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Learning to Prevent Burning and Fatigue: Teacher Burnout and Compassion Fatigue

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

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LEARNING TO PREVENT BURNING AND FATIGUE: TEACHER BURNOUT AND
COMPASSION FATIGUE

(Thesis format: Monograph)

by

Adam Koenig

Graduate Program in Education (Counselling Psychology)

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

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Abstract

During a professional development workshop, 64 Canadian educators from Southwestern Ontario participated in a workshop about natural consequences that may develop as a result of their line of work. A focus on teacher compassion fatigue, an unresearched area with respect to Canadian educators, and burnout was taken. The current study hypothesized professional development would positively influence educators' knowledge, skills, and awareness regarding burnout, vicarious trauma, compassion fatigue, and self-care, in both the short and long term. Furthermore, it was predicted there would be a correlation between burnout and compassion fatigue, and that years of experience would be related to the level of burnout reported. Results supported the efficacy of professional development in both the short and long term; and support was partially detected for the relationship between burnout and compassion fatigue, but not for the relationship between years of experience and burnout. Implications and future research are discussed.

Keywords

Teacher, Educator, Burnout, Compassion Fatigue, Professional Development, Canadian

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Chapter 1

1 Introduction

Teachers are entrusted with the responsibility to educate the future leaders of tomorrow and are essential to student achievement (Murphy, Delli, & Edwards, 2004). Moreover, they are challenged with the task of successfully performing many different roles and responsibilities in their every day work, including: being a motivator, manager, observer, counsellor (Cohen, Manion, & Morrison, 1996), school leader, resource provider, mentor for fellow teachers, and an active agent of change of themselves and their students (Harrison & Killion, 2007), among others. Although commonly construed as an "easy" occupation, Johnson et al. (2005) found teaching to be one of the most stressful professions with similar levels of stress to those of paramedics, police officers, and social service workers. With the large number of roles and responsibilities teachers face, it is no wonder that two distinct concepts have been linked to reduced emotional and physical well-being in teachers; those concepts being burnout (Burke & Greenglass, 1995) and more recently compassion fatigue, also referred to as secondary traumatic stress (STS; Hatcher, Bride, Oh, King, & Catrett, 2011). With the limited amount of literature on compassion fatigue in teachers (Borntrager et al., 2012), and the prevalent issue of burnout in teachers, the present study will provide: a review of the relevant research literature; offer a theoretical framework to develop a comprehensive understanding of teacher burnout and compassion fatigue; describe the positive impact of professional development on burnout and compassion fatigue; and finally, describe a relevant professional development opportunity for teachers and evaluate the effectiveness of the program in both the short term and after 6 months with the goal of improving teacher well-being, enhancing the quality of student education, and adding to the academic literature.

1.1 Teacher Roles

Traditionally, an authoritarian type of discipline was expected of teachers and students attended class to memorize and absorb the information presented (Okojie, 2011). The role of educators today is very different as they need to be more adaptable with frequently changing policies, practices, and demands (Valli & Buese, 2007). Teachers must be facilitators of knowledge as well as managers and mentors of children (Pettersson, Postholm, Flem, &

Gudmundsdottir, 2004). With the tremendous increase in technological advances in recent years, teachers today must too possess the ability to use technology in the classroom and attend to its impact on students, all the while engaging students and motivating them to learn (Okojie, 2011).

The modern educational focus is about considering the learner's needs and adapting teaching styles to them; not simply instructing students from a text as was done in the past (Okojie, 2011). Teachers must not only educate the "average" students but are also responsible for creating, overseeing, and evaluating individual educational programs (IEPs) for students with special needs (British Columbia Teachers' Federation, 2009). In Ontario, teachers are expected to adhere to the guidelines outlined in the Ontario Education Act (1990). The act instructs/informs teachers of the many different tasks they must perform in addition to teaching their students; including, ensuring effective instruction and evaluation of students, being in the classroom 15 minutes before the day starts, helping the principal/school maintain a good relationship and cooperation with the community, ensure students are safe and that safety procedures are followed, as well as participate in regular parent/teacher meetings. Moreover, the Education Quality Improvement Act (EQIA), initially implemented in 1997-1998 but fully implemented by the 2002/2003 academic year, involved many changes to the Ontario secondary school education system including reallocating control of educational decision making from elected school board officials to government officials, the implementation of a new secondary curriculum, the merger of established school boards, and also mandated the amount of time teachers must spend instructing (Jaafar, Freeman, Spencer, & Earl, 2005).

Jaafar and colleagues (2005) examined the impact of Secondary School Reform in the Ontario education system based on the EQIA. A total of five Ontario schools from two large regions were used as sample sites where students, teachers, and administrators were asked about their experiences with the new educational changes. Results indicated teachers were working to make adjustments to their beliefs on how schools should operate but because of the negative political circumstances surrounding EQIA's implementation, teacher emotional well-being was negatively impacted resulting in a resistance to change. Educators believed the large educational changes implemented by the government were done too fast and done

with ulterior motives in mind (i.e., fiscally related) leading to negative professional and personal well-being for teachers.

Other research by Kyriacou (1998) has shown that large educational changes, similar to the EQIA, increase pressure on educators to develop new skills at impossible rates in order to meet the demands of the governing bodies. These teachers already must fulfill many roles that can be difficult to manage such as time constraints and heavy workloads, attending meetings with parents, planning for their classes, teaching their students, marking assignments and tests, writing academic reports, all the while managing misbehaving students, students who challenge their authority, and students who have little interest in learning. An Ontario College of Teachers report indicated Ontario teachers felt most stressed over job aspects such as time constraints, parental blame over a child's underperformance, encountering dysfunctional families, performance evaluations, and school politics (COMPAS, 2006). With the combination of teachers' regular role related difficulties, and an increased pressure to develop new skills at an extreme pace, there is a high possibility for increased feelings of stress on already strained teachers.

Moreover, as noted in an ethnographic study by Bartlett (2004), while modern teacher roles have expanded in recent times, their structural supports have not. Teachers are now often responsible for assessing the school systems, educational practices, and curriculum development (Lieberman & Miller, 1999); all the while potentially confronting the reality of an increasing number of role related responsibilities outside of the classroom and an intensification of the work inside the classroom (Bailey, 2000). If new roles are integrated into a teacher's "typical day" teachers may actually become more committed to their roles. If, however, they are given an extra role, and it is not integrated into their typical day and/or they are not structurally supported, teachers are likely to be forced into sacrificing some of their personal time at home to finish their work, potentially making them feel overworked and overwhelmed (Bartlett, 2004).

With over 14% of educators leaving the profession within the first year of teaching, nearly 50% leaving within their first 5 years, and about 6% leaving the workforce annually (Alliance for Excellent Education, 2004), it is apparent educators are suffering from their work. In Ontario specifically, 13% of teachers reported feeling "really stressed all the time"

and 45% "a few times a week", compared to 7% and 29% respectively in the general public (COMPAS, 2006, p.10). Seen by some researchers as an extremely emotionally demanding role (Hargreaves, 1998), and one of the most stressful professions (Johnson et al., 2005), the added pressures of the additional roles teachers must take on, alongside their regular duties, can lead some teachers to experience mental health issues and become dissatisfied with their job (Chan, 2006). This feeling of job dissatisfaction, or more specifically a feeling of a lack of personal accomplishment, is a key indicator in a concept known as *burnout* (Maslach & Jackson, 1981).

1.2 Burnout

Described as "a progression of unsuccessful attempts by an individual to cope with a variety of conditions that are perceived to be threatening" (p. 30), burnout was originally coined by Herbert Freudenberger in the 1970's but gained much more significant empirical attention through Christina Maslach (Gold & Roth, 1993). Through interviews, testing, and analyses, Maslach and Jackson (1981) created a psychological measurement called the Maslach Burnout Inventory (MBI) to empirically quantify burnout in human service workers. These researchers conceptualized burnout as a long-term chronic state of stress which is the direct result of working with people (Schwarzer & Hallum, 2008). It is further described as "a syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment" (Maslach, Jackson, & Leiter, 1996, p. 4). Maslach, Jackson, and Schwab (1996) later developed the MBI-Educators Survey (ES), specifically for teachers, and the MBI-General Survey (GS) for non-human service workers (Schaufeli, Leiter, Maslach, & Jackson, 1996). Both the MBI-ES and the original MBI, which was renamed the MBI-Human Service Survey (HSS), define and measure burnout according to three components: emotional exhaustion, lack of personal accomplishment, and depersonalization. Emotional exhaustion is characterized by feelings of depletion and a lack of energy which negatively impacts a person's ability to demonstrate care and concern with the population they typically work with. Lack of personal accomplishment occurs when an individual feels they cannot adequately relate to their target group, and depersonalization occurs when an individual experiences a sense of detachment and a lack of sympathy toward people (Maslach, Jackson, & Schwab, 1996). Each one of these aspects are viewed as an indicator of burnout and are

measured independently of one another; meaning there is no overall indication of burnout but instead three distinct factors.

Alternative inventories have been used to address concerns over the MBI, such as the Copenhagen Burnout Inventory by Kristensen, Borritz, Villadsen, and Christensen (2005). These researchers criticized the MBI for not being publically accessible, asking questions which could elicit negative emotional reactions due to their potential offensive nature, and having an unclear relationship between the three subscales of the MBI and the definition of burnout (i.e., the subscales are independent measures of burnout and yet burnout is defined as a singular concept). Despite these limitations, the MBI is well represented in research with 91% of the literature on burnout using the MBI as its measurement of choice (Schaufeli & Enzmann, 1998).

1.3 Burnout in Teachers

In one of Maslach's (1982) original publications, she used this example of a typical teacher to help readers understand how burnout can occur:

Consider a teacher who must educate a class of thirty students; deal with all of their personal and social needs on a daily basis; discipline, influence, shape, manage, and direct their behavior over long hours and then face possible friction and hostility from parents, the uncertainty of layoffs from administrators, and the ever present threat of budget cutbacks from the community. Such a teacher is at risk for burnout (p.6).

The challenging aspect of burnout is that the principle factor in its development is the same factor which is often a good teacher's strength, namely dedication; thus, the more dedicated teachers are to their job, the more likely they are to experience burnout (Brock & Grady, 2002). What Maslach's (1982) depiction of a teacher provides readers is an idea of what teachers have to manage on any given day and the different demands which may eventually lead to burnout.

Kokkinos (2007) investigated the relations between teacher demands and personality characteristics and how these elements interact with the three dimensions of burnout as described by Maslach and Johnson (1981). One thousand primary school teachers in Cyprus,

Greece were invited to participate in the study after surveys were mailed to local schools. A total of 447 teachers responded and filled out three questionnaires: one on job stressors, one on burnout (in this case, the MBI), and one on personality characteristics (i.e., NEO- Five Factors Inventory). Results identified all 11 job-related factors examined in the study were positively associated with emotional exhaustion and depersonalization. Furthermore, seven job factors were negatively associated with personal accomplishment, including student behaviour (i.e., acting out), managing student behaviour, work load, time constraints, teaching demands, evaluation of teachers, and poor working conditions. Personality characteristics of participants were associated with the MBI personal accomplishment scores such that neuroticism was negatively associated with personal accomplishment and positively associated with emotional exhaustion and depersonalization. Moreover, results indicated those who had been in the teaching profession for 10 years or more experienced greater emotional exhaustion than those who had been teaching for less than 10 years, and the personality trait of high neuroticism, combined with job stressors, was a significant predictor of burnout. In light of these findings, Kokkinos suggested teachers develop strategies to better manage their classrooms, consider the coping mechanisms they use to handle stressors, and discuss alternative coping strategies with others. One way Kokkinos suggested teachers could accomplish these tasks was through professional development.

During a professional development workshop, Fisher (2011) had 412 American secondary school teachers complete three questionnaires, including an inventory of coping skills, the MBI, and a self-report evaluating stress levels. Fisher examined how demographic and individual variables, such as years of experience, job satisfaction, stress, and burnout, were associated with one another. Results indicated stress, low job satisfaction, and lack of coping skills were predictors of burnout. Similarly, burnout, years of experience, and job satisfaction were related to high stress scores.

As mentioned earlier, approximately 50% of teachers quit their job within the first 5 years of employment (Alliance for Excellent Education, 2004). Both Fives, Hamman, and Olivarez (2007) and Hong (2010) investigated factors which appear to influence early teacher attrition. Fives et al. (2007) examined pre-service (student) teacher efficacy, availability of support, learning environment, and the relationship of these variables to burnout as measured by the

Teacher Sense of Efficacy Scale, Learning to Teach Questionnaire, Learning Climate Questionnaire, and the MBI-ES. Researchers found teacher efficacy was positively related to a good learning environment and supportive supervision, and the more efficacy student teachers had the less likely they were to experience emotional exhaustion and depersonalization. Similarly, Hong (2010) examined differences between four groups of teachers based on years of service (i.e., pre-service before any student encounter, pre-service after student encounter, beginning teachers with less than 5 years experience, beginning teachers who left the profession) and five different personal variables; including, values, self-efficacy, commitment, micropolitics, and emotion. Results showed those who had left the profession had the lowest scores on all five variables, including emotion which was measured by the MBI subscales of emotional exhaustion and depersonalization. From this research, the importance of support, self-efficacy, and other variables in preventing teacher burnout was observed. However, in order to develop a comprehensive understanding of burnout and its development, it is important to consider the experience of burnout over time.

In a longitudinal study, researchers Burke and Greenglass (1995) investigated factors which can influence burnout and their effects on teachers over a 1 year period. A total of 833 teachers and principals completed a questionnaire at Time 1, with a completion rate of 43% (n= 362) at Time 2. Researchers found work stress, conflict and ambiguity in the job, narrow type of clientele (i.e., working exclusively with students), and unmet expectations of what they believed the job would be like, were all related to at least one factor of burnout at both Time 1 and 2. Burnout was associated with lower job satisfaction, psychosomatic symptoms, lower life satisfaction, and higher medication use and absenteeism. Moreover, Burke, Greenglass, and Schwarzer (1996) found, in a longitudinal study as well, a lack of supervisory support, disruptive students, and self-doubt were often related to burnout which, in turn, was associated with depressive symptoms, exhaustion, and heart issues in teachers. With burnout being associated with these negative characteristics in teachers it is also interesting to note that burnout can be contagious (Bakker & Schaufeli, 2000).

