
17. I’m normally able to “get into someone’s shoes” and experience their emotions.	1	2	3	4	5	6	7
18. I normally find it difficult to keep myself motivated.	1	2	3	4	5	6	7
19. I’m usually able to find ways to control my emotions when I want to.	1	2	3	4	5	6	7
20. On the whole, I’m pleased with my life.	1	2	3	4	5	6	7
21. I would describe myself as a good negotiator.	1	2	3	4	5	6	7
22. I tend to get involved in things I later wish I could get out of.	1	2	3	4	5	6	7
23. I often pause and think about my feelings.	1	2	3	4	5	6	7
24. I believe I’m full of personal strengths.	1	2	3	4	5	6	7
25. I tend to “back down” even if I know I’m right.	1	2	3	4	5	6	7
26. I don’t seem to have any power at all over other people’s feelings.	1	2	3	4	5	6	7
27. I generally believe that things will work out fine in my life.	1	2	3	4	5	6	7
28. I find it difficult to bond well even with those close to me.	1	2	3	4	5	6	7
29. Generally, I’m able to adapt to new environments.	1	2	3	4	5	6	7
30. Others admire me for being relaxed.	1	2	3	4	5	6	7

## Curriculum Vitae

**Name:** Sarah C. R. Pyne

**Post-secondary Education & Degrees:** University of Guelph  
Guelph, Ontario, Canada  
2010-2014 B.A. Honours Psychology

Western University  
London, Ontario, Canada  
2015-2017 M.A. Counselling Psychology

**Honours & Awards:** Entrance Scholarship  
University of Guelph  
2010

Western Graduate Research Scholarship (WGRS)  
Western University  
2015-2016

Social Science and Humanities Research Council (SSHRC)  
Canadian Graduate Scholarship – Master’s (National)  
2015-2016

**Related Work Experience:** Research Assistant  
Supervisor: Dr. Barbara Morrongiello  
University of Guelph  
2012-2014

Lab Coordinator, Child Development Research Unit  
Supervisor: Dr. Barbara Morrongiello  
University of Guelph  
2014-2015

Child and Family Therapist Intern  
Vanier Children’s Services  
2016-2017

Research Assistant  
Supervisor: Dr. Susan Rodger  
Western University  
2015-Present

### Publications:

Morrongiello, M. A., Corbett, M., Milanovic, M., **Pyne, S.**, & Vierich, R. (2015). Innovations in using virtual reality to study how children cross streets in traffic: Evidence for evasive action skills. *Injury Prevention*. doi:10.1136/injuryprev-2014-041357