Bakker and Schaufeli (2000) tested three hypotheses regarding burnout and contagion. The first tested for a positive relationship between levels of burnout and discussion of work-related issues among teachers; the second examined teachers' susceptibility/ability to

emotionally empathize with their colleagues and its relation to burnout scores; and third, the researchers examined if teachers who discussed work related issues, and emotionally empathized with their colleagues, would be more likely to report burnout. Using a mailed survey with an 83% response rate, the researchers found support for their first hypothesis across all three factors of burnout on the MBI, but only on emotional exhaustion and depersonalization for their third hypothesis. Bakker and Schaufeli did not find support for their second hypothesis. The researchers stated the lack of support could have been due to the strong main effect they found for emotional empathy. In all, the researchers findings suggested burnout factors can be contagious for emotionally empathetic teachers and should be addressed to protect teachers against burnout.

1.4 Research Issues

Research issues impacting most of the reviewed articles were selection bias and generalizability. In both the Kokkinos (2007) and Burke and Greenglass (1995) studies, participant rates were below 50%, and Fives et al. (2007) had only 49 participants: having a lower number of participants willing to participate results in a selection bias. In addition, all participants in all studies were voluntary. Due to the fact that participants voluntarily chose to answer the surveys, they may have had a high desire to do so because they were experiencing more burnout versus those who did not respond to the surveys. This participant self-selection or motivation would then bias the results of the studies. Furthermore, Bakker and Schaufeli (2000), Fisher (2011), and Hong (2010) all dealt with specific teacher populations (i.e., high school, pre-service) and did not include other teacher populations (i.e., elementary, special education) within their specific studies. The lack of inclusion of different teacher populations limits each study's generalizability to teachers other than those included in each study.

Some researchers could also take issue with the fact Kokkinos' (2007) participants were from Greece, and Bakker and Schaufeli's (2000) were from the Netherlands, and that these populations may have limited generalizability to a North American teacher population. That said, a previous study by Kokkinos (2006) reviewed the validity and reliability of the MBI with Greek teachers and results were comparable to those used in the North American validation of the MBI. Schaufeli, Daamen, and Van Mierlo (1994) too found the MBI to be a

valid and reliable measure for a Dutch population; thus, generalizability to teacher populations included in the validation of the MBI (i.e., North American teachers) can be inferred. With numerous studies of different teacher populations from several world locations all apparently experiencing burnout, it appears teacher burnout can be generalized across teacher type and teacher location. Another concept that negatively affects those in the human service field, and one that is often confused with burnout, is compassion fatigue.

1.5 Compassion Fatigue

Unlike burnout, which can result from a large number of factors (i.e., cumulative stressful demands of work, home, and/or family; Maschi & Brown, 2010) and which typically develops over months or years (Pryce, Shackelford, & Pryce, 2007), compassion fatigue can occur after one encounter. Compassion fatigue is the natural emotional and behavioural reactions that occur from the knowledge of someone close experiencing a traumatic event, combined with the stress caused by the desire to help the traumatized individual. Individuals suffering from compassion fatigue often exhibit symptoms similar to the DSM-IV-TR criteria for posttraumatic stress disorder (PTSD) due to the traumatic content that the compassion fatigue sufferer indirectly experienced (Figley, 1999). For example, if a traumatized student approaches a teacher and describes the abuse they have experienced at home in great detail, the teacher may then start to experience PTSD symptoms even though they never directly experienced the abuse. Symptoms of compassion fatigue include: re-experiencing the trauma through dreams, recollections, and/or flashbacks; avoiding or numbing reminders of the trauma through detachment from others, psychogenic amnesia, diminished affect; and heightened/persistent arousal evident by difficulty sleeping, becoming irritable, or being hypervigilant (Figley, 1999).

In addition to the negative symptoms of compassion fatigue, Tehrani (2007) noted other negative results from compassion fatigue sufferers. Tehrani was interested in investigating the effects working in a "helping profession" could have on "helping" workers. Of the 400 individuals contacted to be involved in the study, 319 agreed to participate. All participants were in helping types of employment, such as doctors, teachers, police officers, counsellors, psychologists, and lawyers among others. Respondents answered the Trauma Belief Inventory and although many participants believed they were doing a good job in their work,

more than 60% felt the world was a dangerous place, that they should have coped better, and felt overwhelmed. These beliefs held by participants revealed a negative impact on helper values and beliefs due to their work, often indicators of compassion fatigue.

1.6 Compassion Fatigue and Teachers

Due to the relatively recent development of the topic of compassion fatigue (Figley, 1995), in comparison to the development of the concept of burnout from the 1970's (Gold & Roth, 1993), there is limited published research involving teaching populations (Borntrager et al., 2012). Most of the literature investigates other human service sector employees such as counsellors, nurses, and social workers; however, a recent study by Borntrager and colleagues (2012) was the first to quantitatively investigate compassion fatigue of personnel within six standard public schools in the Northwestern United States. Of the sample of 299 school personnel, including teachers, administrators, social workers, counsellors, and paraprofessionals, approximately 75% were experiencing a significant level of compassion fatigue according to the Secondary Traumatic Stress Scale (STSS). The authors offered an explanation for the high rate of compassion fatigue in their sample as 25% of the educators were of American Indian and Alaska Native descent. These populations are often exposed to trauma at a significantly higher rate than other types of populations (National Center for Children in Poverty, 2007); thus, the researchers believed that as 25% of the educators were of this population, it was likely the students they served would be of a similar percentage and therefore, have a higher rate of trauma exposure resulting in higher secondary exposure rates as well.

Another study which investigated compassion fatigue in teachers was conducted by Hatcher et al. (2011). The study was designed to examine the compassion fatigue experience of juvenile justice teachers and their perceptions of the amount of trauma experienced by their students. Data was collected during educational self-care sessions. Results indicated 81.4% of the teachers met one or more of the three primary diagnostic requirements for PTSD, 55.1% met two, and 39.0% met all three. The researchers discussed the selection bias of their sample as those who completed the study may have been experiencing more compassion fatigue since they elected to attend educational sessions on self-care tactics. Furthermore, the sample population cannot be generalized to the general teaching population since the juvenile

justice teachers work with extremely troubled children who have higher rates of trauma compared to their non-jailed peers. The high trauma rates in children being taught could have influenced the amount of compassion fatigue experienced by their teachers.

Furthermore, studies have shown compassion fatigue cannot only create PTSD-like symptoms in individuals, but alter people's cognitive schemas about the goodness of people (Schauben & Frazier, 1995) and generate psychological distress (Cornille & Myers, 1999). With the amount of distress individuals experiencing compassion fatigue endure, it is difficult not to question the quality of education students are receiving if their teacher is suffering from compassion fatigue, regardless of the student population teachers are interacting with.

Hoffman, Palladion, and Barnett (2007) used a qualitative design to examine the experiences of five middle school special education teachers in regard to compassion fatigue and early teacher attrition. All the teachers studied were novice teachers (i.e., 0-6 years of teaching experience). Through semi-structured interviews, the researchers uncovered themes of loss of control, empathy, and responsibility. These teachers discussed feeling as though they were unable to control their work environment in a way which enabled them to effectively meet the needs of their students. The teachers also discussed how they would continually involve themselves in stressful situations for their students' needs and how it was their duty to do so. All three of the themes captured by the interviews indicated risks and signs of compassion fatigue. Again, this brings into question the quality of education students were receiving.

Another qualitative study was conducted by Hill (2011) investigating how urban teachers coped with compassion fatigue and how they implemented self-care techniques to minimize its effects. Hill conducted personal interviews with nine female teachers from the state of Massachusetts. The interviews were semi-structured, yet open-ended to allow for as much detail as possible, and all teachers indicated they had attended some training for trauma-related issues over their teaching careers. Hill found the teachers in his study exhibited symptoms related to compassion fatigue, such as intrusive imagery, feeling fatigued and anxious, and feeling overwhelmed. Hill also noted the teachers used self-care tactics, such as debriefing with colleagues, friends or family, reading trauma educational resources, and/or

visiting a therapist. These self-care tactics could help teachers cope with compassion fatigue and maintain the quality of their instruction.

Both Hoffman et al. (2007) and Hill's (2011) studies were qualitative in nature. Due to their qualitative designs, issues of transferability/generalizability are present. In the study by Hoffman et al. (2007), participants were middle school special education teachers; while in Hill's (2011) research, all participating teachers taught at a specialized "trauma sensitive school." This trauma sensitive classification meant the teachers involved in the study had more exposure to traumatized children but also were provided with more resources to cope with traumatized individuals through things such as professional development, community support services, and conflict resolution training. Since these teachers were exposed to more traumatized children, similar to the quantitative Borntrager et al. (2012) and Hatcher et al. (2011) studies, the prevalence of compassion fatigue could have been higher than those of the general population. Conversely, working with a traumatized population offered those teachers in Hill's (2011) study more access to resources to help prevent compassion fatigue which many "average" teachers often do not have access to, or knowledge of. The higher availability of resources for Hill's teachers could have resulted in a less severe experience of compassion fatigue than if those resources were not available.

With the findings of the literature reviewed above, it is clear burnout and compassion fatigue have a negative impact on teachers. Burnout can lead to emotional exhaustion, depersonalization, and a sense of a lack of personal accomplishment (Maslach & Jackson, 1981), while compassion fatigue involves symptoms of arousal, avoidance, and re-experiencing (Figley, 1999) among others (Cornille & Myers, 1999; Schauben & Frazier, 1995). That said, both can cause teachers distress (Hill, 2011; Kokkinos, 2007), and as demonstrated in the burnout literature, negatively impact affective learning and student motivation (Zhang & Sapp, 2008). No research examining the impact of compassion fatigue on student learning was uncovered, but it is hard to imagine how learning could not be impacted by a teacher experiencing severe psychological stress, detachment from others, diminished interest in previously important activities, poor sleep patterns, and experiencing difficulty with concentrating, among other symptoms (American Psychiatric Association,

2000). It, therefore, could be stated that teachers are not the only ones negatively affected by burnout and compassion fatigue but that their students may also be negatively impacted.

Before examining the literature on how professional development can help mitigate the impact of burnout and compassion fatigue, it is important to review a theoretical perspective of how and why they develop.

1.7 Teacher Performance-Motivation Theory and Relational-Cultural Theory

Teacher Performance-Motivation Theory (TP-M Theory; Blase, 1982) explains burnout in teachers and can be extended to explain compassion fatigue as well. In addition, a concept known as a *growth-fostering relationship* from Relational-Cultural Theory (RCT; Jordan, 2000) can be added to TP-M Theory to not only explain the impact burnout and compassion fatigue can have on teachers but the teacher/student relationship as well.

TP-M Theory posits there exists a mutual and active relationship between students and teachers and that in order to understand the components of a teacher's job, it is essential that the teacher/student relationship be understood (Blase, 1982). From an RCT perspective, it would be desirable that the "mutual and active relationship" be a growth-fostering relationship since it is viewed as an essential component in life where both parties grow through the relationship, and mutual empathy and empowerment are key in its development (Jordan, 2000). Figure 1 helps conceptualize the integration of RCT and TP-M Theory and how the teacher-student interaction can lead to a non-growth fostering or growth-fostering relationship.

According to TP-M Theory, in the teacher/student relationship, teachers have a perception of the "needs" students have (i.e., teachers' beliefs of what students believe they need to learn). This then leads teachers to apply effort as well as coping resources to help students achieve desired outcomes, such as good grades. In relation to burnout, TP-M Theory views its development from a set of circumstances where a teacher's efforts and coping resources are unable to surmount work-related stressors; meaning, factors in their job overwhelm their resources and prevent them from accomplishing their perceived job (i.e., academic, ethical, and guidance goals) and inhibit them from attaining intrinsic (e.g., personal fulfillment) or

extrinsic rewards (e.g., bonuses). If this overwhelming of resources continues for a long period of time, work involvement, motivation, effort, and satisfaction decrease exponentially; all because of their belief of "ineffective performance with students" (p. 99). The degree to which teachers feel ineffective depends on their perceptions of their efforts and the resultant student outcome. The larger the perceived discrepancy, the more stress and eventual burnout teachers experience (Blase, 1982).

In relation to compassion fatigue, even if teachers were coping with the symptoms of arousal, avoidance, and re-experiencing, they may still perceive their coping resources and available energy to accomplish their job as being overwhelmed. Due to the severity of compassion fatigue, a teacher's ineffective performance perception could be highly discrepant with reality, which could increase their stress levels and worsen their condition. As Hoffman et al.'s (2007) study highlights, teachers suffering from compassion fatigue felt inadequate in their ability to control their work environment in a way which enabled them to effectively meet the needs of their students. This is very similar to the way TP-M Theory conceptualized the feeling "burnt out" teachers experience; thus, TP-M Theory offers a way to conceptualize the process of both burnout and compassion fatigue, and to understand the impact students have on their teachers.

Extending the idea of perceived discrepancy to RCT, teachers who perceive their work stressors as insurmountable, and who then are experiencing burnout and/or compassion fatigue, may not be able to empathetically engage with and empower their students, nor be open to empathy or empowerment from their students. The lack of mutual relational benefit between students and teachers would then result in a non-growth-fostering relationship potentially hindering the teacher/student connection and maintaining the teacher's perceived coping/stressor discrepancy. Conversely, if a teacher perceived they had sufficient or ample coping resources and effort to surmount their work stressors and negative outcomes, a growth-foster relationship could develop dependent upon a student's disposition and availability to engage in the relationship.

In addition to understanding what burnout and compassion fatigue are, including their symptoms and causes, it is also necessary to explore ways in which to reduce their negative effects. One such way appears to be professional development.

Figure 1. TP-M Theory and Growth-Fostering Relationships

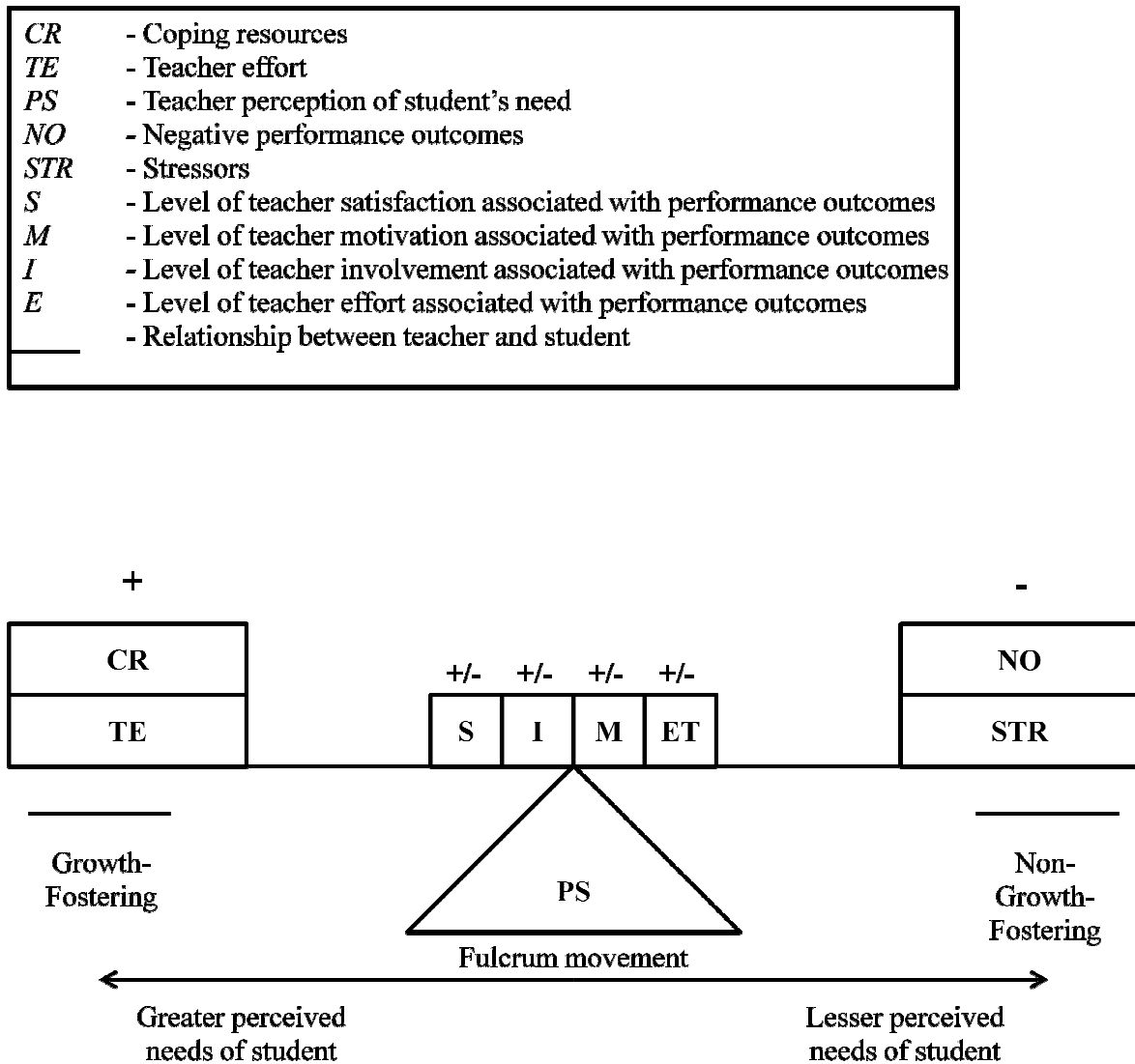


Figure 1. If the positive aspects of coping and effort outweigh the negative aspects of negative outcomes and stressors, the weight of the positive aspects weighs down the left side of the lever shifting the levels of teacher satisfaction, motivation, involvement, and effort to the left (dependent upon the fulcrum placement of the teacher's perception of student needs) which then enables the potential development of a growth-fostering relationship between teacher and student. If, however, the negative aspects outweigh the positive, teacher satisfaction, motivation, involvement, and effort slide to the right, and can lead to negative consequences of burnout, compassion fatigue, and a non-growth-fostering relationship between teacher and student. If a teacher perceives student needs to be excessive (fulcrum placed more to the left), much more weight would have to be placed on coping and effort to develop a growth-fostering relationship. Adapted from "A Social-Psychological Grounded Theory of Teacher Stress and Burnout," by J. J. Blase, 1982, *Education Administration Quarterly*, 18, p. 99-100. Copyright 1982 by Sage Publications.

1.8 Professional Development

What is important to note across many of the studies relating to burnout and compassion fatigue is that professional development, and increasing knowledge on these topics, appears to be a means of combating burnout and compassion fatigue (see Cairns, 2007; Hatcher et al., 2011; Hill, 2012; Hoffman et al., 2007; Hong, 2010; Kokkinos, 2007). Inherent in professional development is the opportunity for knowledge to facilitate change. Prochaska and Norcross (2001) created the transtheoretical *stages of change* model to help understand client change in psychotherapy. Clients will come to therapy at different stages of change such as the precontemplation, contemplation, preparation, or action stages. While learning more about themselves and issues they may have, often facilitated by psychoeducational information provided by their psychotherapists and the development of self-reflection and new skills, clients attempt to progress through the stages. Arguably those attending some form of professional development too lie somewhere in the stages of change and thus, providing information and opportunities for self-reflection through professional development is an effective way to help facilitate positive change as demonstrated by Cooley and Yovanoff (1996) and Pryce et al.'s (2007) respective studies.

Cooley and Yovanoff (1996) examined two different types of interventions designed to improve retention and reduce burnout in special education teachers. Similar to the studies previously discussed, Cooley and Yovanoff's sample of educators had a selection bias since participants were recruited through staff meetings and fliers for those interested in stress reduction; meaning the sample could have been different from those educators who did not feel they needed help with stress.

In an attempt to increase the internal validity of their intervention, Cooley and Yovanoff randomly assigned participants to one of two treatment groups or a wait-list control group. Participants in the treatment groups experienced both treatments in a cross-over design, while the control group received both treatments after the treatment groups. The treatments were a stress-management workshop and a peer collaboration program. After measuring burnout with the MBI, as well as investigating job satisfaction and organizational commitment, results indicated that both groups equally benefited from the treatments compared to the

control group. Cooley and Yovanoff suggested that educational workshops which provide information and/or facilitate peer support can help reduce burnout.

Although not applying these principles with teachers specifically, Pryce et al. (2007) discussed professional development workshops they conducted with child welfare professionals. The workshops involved increasing child welfare professionals' knowledge of compassion fatigue. The researchers had 666 child welfare professionals participate in their workshops and found more than 50% of participants were experiencing symptoms of compassion fatigue. In a post-evaluation of the five workshops conducted in five different states within the United States, more than 88% of participants stated they would incorporate the workshop information into their work and that it was worthwhile attending.

As both Cooley and Yovanoff (1996) and Pryce et al.'s (2007) studies included elements such as having a pre- post- design, attaining feedback, and measuring knowledge gained and attitudinal change, it was important that the current study took note of these elements when designing its professional development workshop. Shaha, Lewis, O'Donnell, and Brown (2004) emphasized the elements outlined above as important factors to be included in professional development in order to ensure generalizability of the evaluation and attain high validity of the development workshop and thus, many were incorporated into the current study.

1.9 The Current Study

The current study focuses specifically on one professional development workshop that was part of a larger five session series which took place during the 2012-2013 academic year. The main topics of each of the sessions came from a Mental Health Literacy and Capacity Survey of Educators (MHLCSSE) administered to teachers in the same board as the current study's sample. The survey, administered in 2011, consisted of 49 items where items were rated on a Likert scale from 1 "Not Important" to 5 "Very Important". The focus of that survey was to gain the perspective of teachers regarding mental health issues in their schools, what was being done in the classrooms related to mental health, and what teachers felt they needed in relation to mental health supports. A total of 3913 individuals responded to the survey with a 79.5% response rate.

What came out of the survey was the understanding that teachers wanted more training and support related to mental health issues and that this training should be done through workshops or peer support and not by providing paper or video materials/resources. Taking this under advisement, the school board's Mental Health Strategic Planning Group (MHSPG), which consisted of 12 members who were psychologists, teachers, social workers, learning supervisors, and school supports, consulted with the current study's research team to help develop the professional development series, including the workshop for the current study.

Based on the reviewed literature, which illustrated promising evidence that professional development workshops can help teachers cope with burnout (Cooley & Yovanoff, 1996) and with compassion fatigue in child welfare workers (Pryce et al., 2007), as well as the 2011 MHLCSSE survey of teachers who indicated the desire for mental health education through professional development, a professional development workshop on the natural consequences of human service work was developed, conducted, and evaluated. The topics of burnout, vicarious trauma, compassion fatigue, and self-care were selected to be discussed with educators but only burnout and compassion fatigue were investigated by the current study. Since compassion fatigue's impact on educators is a relatively new subject area, only a limited amount of literature has been published on how it affects teachers, let alone how a professional development workshop influences teacher resilience to compassion fatigue; meaning, the current investigation can be an important new addition to the literature on compassion fatigue and a further addition to the literature on educator burnout, especially since the present sample involved Canadian educators.

This examination of the outcomes of the second session in the series thus, investigated the short-term and long-term benefits of a single professional development workshop on burnout and compassion fatigue in relation to educators' (i.e., broadly defined as those who work with children in the school system and including educational assistants, school administrators, guidance staff, learning support teachers, student success teachers, psychologists, social workers, speech/language therapists, and school support counsellors among others), knowledge, skills, and awareness of burnout and compassion fatigue along with its prevalence within this population. The specific hypotheses included:

1. In both the short-term and long-term, teachers/staff would report an increase in knowledge and understanding of compassion fatigue and burnout.
2. Participants would report an increase in awareness of, and efficacy in the use of, self-care skills both immediately after the workshop and at the 6 month follow-up, compared to the pre-evaluation.
3. Some participants ways of coping with stress would be measured both before and 6 months after the workshop. Any changes in endorsement of items would be tracked, but no specific predictions were made.
4. Individuals with higher burnout scores would also have higher compassion fatigue scores, based on the results of Pryce et al. (2007).
5. Finally, it was hypothesized that those educators with over 10 years experience would have higher emotional exhaustion scores than their less seasoned peers (Kokkinos, 2007), and also, that those with under 5 years experience would suffer higher rates on all burnout factors due to the typically higher rates of early attrition (Alliance for Excellent Education, 2004).

Chapter 2

2 Method

2.1 Participants

Teachers and support staff, defined from here as educators, from a large school board in Southwestern Ontario participated in the current study. All participants attended a 2 hour voluntary professional development workshop in late November 2012 on burnout, vicarious trauma, compassion fatigue, and self-care funded by their school board and advertised on the school board website. Pre-test (Time 1) and post-test (Time 2) questionnaires were completed individually but in a group setting with up to six participants at each table, both before and after the workshop. There was also a follow-up questionnaire distributed 6 months after the workshop (Time 3) for a total of 3 questionnaire periods. Of the 74 workshop attendees, 64 (58 female, 2 male, 2 unspecified) chose to answer the Time 1 and Time 2 questionnaires, while 32 (31 female, 1 male) consented to being contacted for the Time 3 follow-up. Years of experience ranged from less than 1 year to 36 years ($M = 14.77$, $SD =$

9.79) and 31 participants indicated working in an elementary school setting, 19 secondary, 12 in both, and two did not specify. Table 1 displays previous types of training participants indicated having completed on the topics of burnout, vicarious trauma, and/or compassion fatigue. Of the participants who consented, 18 educators (17 female, 1 male) responded to follow-up requests (i.e., 56% compliance rate); 10 worked in elementary schools, five in secondary, three in both. Years of service ranged from 1 to 36 years ($M = 13.33$, $SD = 9.68$; see Table 2 for Time 1 and Time 3 Role Frequencies).

2.2 Measures

Since the data for the current study was collected during a relatively short professional development workshop, measures which efficiently and effectively collect data were considered. Within the empirical literature, both the Maslach Burnout Inventory-Educators Survey (MBI-ES; Maslach, Jackson, & Schwab, 1996) and the Secondary Traumatic Stress Scale (STSS; Bride, Robinson, Yegidis, & Figley, 2004) appeared to efficiently and effectively measure burnout and compassion fatigue, respectively.

2.2.1 MBI-ES

The MBI-ES was created by Maslach, Jackson, and Schwab (1996) for the needs of researchers examining teacher burnout. The researchers simply changed the word “recipient” found on the original MBI to “student” in some of their items to match the population teachers encounter. The MBI-ES is a 22-item survey which examines the three aspects of burnout according to Maslach and Jackson (1981; i.e., subscales of emotional exhaustion, depersonalization, and personal accomplishment). Items are scored on a seven-point Likert scale from 0 to 6, with 0 being “Never” and 6 being “Every day.” A minimum possible sum score on all subscales is 0 with a maximum possible sum score of 54 on the subscale of emotional exhaustion, 30 on depersonalization, and 48 on personal accomplishment. Higher scores on the emotional exhaustion and depersonalization subscales indicate being negatively affected in those areas of burnout, while lower scores in personal accomplishment indicate being negatively affected in that area of burnout. Severity of scores are based on normed samples of Maslach, Jackson, and Leiter (1996) and then categorized into three categories on a continuum: low, average, high. Reliability coefficients listed in the MBI manual (Maslach,

Table 1
Previous Training Frequency

Training Type	Yes	No	No Response
Indicated receiving training /self-education	23	36	5
Post-secondary	8	51	5
Professional development (in-service)	14	45	5
Continuing education/professional certification course	5	54	5
Readings	13	46	5

Table 2
Role Frequencies

Role	Frequency	Sample Percentage
	Time 1	
Teacher	27	42.2
Educational Assistant	10	15.6
School Administrator	6	9.4
Learning Support Teacher	4	6.3
SS-Unspecified	1	1.6
SS-Psychology	3	4.7
SS-Social Work	2	3.1
SS-Teacher on Special Assignment	1	1.6
SS-Learning Coordinator	3	4.7
Other	4	6.3
Missing	3	4.7
	Time 3	
Teacher	10	55.6
Educational Assistant	1	5.6
School Administrator	3	16.7
Learning Support Teacher	1	5.6
SS-Unspecified	1	5.6
SS-Psychology	2	11.1

Note. Time 1 and Time 2 share the same number of participants, SS = Support Staff; Psychology = Psychologists, Psychometrists, Psych-Associates; Social Work = Social Workers, Social Service Workers.

Jackson, & Leiter, 1996) indicated scores of .90 for the emotional exhaustion subscale, .79 for depersonalization, and .71 for personal accomplishment ($n = 1,316$).

The MBI was chosen for the current study because it is efficient, well represented in the research literature (Schaufeli & Enzmann, 1998), and has been validated with a large number of human service sector employees, including teachers (Maslach, Jackson, & Leiter, 1996). Other studies have investigated the reliability of the subscales of the MBI with teachers and coefficient alphas were found to be .81 for emotional exhaustion, .60 for depersonalization, and .86 for personal accomplishment (Kantas & Vassilaki, 1997). A meta-analysis by Wheeler, Vassar, Worley, and Barnes (2011) found similar support for the MBI with a mean emotional exhaustion score of .87, $SD = .04$ from 98 studies, which involved diverse cultures and populations; depersonalization $M = .71$, $SD = .08$, $n = 93$; and personal accomplishment $M = .76$, $SD = .05$, $n = 90$. The researchers did note, however, that these levels were below what is recommended for diagnostic related decisions.

Further support for the MBI related to factor structure was provided by Gold (1984) who examined the factorial validity of the MBI in a sample of 462 Californian junior high school and elementary teachers. Gold found good factorial validity among emotional exhaustion and personal accomplishment within the MBI where the items loaded on to their intended factors and not onto the other factors. Weights ranged from .33 to .83 for emotional exhaustion to .44 to .67 on personal accomplishment. For depersonalization, even though some of the items loaded onto both depersonalization and emotional exhaustion, the researchers described depersonalization to be “relatively clearly defined” (p. 1014) with weights of .49 and .62 on depersonalization for two of the five factor’s items, demonstrating overall, consistent factorial validity of the MBI.

For the purposes of this study, slight modifications were made to items 5, 10, and 15, as members of the study's MHSPG voiced concerns regarding teacher honesty, in that some of the items were judged to be phrased bluntly and harshly. In other studies, researchers have found these items did not load on the depersonalization factor (Abu-Hilal & Salameh, 1992) and participants reacted negatively to these particular items (Kristensen et al., 2005). Item 5 was changed from “I feel I treat some students as if they were impersonal objects” to “I feel emotionally detached from some students.” Item 10 was changed from “I've become more

callous toward people since I took this job" to "I've become more callous toward people since I first started this job." Item 15 was changed from "I don't really care what happens to some students" to "I have difficulties caring what happens to some students." As three of the five items for the subscale of depersonalization were changed, internal consistency/reliability was calculated for depersonalization and was found to be slightly higher (i.e., $\alpha = .69$) than by Kantas and Vassilaki (1997) but lower than Maslach, Jackson, and Leiter (1996).

With the MBI's popular usage, as well as its supported validity, it was included in the current study to measure burnout.

2.2.2 STSS

The STSS was chosen to measure compassion fatigue due to its brevity and due to its validation through research. Bride, Radey, and Figley (2007) examined 10 different measures used in compassion fatigue research and noted the reliability and validity of each. After reviewing all of the measures, the STSS seemed to be one of the stronger measurements and also one of the most efficient.

The STSS is a 17-item measure of the three primary symptom areas of compassion fatigue (i.e., the three subscales: intrusion, arousal, and avoidance). Cronbach's alpha scores, indicating reliability, were .79 for intrusion, .87 for arousal, .85 for avoidance, and .94 for the total measure (Ting, Jacobson, Sanders, Bride, & Harrington, 2005). Items are scored on a five-point Likert scale from 1 "Never" to 5 "Very Often" with an overall minimum possible sum score of 17 and a maximum of 85, where higher scores indicate higher compassion fatigue. Scores are categorized along a continuum and the continuum consists of 5 levels: no compassion fatigue, mild, moderate, high, and severe compassion fatigue (Bride, Radey, et al., 2007).

In a study by Bride, Robinson, et al. (2004), 287 master's level social workers from the Southeastern United States participated in a demonstration of the STSS's reliability, factorial validity, and convergent and discriminant validity. Results indicated alpha values above .80 on all three subscales. The factor structure of the STSS was sufficient as well, with each item loading on to its intended factor, loadings ranging from .58 to .79, and being significant at $\alpha = 0.05$.

Moreover, based on an additional 23 item measure Bride, Robinson, et al. included in their study that examined participant professional activities and demographics, results also supported convergent and discriminant validity. Previous research has indicated significant relationships between compassion fatigue and the percentage of traumatized individuals someone sees within their caseload (Brady, Guy, Poelstra, & Fletcher-Brokaw, 1999; Chrestman, 1999; Schauben & Fraizer, 1995), extent of time spent working with traumatized individuals (Brady et al., 1999; Chrestman, 1999), how intense someone perceives working with traumatized individuals to be (Arvay & Uhlemann, 1996), as well as depression and anxiety symptoms (Davidson & Fairbank, 1993). All these factors, measured by the 23-item additional measure in Bride, Robinson, et al. (2004), supported the notion of a significant relationship to the STSS and each subscale, thus demonstrating convergent validity. Other research indicated a lack of significant relationships between compassion fatigue and income (Pearlman & Mac Ian, 1995), ethnicity (Knight, 1997), and age (Good, 1996). None of these factors related to the STSS or its subscales, thus demonstrating discriminant validity.

For the current study, the period of reflection in the STSS was changed from “the past seven days” to “the past year.” The researchers felt that since the current study was examining an educator population, their encounters with traumatized children or staff would be less frequent than with social workers, for which the STSS was validated.

Participant responses can be scored either by examining total scores by each subscale or by an overall score of the STSS. It was decided to analyze data by using the overall score of participants on the STSS versus their individual subscale scores based on results from Ting et al. (2005). Ting et al. examined the STSS’s validity and reliability with a national sample. A randomized list of 1000 individuals from the National Association of Social Workers database, which consisted of over 50,000 names of mental health social workers in the United States, was generated to determine who would be mailed a questionnaire package which included the STSS. Of the 1000 anonymous self-administered questionnaires sent out, 515 individuals responded with 275 of those respondents indicating they had been affected by their work and, as a result, elected to answer the STSS. Even though confirmatory factor analyses indicated support for the three subscales of the STSS, where factor loadings ranged from .46 to .82, the three factors were highly correlated with each other ranging from .96 to

1.0 suggesting compassion fatigue may in fact be a single construct; thus is why the STSS was analyzed as a whole instead of by its subscales in the current study. Scores of 38 or above (i.e., moderate to severe) are considered to warrant intervention (Bride, Radey, et al., 2007).

2.2.3 Ways of Coping

The current study also used two subscales from the Ways of Coping questionnaire to assess coping skills (Folkman, Lazarus, Dunkle-Schetter, DeLongis, & Gruen, 1986). The included scales were “planful problem-solving” and “seeking social support.” These scales were selected because adaptive coping skills were thought to be a desirable topic of investigation for those who indicated having not been exposed to a secondary trauma and to maintain anonymity so that participants were unaware of who completed the STSS and who did not (i.e., participants would finish answering their questionnaire packages roughly at the same time). A total of 12 items were used, six from each subscale. All items were scored on a four-point Likert scale from 0 “Not used” to 3 “Used a great deal” where average scores were calculated to observe participant trends but no formalized scoring method was used.

2.2.4 Researcher's Questionnaire

Lastly, an original questionnaire was created to investigate educator knowledge and awareness of burnout, vicarious trauma, compassion fatigue, coping skills, and resources available to educational staff in the community and through the school board (see Appendix A). Items were divided into three subscales labelled knowledge and understanding, awareness, and skills and behaviour. Items 1, 2, 4, 5, 7, 8, 12, 13, 14, 15, 16, 17, 18, 21, and 22 fell under the knowledge and understanding subscale and its Cronbach's alpha score was .90 indicating high reliability of the subscale; item 10 fell under awareness and a reliability score was not calculated as the subscale only involved one item; and items 3, 6, 9, 11, 19, and 20 fell under skills and behaviour and its Cronbach's alpha score was .65 indicating moderate reliability of the subscale. All subscales were evaluated before, immediately following, and 6 months after the professional development workshop.

In order to maintain comparability of the researcher's questionnaire subscales across the five workshops, as the other workshops had similar numbers of items allocated to their respective

subscales, only one item was used to measure awareness in the current study's researcher's questionnaire. What is more, the researcher's questionnaire was designed in consultation with the school board's MHSPG, while the learning objectives were developed by the school board's MHSPG in consultation with the workshop's presenters and included: gaining a deeper understanding of burnout, vicarious trauma, and compassion fatigue; recognizing the signs and symptoms of these consequences due to their work; identifying personal risk factors; increase awareness of practical strategies and stimulate the development of plans, strategies, or ideas to combat the discussed work related consequences; help develop the ability of attendees to identify personal changes that can be accomplished; provide attendees with the opportunity to reflect on what was happening in their life related to the workshop topics; and provide attendees with the opportunity and some direction on how to reflect on their own mental health and well-being (M. Gilpin, personal communication, October 30, 2012). As the majority of the outlined learning objectives related more to the subscales of knowledge and understanding, and skills and behaviour, this was reflected in the distribution of items among the three subscales of the researcher's questionnaire.

Originally items were scored on a 6-point Likert scale from 1 "No need for development" to 5 "Urgent attention required" with 6 being "Not relevant to my daily work". During data entry however, it was apparent that it was more appropriate for the sixth option to be scored as a 0 rather than a 6 because of how maintaining the sixth option as a 6 skewed data in an unintended direction; therefore, the scale was recoded from the initial 6-point Likert scale to then range from 0 "Not relevant to my daily work" to 5 "Urgent attention required". A minimum possible score on each subscale was then 0 with a maximum possible score of 75 on knowledge and behaviour, 5 on awareness, and 30 on skills and behaviour. High numbers indicated more need for development within that subscale area, while lower numbers indicated less need for development.

2.3 Procedure

The study was approved by the Research Ethics Review Board at The University of Western Ontario (see Appendix B) and took place at the school board's head office, located in the centre of the community, in the gymnasium. The room was set up such that about 32 round

tables with six chairs at each table were oriented to the front of the room where presenters used a lectern and computer projection screen to make their presentation.

The workshop presenters were local professionals hired by the school board with the first holding a Master's degree in Counselling Psychology and being an expert in the area of burnout, vicarious trauma, and compassion fatigue. The second presenter also held a Master's degree, and was a principal within the school board, and had additional training in self-care techniques.

Presenters were asked to develop their respective presentations with David Kolb's Experiential Learning theory in mind. Kolb proposed that there are four learning stages individuals must complete in order to successfully comprehend a concept: Concrete Experience (i.e., experiential learning), Reflective Observation (i.e., learning through analyzing or examining), Abstract Conceptualization (i.e., explaining new concepts to others), and Active Experimentation (i.e., hands on applied learning; Kolb, 1984); and these stages could be completed in any order. Presenters were asked to follow Kolb's model as best they could and make participants "active participants" through encouraging discussion of the topics with each other to allow for experimentation with the information. Making participants active and allowing engagement, analysis, and reflection with their peers has been shown to be important elements in effective professional development (Smith, Hofer, Gillespie, Solomonn, & Rowe, 2006).

Important to note is the fact that the workshop happened to be held at the end of a lengthy period of contract negotiations between the Ontario teachers' unions (i.e., Ontario Secondary School Teachers' Federation and Elementary Teachers' Federation of Ontario) and the Ministry of Education. There was much tension at that time between the unions and government with unions instructing members to use job actions, such as refusing to be a part of extra-curricular activities, staff meetings, professional development activities etc., (Artuso, 2012), while the government had imposed Bill 115 which restricted teachers' striking ability, warnings of disciplinary reviews or deductions in pay if found to not be "fulfilling" proper teaching duties, and wage freezes (Dubinski, 2012). The political tension at this time may have had an influence on the educators' stress levels, thus impacting the current results.

Held after school hours, participants were welcomed to the workshop and read a script informing them of the nature of the study, that it was voluntary, and that their school board would not know if they chose to participate in the study or not.

Participants were given an envelope which included the Time 1 and Time 2 questionnaires, letter of information, and written consent. Both the Time 1 and Time 2 questionnaires were in pencil and paper format. The written consent was for participants who wished to be contacted 6 months from the date of the initial workshop to attain Time 3 information on its effectiveness. Consenting participants were asked to provide their name, email, and phone number. All participants were then asked to complete the Time 1 evaluation which took approximately 15 minutes. The Time 1 evaluation consisted of the researcher's questionnaire, MBI-ES, STSS, and Ways of Coping subscales. All participants were asked to answer the researcher's questionnaire and the MBI-ES. All participants were then asked to answer the question, "Within the last year, and within your work environment, have you observed a student or co-worker who has experienced a trauma." If participants responded "yes" to the question they were asked to answer the STSS. If participants responded "no" to the question they were asked to answer the Ways of Coping subscales so participants would not know who was completing the STSS and who was not.

In order to ensure participant safety, as participants could have experienced distress when hearing or thinking about issues related to burnout or compassion fatigue, they were told that they may refuse to answer any questions in the surveys and the initial presenter informed participants that any type of emotional reaction to the subject matter was normal and that therapists were present in case participants became overwhelmed. After participants completed the Time 1 evaluation the workshop began. The first presenter presented for approximately 1 hour while the second presented for approximately 40 minutes.

Once the workshop was over, participants were thanked for coming and asked to complete the Time 2 evaluation. The Time 2 evaluation took approximately 5 minutes to complete and only consisted of the researcher's questionnaire.

The total time for the workshop with data collection and presentations was 2 hours.

For those who consented to being contacted at Time 3, an email was sent to them and they were asked to complete a questionnaire similar to the Time 1 questionnaire with the questionnaire attached to the email as a Microsoft Word document. The questionnaire included the researcher's questionnaire without the demographic questions, the MBI-ES, STSS, and the Ways of Coping subscales. As in the Time 1 evaluation, the question "Within the last year, and within your work environment, have you observed a student or co-worker who has experienced a trauma" was asked and an additional question, "Since the workshop on burnout and compassion fatigue you attended in November, have you observed a student or co-worker who has experienced a trauma?" was also asked to help track client changes or potential development of compassion fatigue since the workshop. Both were used to sort participants into answering the STSS or Ways of Coping Subscales as previously described.

2.4 Analysis

Examination of the data revealed of the 6259 possible responses (see Table 3 for Number of Possible Responses Per Measure) between the researcher's questionnaire, MBI-ES, STSS, and Ways of Coping subscales there were 178 data points missing in total (2.85%).

Individual measures varied in the percentage of missing data: researcher's questionnaire (2.46%), MBI-ES (4.71%), STSS (0.81%), Ways of Coping subscales (2.50%). In order to promote reliability, a set of criteria was developed in order for participants to be systematically included in the analyses. The criteria were as follows:

1. Participants who were missing more than 20% of responses on a particular measure were excluded from the analyses of that measure (e.g., if a participant was missing more than 20% of responses on the MBI-ES, their data was not included in the analyses of the MBI-ES). Of the 64 participants who answered the Time 1 questionnaire, four (6.25%) were excluded from the analysis of the researcher's questionnaire, five (7.81%) from the MBI-ES, one (2.22%) from the STSS, and none from the Ways of Coping subscales.
2. Participants who had less than 20% of responses missing on a particular measure, but were missing greater than 20% of responses on a particular subscale within a measure, were included in the analyses but excluded when analyzing that particular

Table 3

Number of Responses Per Measure

Measure	Number of Possible Responses
Researcher's Questionnaire ^a	3212
MBI ^b	1804
STSS ^c	1003
Ways of Coping ^d	240

Note. Total number of participants across measurement periods per scale
^an = 146 ^bn = 82 ^cn = 59 ^dn = 20

subscale. For example, if a participant was missing two responses on the MBI-ES, they would be missing less than 20% of responses overall, thus included in the analyses. If however, they were missing two responses on one subscale, say emotional exhaustion, their data was excluded from the analysis of the emotional exhaustion subscale but not the analyses of the depersonalization or personal accomplishment subscales. One participant was excluded from the analyses of the depersonalization and personal accomplishment subscales of the MBI-ES but their emotional exhaustion scores were included in the analysis.

If a participant met the two criteria conditions, their missing data points were filled with an average score calculated with the participant's existing subscale scores on the measure missing a response. For example, if a participant was missing one response on the MBI-ES emotional exhaustion subscale, their eight other emotional exhaustion item responses were averaged to obtain the missing ninth item response. This was performed with 13 participants on the researcher's questionnaire, four at Time 1, six at Time 2, three at Time 3; five on the MBI-ES, four at Time 1, one at Time 3; six on the STSS, four at Time 1, two at Time 3, and was not performed at all on the Ways of Coping subscales.

Chapter 3

3 Results

Three single factor repeated measure analyses of variance were conducted to determine if participants would report an increase at Time 2 and Time 3 compared to Time 1, in:

- knowledge and understanding of burnout, vicarious trauma, and compassion fatigue;
- awareness of their self-care skills; and
- efficacy in the use of their self-care skills and identifying risk factors of burnout, vicarious trauma, and compassion fatigue

3.1 Researcher's Questionnaire

The subscale scores were created by summing the items representing the three areas of interest: knowledge and understanding (15 items), awareness (1 item), skills and behaviour (6 items).

Across all three subscales, Mauchley's Test of Sphericity was not significant: knowledge and understanding, $W = 0.99$, $\chi^2(2) = 0.18$, *ns*; awareness, $W = 0.96$, $\chi^2(2) = 0.72$, *ns*; and skills and behaviour $W = 0.82$, $\chi^2(2) = 3.22$, *ns*; thus, circularity of the covariance matrix was assumed. To be conservative, the Greenhouse Geisser correction was used. Results indicated at least two of the means differed significantly within each subscale comparison. The Bonferroni adjustment was used in all the related t-tests to determine where the differences occurred (see Table 4 for Researcher's Questionnaire Means and Standard Deviations).

3.1.1 Knowledge and Understanding

For knowledge and understanding, $F(2,34) = 33.02$, $p < .001$, $\eta^2 = 0.66$, and as predicted significant differences occurred between Time 1 and Time 2, $t(59) = 10.29$, $p < .001$, 95% CI [9.6, 14.2], as well as Time 1 and Time 3, $t(17) = 6.90$, $p < .001$, 95% CI [8.7, 16.4], but not between Time 2 and Time 3 $t(17) = -0.47$, *ns*.

3.1.2 Awareness

For awareness, $F(2, 34) = 14.44$, $p < .001$, $\eta^2 = 0.46$ with significant differences noted between Time 1 and Time 2, $t(59) = 7.82$, $p < .001$, 95% CI [0.9, 1.5], and Time 1 and Time 3, $t(17) = 3.97$, $p = .001$, 95% CI [0.5, 1.7], but not between Time 2 and Time 3, $t(17) = -0.94$, *ns*.

3.1.3 Skills and Behaviour

For skills and behaviour, $F(2, 34) = 29.60$, $p < .001$, $\eta^2 = .64$ with differences occurring between Time 1 and Time 2, $t(59) = 10.37$, $p < .001$, 95% CI [4.5, 6.6], as well as Time 1 and Time 3, $t(17) = 7.66$, $p < .001$, 95% CI [3.9, 6.8], but not between Time 2 and Time 3, $t(17) = -1.00$, *ns*.

Table 4

Researcher's Questionnaire Means and Standard Deviations

Variable ^a	Time 1		Time 2	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Knowledge	45.67	9.47	33.77	10.26
Awareness	3.30	0.91	2.12	0.85
Skills and Behaviour	19.23	3.36	13.66	4.20

Variable ^b	Time 1		Time 2		Time 3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Knowledge	44.16	8.07	30.73	9.88	31.57	8.69
Awareness	3.11	0.96	1.78	0.81	2.00	0.69
Skills and Behaviour	18.83	3.29	12.61	4.88	13.48	3.60

^a n = 60 ^b n = 18

3.2 Ways of Coping

Sixteen participants completed the Ways of Coping subscales at Time 1 and four at Time 3. Participant responses ranged from 1.00 to 2.50 on the social support subscale and 0.83 to 2.83 on the problem solving subscale. Additionally, and tracked through the researcher's questionnaire at Time 2, the top coping/self-care activities of the participants indicated they intended to perform after the workshop were engaging in physical activity, creating more time for themselves, and spending more time with family (see Table 5 for Frequency of Self-Care Activities).

3.3 Burnout and Compassion Fatigue

Cronbach's Alpha scores were calculated to compare reliability estimates between the original measures and the modified measures used in the current study. MBI-ES subscale scores ranged from .70 to .91, while the STSS alpha score was .95, thus reliability of the modified scales was assumed.

A Pearson's correlation was used to examine the relationship between total STSS scores and scores based on the subscales of the MBI-ES. Results indicated a significant relationship between emotional exhaustion and total STSS scores, depersonalization and total STSS scores, but not between personal accomplishment and total STSS scores (see Table 6 for STSS' Relation to MBI-ES Subscales).

3.3.1 Burnout

Burnout rates by experience classification, measured at Time 1, were compared using a one-way analysis of variance. Groups were those with 0 to 4 years experience ($n = 10$), 5 to 10 years experience ($n = 13$), and 11 or more years experience ($n = 34$). Contrary to predictions, results indicated no significant differences between experience groups on any of the MBI-ES subscales: emotional exhaustion, $F(2,55) = 1.18, ns$; depersonalization $F(2, 54) = 0.25, ns$; personal accomplishment $F(2, 54) = 0.07, ns$; meaning no group experienced more burnout symptoms than any other group.

Table 5

Frequency of Intended Self-Care Activities

Self-Care Activity	Frequency	
	Time 2 ^a	Time 3 ^b
Physical Activity	41	10
Diet Change	23	5
Meditation	10	2
Counselling	3	2
More Self Time	27	7
Time with Family	27	6
Deep Breathing	13	4
Time with Nature	22	4
Work Support Group	3	4
Other	3	0

Note. ^an = 62 ^bn = 18

Table 6

STSS' Relation to MBI-ES Subscales

Measure	1	2	3	4
1. EE	1.00	–	–	–
2. DP	.66**	1.00	–	–
3. PA	-.054	-.14	1.00	–
4. STSS	.64**	.54**	-.14	1.00

Note. EE = Emotional exhaustion, DP = Depersonalization, PA = Personal accomplishment, STSS = Secondary Traumatic Stress Scale, n = 44, ** $p < .01$, two-tailed.

Although no hypotheses were made regarding frequency rates of the different MBI-ES subscales, we believed it was important to examine how many educators were experiencing burnout (see Table 7 for Frequency of MBI-ES scores).

3.3.1.1 Emotional Exhaustion

Emotional exhaustion scores at Time 1 ranged from 2 to 49 with 40.7% of the present sample experiencing high emotional exhaustion, while Time 3 scores ranged from 2 to 36 with 27.8% experiencing high emotional exhaustion.

3.3.1.2 Depersonalization

Depersonalization scores at Time 1 ranged from 0 to 26 and 15.5% of the present sample were experiencing high depersonalization, while Time 3 scores ranged from 0 to 13 and 0% were experiencing high depersonalization.

3.3.1.3 Personal Accomplishment

Personal accomplishment scores at Time 1 ranged from 15 to 45 where 12.1% were experiencing a high lack of personal accomplishment, while at Time 3 scores ranged from 22 to 48 and 11.1% were experiencing a high lack of personal accomplishment.

3.3.1.3.1 Comparative T-Tests

Comparative t-tests were calculated to determine if any significant differences existed between the current sample and Maslach, Jackson, and Leiter's (1996) sample of teachers. Results indicated no significant differences of variance on the MBI subscales of emotional exhaustion $F(1, 4220) = 1.28, ns$; depersonalization $F(1, 4219) = 1.17, ns$; and personal accomplishment $F(1, 4219) = 1.01, ns$; therefore equal variances were assumed. Results indicated significant differences between samples on the emotional exhaustion subscale $t(60) = 2.16, p < .05$; depersonalization $t(59) = -3.94, p < .05$; and personal accomplishment $t(59) = 4.16, p < .05$, suggesting the current sample had higher scores on emotional exhaustion and personal accomplishment, but lower scores of depersonalization than Maslach, Jackson, and Leiter's sample.

Table 7
Frequency of MBI-ES Scores

Subscales	Range of Experienced Burnout			
	<i>n</i>	Low	Average	High
Time 1				
Emotional Exhaustion	59	13	22	24
Depersonalization	58	34	15	9
Personal Accomplishment	58	33	18	7
Time 3				
Emotional Exhaustion	18	4	9	5
Depersonalization	18	13	5	0
Personal Accomplishment	18	14	2	2

3.3.2 Compassion Fatigue

Of the 64 Time 1 participants, 45 (70.3%) indicated an experience with a secondary trauma within the last year. Of those 44 individuals included in the analysis, roughly 50% of the sample population indicated having secondary experiences with violence, family tragedy, and/or health crises (see Table 8 for Frequency of Secondary Trauma Experiences at Time 1 and Time 3). Compassion fatigue scores were calculated based on the total STSS score of participants. Time 1 scores ranged from 17 to 82 while at Time 3, scores ranged from 17 to 49 (see Table 9 for STSS Role Frequencies at Time 1 and Time 3). Moreover, 10 of the 14 participants who completed the STSS indicated experiencing a secondary trauma since Time 1 (see Table 10 for Severity of Compassion Fatigue scores at Time 1 and Time 3). An independent samples t-test indicated no difference in variance scores between the present sample and Bride, Jones, and MacMaster's (2007) sample of child protective services workers, $F(1, 229) = 1.00, ns$, and no significant difference between sample means, $t(65) = -0.28, ns$; thus suggesting the samples were comparable.

Chapter 4

4 Discussion

The purpose of the current study was to evaluate the immediate and longer-term efficacy of a professional development workshop for educators on the concepts of burnout, vicarious trauma, compassion fatigue, and self-care. Participants' knowledge and understanding, awareness, and skills and behaviour were evaluated on the concepts of interest. Hypothesis 1 predicted that at both Time 2 and Time 3, educators would report an increase in knowledge and understanding of compassion fatigue and burnout compared to Time 1; and hypothesis 2 predicted educators would report an increased awareness of, and efficacy in the use of, self-care skills at Time 2 and Time 3 compared to Time 1. As hypothesized, significant decreases in need for development were noted at Time 2, immediately after the workshop, and maintained at Time 3, 6 months later, compared to Time 1 across the subscales of knowledge and understanding, awareness, and skills and behaviour. As indicated by hypothesis 3, information from the Ways of Coping questionnaire was noted but no predictions were made. Hypothesis 4 predicted that educators with higher burnout scores would also have higher compassion fatigue scores. Results indicated only partial support for

Table 8

Frequency of Secondary Traumas Experienced

Types of Experiences	Frequency	Percentage
Time 1 ^a		
Accidental death of student	5	11.4
Suicide of student	6	13.6
Death of colleague	4	9.1
Natural disaster	0	0
Criminal investigation	9	20.5
Experience of violence	21	47.7
Family tragedy	24	54.5
Health crisis	22	50
Other	7	15.9
Time 3 ^b		
Accidental death of student	2	14.3
Suicide of student	1	7.1
Death of colleague	1	7.1
Natural disaster	0	0
Criminal investigation	4	28.6
Experience of violence	4	28.6
Family tragedy	5	35.7
Health crisis	12	85.7
Other	2	14.3

Note. ^a n = 44 ^b n = 14

Table 9

STSS Role Frequencies

Role	Frequency	Percentage
Time 1		
Teacher	20	45.5
Educational Assistant	6	13.6
School Administrator	5	11.4
Learning Support Teacher	3	6.8
SS-Unspecified	1	2.3
SS-Psychology	1	2.3
SS-Social Work	2	4.5
SS-Learning Coordinator	3	6.8
Other	3	6.8
Time 3		
Teacher	8	57.1
Educational Assistant	1	7.1
School Administrator	3	21.4
Learning Support Teacher	1	7.1
SS-Unspecified	1	7.1

Note. SS = Support Staff; Psychology = Psychologists, Psychometrists, Psych-Associates; Social Work = Social Workers, Social Service Workers.

Table 10

Severity of Compassion Fatigue

Time	<i>n</i>	Range of Experienced Compassion Fatigue				
		Little to no compassion fatigue	Mild	Moderate	High	Severe
1	44	8	17	10	3	6
3	14	5	6	0	2	1

this hypothesis as significant positive relationships between compassion fatigue and burnout symptoms of emotional exhaustion and depersonalization were found but no relationship was found between compassion fatigue scores and personal accomplishment scores. Finally, hypothesis 5 predicted those educators with over 10 years experience would have higher emotional exhaustion scores compared to their less seasoned peers; while those with fewer than 5 years experience would suffer higher rates on all burnout factors due to the typically higher rates of early attrition. Contrary to this hypothesis, no differences in burnout scores were found between the three different classifications of educators based on their years of experience in the profession.

The purpose of the current study was to provide educators with psychoeducational information on the outlined topics with the hopes that they would integrate the material, make positive behavioural and attitudinal changes in their lives, and thus help protect themselves against the natural consequences of their line of work. Reflecting on the current results related to educator knowledge and understanding, awareness, and skills and behaviour, all demonstrated to be key components of educator training (Newman-Carlson & Horne, 2004), it is clear the present sample of educators found the workshop informative and useful. After the workshop educators indicated they not only better understood the concepts of burnout, vicarious trauma, and compassion fatigue but felt they needed less development on how to identify the reviewed concepts' symptoms within themselves; thus providing further evidence of professional development's efficacy in helping individuals with the natural consequences of their line of work (see Cooley & Yovanoff, 1996; Pryce et al., 2007).

4.1 Psychoeducational Interventions

Psychoeducational interventions have been used with success with many different populations and participants. Van Daele, Hermans, Van Audenhove, and Van den Bergh (2012) conducted a meta-analysis of 16 studies on psychoeducational interventions on the topic of stress reduction and found an overall small but positive effective size of .27 at post-test and .20 at follow-up indicating support for the validity of psychoeducation in helping individuals change. Another meta-analysis, involving 20 studies, too found positive changes with teachers as the result of psychoeducation where an increase in positive behaviours and

attitudes, as well as knowledge of ADHD and Tourette syndrome, was found (Nussey, Pistrang, & Murphy, 2013). Newman-Carlson and Horne (2004) found psychoeducation improved teachers' knowledge, awareness, skills, and self-efficacy in dealing with student bullying; while a one-day psychoeducational workshop for family members of individuals with severe mood disorders was found to improve family member knowledge of the illness, treatment, and of available resources; decreased feelings of guilt; and increased sense of control and effectiveness in crisis situations (Pollio, North, Reid, Miletic, & McClendon, 2006).

As demonstrated by the depth of the literature above, educating individuals offers them information to help facilitate change. A common element in the definition of learning, given by educational professionals, is behavioural change. Schunk (2004) defined learning as "an enduring change in behavior, or in the capacity to behave in a given fashion, which results from practice or other forms of experience" (p.2). Reflecting on the present study, the information given to educators endured for at least 6 months where they indicated a lesser need of development than before the workshop; thus, providing the information on the natural work consequences, and how to make positive changes (whether through verbal communication, behavioural modeling, or other forms of knowledge dissemination), was an important step in helping facilitate the behavioural change process inherent in professional development.

Change is often a difficult process to start, especially if one is in the precontemplative or contemplative stage. There are times where individuals are unaware change is needed or perhaps are aware but do not know how to start. Psychoeducation appears to be a relatively low impact, low risk, avenue where individuals can increase their knowledge, awareness, and skills in confronting whatever hindering mental health issue is in the way of positive change. That said, Smith et al. (2006) outlined a number of facts about change, specifically related to teachers. Points they emphasized based on research with teachers were that change takes time, is not always easy, requires support, and is not always linear.

4.2 The Relationship between Burnout and Compassion Fatigue

Through the current study the relationship between two natural consequences of human service work, burnout and compassion fatigue, was also examined. As significant relationships existed between the burnout subscales of emotional exhaustion and depersonalization with compassion fatigue, but not between personal accomplishment and compassion fatigue, it established the question of why only two of the three burnout subscales correlated with compassion fatigue. The initial hypothesis built on Pryce et al.'s (2007) study with child welfare workers who, similar to the current study with educators, attended a professional development workshop on compassion fatigue, burnout, and vicarious trauma. Pryce and her colleagues chose to use the Compassion Fatigue Self-Test designed by Figley (1995) which, according to Pryce et al. (2007), consists of two dimensions; one measures Secondary Traumatic Stress (STS) while the other measures burnout. Some researchers view the term compassion fatigue as encompassing not only STS but also burnout, specifically energy depletion (Stamm, 2010); while in the current study compassion fatigue was viewed as synonymous with STS and related to PTSD-like symptoms.

When looking to explain the results, the use of the MBI-ES thus divided the concept of burnout into three subcategories (i.e., emotional exhaustion, depersonalization, personal accomplishment) whereas Pryce et al.'s (2007) use of the Compassion Fatigue Self-Test conceptualized burnout as a singular concept. The discrepancy between the concept definitions and measurements of burnout between the current study and Pryce et al.'s could then account for why personal accomplishment did not significantly correlate with compassion fatigue; in that, the Compassion Fatigue Self-Test's items were more similar to the MBI-ES subcategories of emotional exhaustion and depersonalization than personal accomplishment.

The notion of discrepancies between concept definitions and measurements of the concepts moderating the relationship between burnout and compassion fatigue was supported by Cieslak et al.'s (2013) meta-analysis. Cieslak et al. compiled a total of 41 studies totalling 8,256 workers from numerous human services fields and discovered that effect sizes of the

relationship between burnout and compassion fatigue were moderated by not only the type of measurements used to measure STS and burnout but the theoretical frameworks used to conceptualize the concepts as well. Those studies that used the ProQOL or ProQOL-related measure (i.e., a measure which conceptualizes compassion fatigue similar to that of the Compassion Fatigue Self-Test) reported a stronger association with burnout ($r^2 = .53$) than did measures which focused on PTSD-like symptoms, as the STSS does ($r^2 = .37$). Moreover, those studies that also used ProQOL-related measures to measure burnout reported stronger associations ($r^2 = .55$) than those focusing on the role of emotional exhaustion, like the MBI ($r^2 = .28 - .53$). Studies which theoretically framed compassion fatigue as STS and burnout, rather than as separate concepts, resulted in higher associations ($r^2 = .55$, $r^2 = .34$; respectively) as those studies with this orientation often used the ProQOL or a ProQOL-related measure. As the current study, a) defined compassion fatigue as synonymous with STS and used the STSS to measure its PTSD-like symptoms and b) defined burnout as emotional exhaustion, depersonalization, and a lack of personal accomplishment measured by the MBI-ES, both the study's measurement choice and concept definitions, according to Cieslak et al.'s results, could account for differences in the present findings compared to Pryce et al. (2007).

Further explanation of the present results can be taken from Cieslak et al. (2013) in that researchers noted when examining the relationships between studies that measured STS and the subscales of the MBI, effect sizes were smaller for personal accomplishment ($r^2 = .12$) than those of depersonalization ($r^2 = .26$) and emotional exhaustion ($r^2 = .30$). The trend of a lower relational value between STS and lack of personal accomplishment could account for why no significant correlation was found in the current study between these two variables. As Cieslak et al.'s sample did not include studies with educators, perhaps there are differences between burnout and compassion fatigue's relationship within educators compared to other human service workers or perhaps the fact the current study's sample had higher levels of personal accomplishment compared to Maslach, Jackson, and Leiter's (1996) sample may have impacted the results. Either way, more research should be conducted with educators in this area.

What was apparent through the present research was the strong relationships of emotional exhaustion and depersonalization with compassion fatigue. When reflecting on why there were such strong relationships, the similarities between the described symptoms of the two correlated subscales of the MBI-ES and compassion fatigue could have been a factor. The experience of compassion fatigue is related to a second-hand encounter with a psychological trauma which Herman (1997) defined as the feeling of powerlessness and being helpless at the hands of an overwhelming force. Considering emotional exhaustion is a feeling of depletion and a lack of energy, whereas depersonalization is a sense of detachment and a lack of sympathy toward people (Maslach, Jackson, & Schwab, 1996), one could draw parallels between the experience of powerlessness and helplessness due to a psychological trauma and these burnout symptoms. Teachers may feel powerless or helpless in their workplace due to their emotional exhaustion and feelings of depletion, while at the same time detach from others in an effort to avoid becoming overwhelmed. Avoidance or numbing is a key symptom in PTSD and can be expressed through detaching or estranging from others (APA, 2000). As compassion fatigue has the same symptoms as PTSD, there appears to be a large similarity between the experience of avoidance (in compassion fatigue) and depersonalization (in burnout).

Moreover, the Teacher Performance-Motivation (TP-M) Theory emphasizes the development of burnout when a teacher's coping resources become overwhelmed by their job (Blase, 1982). If a teacher was living with the compassion fatigue symptoms of arousal, intrusion, and avoidance because of a trauma a student or co-worker told them about, the teacher could potentially struggle to maintain a significant level of coping resources to help them accomplish many of their work duties. The lower level of coping resources would thus make them more vulnerable to the burnout symptoms of emotional exhaustion and depersonalization. The opposite could also be said, where if a teacher was experiencing burnout symptoms of emotion exhaustion and/or depersonalization their coping resources could then be weakened. Their weakened coping ability could then make them more vulnerable to experience compassion fatigue if a student or co-worker discussed a trauma with them. Building on this point, the high percentage of educators who experienced emotional exhaustion in the present sample, along with the current study's sizable exposure

rate to secondary traumatic experiences, could account for the large correlation between the two variables.

4.3 Burnout and Compassion Fatigue Rates

Although no hypotheses were made in relation to educator burnout or compassion fatigue rates, 40.7% were experiencing high emotional exhaustion, 15.5% high depersonalization, and 12.1% a high lack of personal accomplishment. Of the 64 initial participants, 45 (70.3%) reported exposure to a secondary trauma. Of those individuals used in the STSS analysis 43.2% were at a level of clinical intervention according to Bride, Radey, et al. (2007). That said, it is evident that a significant proportion of the educators sampled for the current study were experiencing negative consequences directly related to their work.

As outlined in the introduction, the TP-M Theory emphasizes the role of the relationship between teachers and their students in the development of teacher burnout (Blase, 1982), which was then extended to include compassion fatigue as well. With the fact that a significant proportion of the present study's sample of educators acknowledged exposure to a secondary trauma, and were experiencing PTSD-like symptoms, there was a clear indication that compassion fatigue could occur in educators and could result from the caring relationships they have with their students and/or colleagues. Although not conducted with educators but care workers for the elderly, Cheug and Chow (2011) found burnout not only likely negatively affected the well-being of the helpers, but the well-being of their clients and also reduced the helper's caring effectiveness as well. What Cheug and Chow's study demonstrated was not only were the professionals negatively impacted by burnout but, as a result of burnout, so too were their clients. Focusing on the relationship between the current study's sample of educators and their students, it warrants the question of how students and their learning were being impacted since almost 41% of those educators sampled experienced high emotional exhaustion and 43% experienced an intervention level of compassion fatigue.

In Relational-Cultural Theory (RCT), the formation of mutual benefiting growth-fostering relationships are viewed as essential in life (Jordan, 2000), and that mutual empathy is extremely important to enable change and consists of mutual care, impact, and responsiveness (Jordan, 2010). As students are in a continual state of change, not only in

their natural development but educational knowledge as well, interactions with empathetic educators would then be essential to student change and engagement. From an education-relational perspective both Skovholt and D'Rozario (2000) and Klem and Connell (2004) found support for the importance of students feeling cared for by their teachers. Skovholt and D'Rozario (2000) asked active pre-service teachers to describe either their best teacher or the teacher they liked the most during their pre-postsecondary schooling. The most popular word used by their sample in both conditions was *caring* while the least liked teachers were described as *fierce*; which was also associated with terms such as hostile, sarcastic, and impatient. Moreover, Klem and Connell (2004) found teachers who created caring, structured learning environments with high, clear, and fair expectations, as viewed by their students, fostered more student engagement.

As teacher quality is one of the best predictors of student achievement (Sanders & Rivers, 1996), for those students taught by teachers described as fierce, hostile, sarcastic, and/or impatient (symptoms often associated with burnout; Swearingen, 1990), and in learning environments which are unstructured, it begs the question are the students being taught in a RCT growth-fostering way or one that hinders this connection and as a result impedes change and development? The same question could be asked for those educators suffering from compassion fatigue, as it is viewed as a reduced capacity for empathy (Adams, Boscarino, & Figley, 2006). The impact of educator burnout on students in the present study could have been as such: with 24 educators having experienced high emotional exhaustion, if each educator consistently interacted with 23-26.5 students, (i.e., the maximum for elementary classes and average secondary class sizes for the sample's school board; TVDSB, n.d.), approximately 552-636 students could have been negatively impacted by their educator's disposition. Taking into account some of those participants sampled would not have had the same number of interactions with students as some were not teachers but administrative staff, the number of students affected could be somewhat lower. Regardless, the point here is that educators in Southwestern Ontario were potentially not the only ones suffering due to burnout and/or compassion fatigue. Student learning could also have been negatively influenced by their educator's disposition resulting in less engagement, and as a result, worse academic achievement.

4.4 Burnout and Years of Experience

Contrary to the present study's predictions, there were no significant differences found in burnout scores between those educators with over 10 years experience, between 5 and 10 years experience, and those with fewer than 5 years experience. A possible explanation for why no significant differences were found could be explained by Fisher's (2011) findings. Contrary to Fisher's expectation, she found novice teachers were the ones who experienced slightly more emotional exhaustion compared to their seasoned peers. Even though Fisher found a significant difference between teacher experience levels, the difference was very small ($p = .047$), her experience parameters were different from the current study's (i.e., ≤ 5 years, > 5 years), and she had a much larger participant pool of 385 teachers. The large n value, and difference in experience parameters, could perhaps explain the small but significant finding in Fisher's study versus the present's. Moreover, perhaps some of those teachers who were experiencing higher levels of emotional exhaustion as novice teachers chose to leave the profession before the 5 year mark and thus decreased the scores of the experienced category. If the current study's n value was higher, and experience parameter changed, perhaps a small finding would be present. That said, researchers who have conducted meta-analyses on the topic of burnout and years of experience have noted the inconclusive nature of their relationship within the literature (Brewer & Shapard, 2004; Lim, Kim, Kim, Yang, & Lee, 2010). A variable which seems to have a slightly clearer relationship with burnout is the age of the participants.

As in the present study, Kantas and Vassilaski (1997) found no significant differences of burnout symptoms between differing years of experience among teachers but did find significant differences when comparing the ages of participants. The researchers found that younger teachers (i.e., 20-39) experienced significantly more emotional exhaustion than their older peers (i.e., 40-50+); meaning perhaps the age of participants is a more important factor which contributes to burnout development compared to years of experience on the job. In a meta-analysis by Lim et al. (2010) that involved 15 studies, age was found to be a larger indicator of emotional exhaustion, depersonalization, and personal accomplishment, where years of work experience was only a moderate indicator of depersonalization and personal accomplishment but not emotional exhaustion.

Age related differences in burnout scores have also been found in other human service workers. Peisah, Latif, Wilhelm, and Williams (2009) examined doctors' experiences with burnout where those in the youngest category (i.e., ≤ 40) reported higher feelings of emotional exhaustion and depersonalization than the older doctors (i.e., ≥ 50). The researchers contextualized their results by suggesting older doctors may have been better able to recognize the symptoms of burnout and thus, protect themselves from its negative effects. Other research also supported age's association with burnout, specifically emotional exhaustion, as Brewer and Shapard (2004) and Lim et al. (2010) too found a small negative correlation between the two variables in their respective meta-analyses with human service related populations. As age seems to be negatively related to emotional exhaustion ($r = -.18$ to $-.20$; Brewer & Shapard, 2004; Lim et al., 2010) and depersonalization ($r = -.18$), but positively related to personal accomplishment ($r = .14$; Lim et al., 2010), perhaps examining participants' age in relation to burnout would have been a more fruitful area of investigation. Having said that, inherent in age is life experience. As individuals progress through time they learn more about themselves, different topics, and ways to cope with the stressors in their lives. Maytum, Heiman, and Garwick (2004) noted in their qualitative study that pediatric nurses felt insight and experience, both of which take time to develop, aided their ability to manage the natural consequences in their line of work through the development of short-term and long-term coping strategies. Expanding on what Peisah et al. (2009) noted in their discussion, perhaps it is the time individuals spend on this earth that enable them to determine how best to cope with the natural consequences they experience in their employment rather than the time they actually spend on the job.

4.5 Implications

4.5.1 Compassion Fatigue in Educators

A general message that can be taken away from the present study is that Southwestern Ontario educators are suffering due to the natural consequences of their line of work. Both burnout and compassion fatigue were found in the present sample of educators with some educators experiencing extremely high scores in these areas; meaning, both their personal and professional well-being were negatively impacted. To date there has been much research on the measurement and consequences of burnout within the teaching profession (see Bakker

& Schaufeli, 2000; Burke & Greenglass, 1995; Fisher, 2011; Fives et al., 2007; Kokkinos, 2007; Hong, 2010) but the impact of compassion fatigue appears to be a relatively new area of investigation with educators (Borntrager et al., 2012). Much of the research on compassion fatigue has been developed through the use of other human services workers such as child welfare workers (Pryce et al., 2007), social workers (Bride, Robinson, et al., 2004), therapists/psychologists (Arvey & Uhleman, 1996; Chrestman, 1999; Schauben & Frazier, 1995), nurses (Maytum et al., 2004), among others; thus, the current study demonstrates support for educators to be included into the group of human service workers who can potentially develop PTSD-like symptoms as a result of the empathetic interactions they have with the student population they serve or the staff they serve with.

4.5.2 First Canadian Sample

From a review of the research literature, this sample was the first to examine compassion fatigue in Canadian educators. The discovery of compassion fatigue in Canadian educators is both a helpful and unfortunate finding because, on the positive side, it can lead to further research interest in the topic of compassion fatigue in educators, and enables further funding of professional development programs on the topic for educators; but on a negative note, it also acknowledges another potential consequence of being involved in the education profession. The fact that until changes are made within the school system by bringing knowledge and awareness of compassion fatigue and other natural consequences to educators on a larger scale, and how to prevent/mitigate against their negative effects, some educators may continue to suffer in silence as they are either unable to identify what they are experiencing or can identify it but are unsure of how to help themselves. The professional development workshop of this study at the very least, and in both the short and long term, enabled educators to identify the natural consequences of burnout, vicarious trauma, and compassion fatigue within themselves and also provided and stimulated thoughts of how to mitigate against their negative effects.

4.5.3 Evidence for Additional Training and Support

A related implication that can be taken from the present study is that educators need support and continual education on burnout, vicarious trauma, compassion fatigue, and self-care. The

education and support could be done through professional development workshops, like the current study, or perhaps within the teacher training programs. Approximately 40% of the present study's sample indicated some type of formal or informal training on burnout, vicarious trauma, and/or compassion fatigue but only 23.7% had done so through in-service professional development, and 13.6% through their formal post-secondary education program. Both Pryce et al. (2007) and Newell and MacNeil (2010) explored the same natural consequences related to work as the current study did but with social workers instead of educators. Both sets of researchers suggested that social work students should be taught about these concepts, as well as self-care strategies, during their formal training and course work. The suggested purpose of educating students about these topics early in their careers is to potentially decrease vulnerability to burnout, vicarious trauma, and compassion fatigue; it could also be argued that the same could be said for pre-service teachers.

With the change of the Ontario College of Teacher's bachelor of education programs from a 1-year to 2-year program in September 2015 (Alphonso, Morrow, & Bradshaw, 2013), the opportunity to integrate additional material on the natural consequences resultant of an educator's line of work is present. Perhaps a course, or at least a number of classes within a course, could teach pre-service teachers about these natural consequences as Alphonso et al. noted more time will be spent on classroom instruction with the pre-service teachers beginning in 2015. Useful content could not only include information on the natural consequences and self-care strategies but also the dissemination of how to set appropriate boundaries with students as Hong (2012) found boundary setting was an influential factor in teachers with less than 5-years experience who stayed in the profession versus those who left. Moreover, Hultell and Gustavsson (2011) found the lack of defined boundaries between home and work life of beginning teachers was one of the variables that accounted for the largest proportion of variance in burnout and work engagement scores, along with job demands and job resources.

Drawing parallels from research and standards within the counselling field, some governing bodies emphasize the importance of aiding counselling students in their understanding of self-care strategies (Council for Accreditation of Counseling and Related Educational Programs, 2009; Section II, G.1.d.) in order to effectively serve their clients (Myers,

Sweeney, & Witmer, 2000). Thinking about the negative impact of burnout and compassion fatigue on educators, and its potential impact on students as previously discussed, self-care should be an important part of an educator's training. From the current sample, much of the self-care conducted by educational staff was related to physical activity and time spent socializing or by oneself, with a lesser emphasis on methods such as meditation, deep breathing, or work support groups. As empirical evidence suggests meditation and deep breathing can be effective means to reduce teacher stress and burnout (Anderson, Levinson, Barker, & Kiewra, 1999; Flook, Goldberg, Pinger, Bonus, & Davidson, 2013; Roeser et al., 2013), and social support has been linked to decreases in burnout as well (Cooley & Yovanoff, 1996; Um & Harrison, 1998), perhaps training pre-service teachers with these lesser known or used skills would be a useful inclusion in an educator wellness course and/or class. Hill (2004) emphasized the importance of counsellor educators being attune to their own well-being because it is not only beneficial to themselves but it serves to foster the development of student counsellors who are then more aware of their own wellness and better able to serve their clients. If educators were taught the principles of self-care early on in their career, this might not only help them to prevent/mitigate burnout, vicarious trauma, and compassion fatigue but also provide their students with a model of a healthy functioning adult.

4.5.4 Counselling Implications

Burnout and compassion fatigue are concepts that have been well documented within the counselling field (Cieslak et al., 2013, Hardiman & Simmonds, 2013; Maslach, Johnson, & Leiter, 1996; Perkins & Sprang, 2013). Although pervious research has indicated burnout is often a consequence in teaching (Fisher, 2011), compassion fatigue is a relatively newly linked concept (Borntrager et al., 2012). That said, research indicates that some professionals in both the counselling and teaching fields appear to be negatively impacted by the interactions they have with the populations they serve. As many counselling psychology programs are housed in faculties of education at their respective universities, the opportunity for counselling faculty and counselling graduate students to share their knowledge with pre-service teachers on these topics is inherently simple and geographically convenient. As mentioned above, a pre-service course or classes on self-care and the natural work

consequences one will confront as a teacher would perhaps be beneficial to teacher well-being. Counselling psychology faculty could instruct these courses, due to their knowledge of the topics and close proximity to the pre-service population, while their graduate students could take on the roles of guest lecturers or teaching assistants in order to help educate the up-and-coming teacher cohorts and learn more about these topics themselves. As both teachers and counselling professionals experience burnout and compassion fatigue, learning about them and how to combat them early on before entering the field would be beneficial.

Moreover, according to the Canadian Code of Ethics for Psychologists (Canadian Psychological Association, 2000), Principle IV.1 states members must:

Contribute to the discipline of psychology and of society's understanding of itself and human beings generally, through free enquiry and the acquisition, transmission, and expression of knowledge and ideas, unless such activities conflict with other basic ethical requirements (p.29).

Using this principle as a framework, discussing the natural work consequences of teaching with pre-service as well as in-service teachers is something that not only would be beneficial to teachers' understanding of themselves but upholds the ethical principle mandated by the CPA. Those professionals related to the counselling field, specifically counselling psychology faculty, should think about developing courses or workshops to be presented to pre-service/in-service teachers on the topics of burnout, vicarious trauma, compassion fatigue, and self-care as they too are suffering from these natural work related consequences. Developing these courses or workshops could then offer the opportunity to conduct further research on the effectiveness of these models of knowledge transmission and what teachers feel they most benefit from.

Finally, counselling professionals who are in private practice, those who are liaisons with the community, or linked with insurance plans or an employee assistance program, would also benefit from knowledge of the current study's results. If an educator presented to counselling with PTSD-like symptoms, but had no indication of a primary trauma, a counsellor with an understanding that educators can and do suffer from compassion fatigue could help this client not only work through their secondary trauma, through trauma informed therapy (Herman,

1997), but also help normalize their experience and explain its relation to their line of work. Furthermore, a counsellor could also inquire about the potential burnout experiences of emotional exhaustion and depersonalization in their client due to the current study's finding of the relationships between these variables and compassion fatigue in educators.

4.6 Limitations

4.6.1 General

As with some of the previously reviewed studies in the introduction (i.e., Cooley & Yovanoff, 1996; Hatcher et al., 2011; Kokkinos, 2007) issues of selection bias and generalizability were present in the current study. Since participants voluntarily attended the workshop known to be on the topic of burnout, vicarious trauma, and compassion fatigue, they may have already been aware of their experiencing one of these natural consequences and sought information via this professional development session; thus, inflating the sample's burnout and/or compassion fatigue numbers compared to a randomly selected sample of teachers and support staff. In regards to the issue of generalizability (see Bakker & Schaufeli; Fisher, 2011; Fives et al., 2007; Hatcher et al., 2011; Hong, 2000; Kokkinos, 2007), it can be argued that it has been partially addressed in the current study due to not only including both elementary and secondary school teachers but educational assistants, administrators and other educational personnel vital to student success (see Table 11 for Role Frequency of School Board Employees). The sample's lower participant number and participants being from one school board from the same region of Ontario limits the larger generalizability of the study.

Moreover, the lack of a control group in the current study limits its implications as rates of burnout and compassion fatigue, as well as need for development, in non-workshop participating educators from the sample's school board was not measured; therefore, a comparison between workshop attendees versus non-attendees could not be completed.

4.6.2 The Impact of Gender on Burnout and Compassion Fatigue's Correlation

Cieslak et al. (2013) noted in their meta-analysis that studies which consisted of predominantly female participants resulted in stronger associations between burnout and

Table 11

Role Frequencies of School Board Employees

Role	Frequency	Percentage
Teachers in schools	4755	61.6
Teachers in central office	141	1.8
Administrators in schools	263	3.4
Administrators in central office	10	0.1
Educational Assistants	777	10.1
Psychology	27	0.3
Social Work	34	0.4
Other	1708	22.1

Note. Psychology = Psychologists, Psychometrists, Psych-Associates; Social Work = Social Workers, Social Service Workers.

compassion fatigue ($r^2 = .48$) than relatively equivalent male samples ($r^2 = .37$). As the initial sample only consisted of two males, and was inconsistent with the sample's school board demographics (i.e., Males 25.4%, Females 74.6%; A. McKerlie, personal communication, January 27, 2014), the correlation values between emotional exhaustion and depersonalization with compassion fatigue could have been inflated compared to the sample school board's personnel as a whole.

4.6.3 Burnout and Compassion Fatigue Rates

A limitation which may have influenced the burnout and compassion fatigue rates had to do with the timing of the professional development workshop. After consulting with school board staff and sharing the initial results of the study, one staff member noted he was not surprised by the high number of educators experiencing burnout and compassion fatigue as the professional development workshop landed in the middle of the longest teaching period without any type of formalized break (i.e., civic or statutory holiday, Christmas break, Easter, Thanksgiving). When the school board's academic calendar was reviewed, it was noted that the present study's workshop fell on the 32nd workday of a 54 consecutive workday period. The next longest period in the school calendar without a break was 34 workdays.

Previous research has demonstrated the importance of respite from work in different populations ranging from blue-collar workers (Westman & Etzion, 2001), to engineers (Etzion, Eden, & Lapidot, 1998), to nurses, where even short respite periods have been shown to lead to decreased emotional exhaustion and an increase in vigour (Marzuq & Drach-Zahavy, 2012). De Bloom and colleagues (2009) conducted a meta-analysis of seven studies to examine effects of time off work on stress levels and demonstrated a small positive effect ($d = 0.43$) immediately after a vacation but the effects were short lasting once work resumed ($d = -0.38$). Even though the positive effects of time off do not appear to be long lasting, a mental and physical reprieve from work appears to be advantageous to a worker's well-being. Implicit in compassion fatigue's alternative name, and illustrated by previous burnout research (Fisher, 2011; Kokkinos, 2007), stress plays a role in these work related experiences; thus a long period of time without work respite could have inflated MBI-ES or STSS scores within the current sample population.

Moreover, another potential MBI-ES and STSS inflating factor could have been around the timing of the workshop and contract negotiations between the Ontario teachers' unions and the Ministry of Education. The added strain of an impending strike, on top of regular teaching duties, could have inflated at the very least burnout scores as occupational stress has been shown to be correlated with burnout (Lopez, Bolaño, Mariño, & Pol, 2010), and perhaps compassion fatigue scores too as a correlation does exist between burnout and compassion fatigue (Cieslak et al., 2013; Pryce et al., 2007).

4.6.4 Researcher's Questionnaire

Finally, the researcher's questionnaire was developed with all five workshops in mind. Although each question was designed to accurately assess the areas of instructional interest, there was an unequal distribution of questions allocated to the three subscales, particularly in the present study. The awareness subscale only had one item allocated to it and having only one item examining awareness may bring into question whether the findings are substantial, even though it had a eta value of .46.

4.7 Future Research

Based on the current results, it appears both burnout and compassion fatigue can occur in educators. These are important findings because they refute the commonly held belief that teachers have an easy job. Due to the infancy of the demonstrated relationship between compassion fatigue and educators, more research needs to be conducted to aid in its further explanation; especially with other Canadian educators. As discussed within the implication section, most of the research to date on compassion fatigue with human service professionals has been done with non-teaching populations; thus, it is important for future researchers in this area to examine the longitudinal impact of professional development workshops or pre-service courses on teacher compassion fatigue. Although the current study found that at 6 months educators maintained their knowledge and awareness of their work's natural consequences, as well as skills to identify and combat them, it is one thing to say something and another to actually do it. Perhaps creating an experiment where educators receive training on the natural consequence topics and self-care, and then have their self-care practices monitored over a 1-year period, would provide researchers with information of

what practices are more useful and actually used by educators over time. A researcher could also then compare the treatment groups with a control group of educators to examine differences in well-being, as well as confidence in addressing the natural consequences, and the potential differences in rates of burnout and compassion fatigue within the respective populations.

Along similar lines, an area which would be interesting to examine would be the impact of a pre-service course allocated to the negative consequences related to an educator's work and self-care, or a number of classes within a course. The increase in Ontario College of Teacher's programs from 1 to 2 years in 2015 (Alphonso et al., 2013) would allow the integration of such a course. Resiliency of educators, once they have entered the field, could then be tracked and measured against peers who attended an institution not offering such a course. Perhaps proactively establishing self-care plans and already possessing the knowledge of the symptoms of the natural consequences would help young educators just entering into the field maintain a good standard of well-being. Findings from research conducted along these lines could then potentially help bring more awareness of the issue to educational policy makers and provide additional support for increased government funding for educational programs and supports toward educator mental health. Periodic professional development workshops could then serve as "booster" sessions to refresh educators about the importance of self-care and the symptoms related to the natural consequences, as well as inform those educators who did not receive formal pre-service training on the subject matter.

Research on compassion fatigue and its relation to student learning and achievement would also be an interesting and potentially impactful area of investigation. As Sanders and Rivers (1996) emphasized the importance of teacher quality in student success, it would be important to examine how compassion fatigue potentially impacts this quality and what this means for students. Maslach, Jackson, and Leiter (1996) noted that the quality of service provided by professionals declined when affected by burnout and some laboratory research has artificially shown evidence of college students' motivation and affective learning being negatively impacted by a teacher framed as experiencing burnout and who lacked nonverbal immediacy (Zhang & Sapp, 2008). As the present research examined the impact of burnout

and compassion fatigue in educators, and found they were being negatively affected, the logical next step is then to examine how the people they serve are affected.

Chapter 5

5 Conclusion

Teachers and educational staff are entrusted to disseminate current societal knowledge to future generations. They strive to help mould, craft, and shape children into the competent developers of the future. The stress of this task is illustrated by the high attrition rates (Alliance for Excellent Education, 2004); stress levels similar to those of police, EMS, and social service workers (Johnson et al., 2005); and the experiences of burnout (Maslach, Jackson, & Leiter, 1996) and compassion fatigue (Borntrager et al., 2012); now thanks to the current study, demonstrated in a Canadian sample. There are often consequences related to any type of work but the current study provided support for another negative outcome related to the teaching profession. That said, professional development appears to be a way to help educate teachers and other educational professionals how to protect themselves against the negative consequences of their line of work. These natural consequences not only negatively impact the mental well-being of educators but can then have negative implications for student learning (Zhang & Sapp, 2008).

Important to note in life is that all are confronted with trials but the true measure of a person is how they choose to react in the face of those trials. Sometimes a trial is remembering that red and blue make purple, while other times it is figuring out how to get out of the metaphorical "hole" one is in because of one's line of work. Through teaching educators about self-care tactics and coping strategies to help them in their line of work, they may not be the only ones potentially benefiting from this knowledge as their students may benefit as well. Imagine a teacher who conducts deep breathing as a class before a test, creates a healthy eating initiative in their classroom or school, allows students to go for a walk when overwhelmed, helps students develop self-awareness in order to identify the emotions they are feeling, and incorporates humour and creative expression in their lesson plans not only because it is a benefit to them and their own well-being but because their students benefit as well. All of the previously listed ideas incorporate the concept of self-care (Yassen, 1995)

into the classroom and are essential resources to have when confronted with a life trial. Trials in life are inevitable but learning methods to cope during those trials is something society as a whole can benefit from. Through educating teachers about the natural consequences of their line of work, and how to prevent/mitigate their negative effects, the possibility of positively influencing the population they serve (i.e., society's children and their futures) is ever present.

References

- Abu-Hilal, M. M., & Salameh, K. M. (1992). Validity and reliability of the Maslach Burnout Inventory for a sample of Non-Western teachers. *Educational and Psychological Measurement, 52*, 161-169. doi: 10.1177/001316449205200121
- Adams, R. E., Boscarino, J., & Figley, C. R. (2006). Compassion fatigue and psychological distress among social workers: A validation study. *American Journal of Orthopsychiatry, 76*, 103-108. doi: 10.1037/0002-9432.76.1.103
- Alliance for Excellent Education. (2004). Tapping the potential: Retaining and developing high quality new teachers. Washington D.C.: Alliance for Excellent Education. Retrieved from <http://www.all4ed.org/files/TappingThePotential.pdf>
- Alphonso, C., Morrow, A., & Bradshaw, J. (2013, June 5). Ontario moves to halve number of teachers-college grads. *The Globe and Mail*. Retrieved from <http://www.theglobeandmail.com/news/national/ontario-moves-to-halve-number-of-teachers-college-grads/article12357404/>
- American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental disorders* (4th ed. rev.). Washington, DC: Author
- Anderson, V. L., Levinson, E. M., Barker, W., & Kiewra, K. R. (1999). The effects of meditation on teacher perceived occupational stress, state and trait anxiety, and burnout. *School Psychology Quarterly, 14*(1), 3-25. Retrieved from <http://www.apa.org/pubs/journals/spq/>
- Artuso, A. (2012, October 26). Ontario public high school teachers to expand job action Nov.7. *Toronto Sun*. Retrieved from <http://www.torontosun.com/2012/10/26/ontario-public-high-school-teachers-to-expand-job-action-nov-7>
- Arvay, M. J., & Uhlemann, M. R. (1996). Counsellor stress in the field of trauma: A preliminary study. *Canadian Journal of Counselling, 30*(3), 193-210. Retrieved from <http://cjc-rcc.ucalgary.ca/cjc/index.php/rcc>

- Bailey, B. (2000). The impact of mandated change on teachers. In N. Bascia & A. Hargreaves (Eds.), *The sharp edge of educational change: Teaching, leading, and the realities of reform* (pp. 112-128). New York: Routledge Falmer.
- Bakker, A. B., & Schaufeli, W. B. (2000). Burnout contagion processes among teachers. *Journal of Applied Social Psychology, 30*(11), 2289-2308. Retrieved from [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1559-1816](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1559-1816)
- Bartlett, L. (2004). Expanding teacher work roles: A resource for retention or a recipe for overwork? *Journal of Education Policy, 19*, 565-582. doi: 10.1080/0268093042000269144
- Blase, J. J. (1982). A social-psychological grounded theory of teacher stress and burnout. *Educational Administration Quarterly, 18*, 93-113. doi: 10.1177/0013161X82018004008
- Borntrager, C., Caringi, J. C., van den Pol, R., Crosby, L., O'Connell, K., Trautman, A., & McDonald, M. (2012). Secondary traumatic stress in school personnel. *Advances in School Mental Health Promotion, 5*, 38-50. doi: 10.1080/1754730X.2012.664862
- Brady, J. L., Guy, J. D., Poelstra, P. L., & Fletcher-Brokaw, B. (1999). Vicarious traumatization, spirituality, and the treatment of sexual abuse survivors: A national survey of women psychotherapists. *Professional Psychology: Research and Practice, 30*(4), 386-393. Retrieved from <http://psycnet.apa.org/journals/pro/>
- Brewer, E. W., & Shapard, L. (2004). Employee burnout: A meta-analysis of the relationship between age or years of experience. *Human Resource Development Review, 3*(2), 102-123. Retrieved from <http://hrd.sagepub.com/>
- Bride, B. E., Jones, J. L., & MacMaster, S. A. (2007). Correlates of secondary traumatic stress in child protective services workers, *Journal of Evidence-Based Social Work, 4*, 69-80. doi: 10.1300/J394v04n03_05
- Bride, B. E., Radey, M., & Figley, C. R. (2007). Measuring compassion fatigue. *Clinical Social Work Journal, 35*, 155-163. doi: 10.1007/s10615-007-0091-7

- Bride, B. E., Robinson, M. M., Yegidis, B., & Figley, C. R. (2004). Development and validation of the Secondary Traumatic Stress Scale. *Research on Social Work Practice, 14*, 27-35. doi: 10.1177/1049731503254106
- British Columbia Teachers' Federation (2009). *Roles and responsibilities of teachers and teacher assistants/education assistants*. Retrieved from <http://www.bctf.ca/uploadedFiles/Public/Issues/InclusiveEd/RolesandResponsibilitiesTeachersTAs.pdf>
- Brock, B. L., & Grady, M. L. (2002). *Avoiding burnout: A principal's guide to keeping the fire alive*. Thousand Oaks: Corwin Press.
- Burke, R. J., & Greenglass, E. (1995). A longitudinal study of psychological burnout in teachers. *Human Relations, 48*, 187-202. doi: 10.1177/001872679504800205
- Burke, R. J., Greenglass, E. R., & Schwarzer, R. (1996). Predicting teacher burnout over time: Effects of work stress, social support, and self-doubts on burnout and its consequences. *Anxiety, Stress & Coping: An International Journal, 9*(3), 261-275. Retrieved from <http://www.tandfonline.com/toc/gasc20/current>
- Cairns, K. (2007). Caring for the carers: Preventing and managing secondary traumatic stress. In A. A. Hosin (Ed.), *Responses to traumatized children* (pp.186-199). New York, NY: Palgrave Macmillian.
- Canadian Psychological Association (2000). *Canadian Code of Ethics for Psychologists* (3rd ed.). Retrieved from <http://www.cpa.ca/cpsite/userfiles/Documents/Canadian%20Code%20of%20Ethics%20for%20Psycho.pdf>
- Chan, D. (2006). Emotional intelligence and components of burnout among Chinese secondary school teachers in Hong Kong. *Teaching and Teacher Education, 22*, 1042-1054. doi:10.1016/j.tate.2006.04.005

- Cheung, C., & Chow, E. O. (2011). Reciprocal influences between burnout and effectiveness in professional care for elders. *Social Work in Health Care, 50*, 694-718. doi: 10.1080/00981389.2011.580421
- Chrestman, K. R. (1999). Secondary exposure to trauma and self reported distress among therapists. In B. H. Stamm (Ed.), *Secondary traumatic stress: Self-care issues of clinicians, researchers and educators* (2nd ed., pp. 29-36). Baltimore: Sidran Press.
- Cieslak, R., Shoji, K., Douglas, A., Melville, E., Luszczynska, A., & Benight, C. C. (2013). A meta-analysis of the relationship between job burnout and secondary traumatic stress among workers with indirect exposure to trauma. *Psychological Services*. Advance online publication. doi: 10.1037/a0033798
- Cohen, L., Manion, L. & Morrison, K. (1996). *A guide to teaching practice* (4th ed.). New York: Routledge.
- COMPAS. (2006). *State of the teaching profession 2006 annual survey: A COMPAS report to The Ontario College of Teachers*. Retrieved from http://www.oct.ca/~media/PDF/State%20of%20the%20Teaching%20Profession%202006%20Survey/survey06_e.ashx
- Cooley, E., & Yovanoff, P. (1996). Supporting professionals-at-risk: evaluating interventions to reduce burnout and improve retention of special educators. *Exceptional Children, 62*, 336-355. Retrieved from <http://www.cec.sped.org/Content/NavigationMenu/Publications2/ExceptionalChildren/>
- Cornille, T. A., & Myers, T. W. (1999). Secondary traumatic stress among child protective service workers: Prevalence, severity, and predictive factors. *Traumatology, 5*(1), Article 2. Retrieved from <http://tmt.sagepub.com/>
- Council for Accreditation of Counseling and Related Educational Programs. (2009). *2009 standards*. Retrieved from <http://www.cacrep.org/doc/2009%20Standards.pdf>

- Davidson, J. R. T., & Fairbank, J. A. (1993). The epidemiology of post-traumatic stress disorder. In J. R. T. Davidson & E. B. Foa (Eds.), *Post-traumatic stress disorder: DSM-IV and beyond* (pp. 147-169). Washington, DC: American Psychiatric Press.
- de Bloom, J., Kompier, M., Geurtus, S., de Weerth, C., Taris, T., & Sonnentag, S. (2009). Do we recover from vacation? Meta-analysis of vacation effects on health and well-being. *Journal of Occupational Health, 51*(1), 13-25. Retrieved from <http://www.apa.org/pubs/journals/ocp/index.aspx>
- Dubinski, K. (2012, November 15). Accused of bullying and intimidation by TVDSB director Bill Tucker, London-area elementary teachers are firing back. *London Free Press*. Retrieved from <http://www.lfpress.com/2012/11/14/tvdsb-directors-letter-chastises-teachers-for-workplace-intimidation>
- Etzion, D., Eden D., & Lapidot, Y. (1998). Relief from job stressors and burnout: Reserve service as a respite. *Journal of Applied Psychology, 82*(4), 577-585. Retrieved from <http://www.apa.org/pubs/journals/apl/>
- Figley, C. R. (1995). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*. New York: Brunner/Mazel.
- Figley, C. R. (1999). Compassion fatigue: Toward a new understanding of the costs of caring. In B. H. Stamm (Ed.), *Secondary traumatic stress: Self-care issues for clinicians, researchers, and educators* (pp. 3-28). Baltimore: Sidran Press.
- Fisher, M. H. (2011). Factors influencing stress, burnout, and retention of secondary teachers. *Current Issues in Education, 14* (1), 1-37. Retrieved from <http://cie.asu.edu/ojs/index.php/cieatasu>
- Fives, H., Hamman, D., & Olivarez, A. (2007). Does burnout begin with student-teaching? Analyzing efficacy, burnout, and support during the student-teaching semester. *Teaching and Teacher Education, 23*, 916-934. doi:10.1016/j.tate.2006.03.013

- Flook, L., Goldberg, S. B., Pinger, L., Bonus, K., & Davidson, R. J. (2013). Mindfulness for teachers: A pilot study to assess effects on stress, burnout, and teacher efficacy. *Mind, Brain, and Education*, 7(3), 182-195. Retrieved from <http://onlinelibrary.wiley.com/journal/10.1111/%28ISSN%291751-228X>
- Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. (1986). The dynamics of a stressful encounter: Cognitive appraisal, coping and encounter outcomes. *Journal of Personality and Social Psychology*, 50(5), 992-1003. Retrieved from <http://www.apa.org/pubs/journals/psp/index.aspx>
- Gold, Y. (1984). The factorial validity of the Maslach Burnout Inventory in a sample of California elementary and junior high school classroom teachers. *Educational and Psychological Measurement*, 44, 1009-1016. doi: 10.1177/0013164484444024
- Gold, Y., & Roth, R. A. (1993). *Teachers managing stress and preventing burnout: The professional health development*. London: Burgess Science Press.
- Good, D. A. (1996). *Secondary traumatic stress in art therapists and related mental health professionals*. (Order No. 9635262, The University of New Mexico). *ProQuest Dissertations and Theses*, 97-98. Retrieved from <https://www.lib.uwo.ca/cgi-bin/ezpauthn.cgi/docview/304251097?accountid=15115>.
- Hardiman, P., & Simmonds, J. G. (2013). Spiritual well-being, burnout and trauma in counsellors and psychotherapists. *Mental Health, Religion & Culture*, 16, 1044-1055. doi: 10.1080/13674676.2012.732560
- Hargreaves, A. (1998). The emotional practice of teaching. *Teaching and Teacher Education*, 14(8), 835-854. Retrieved from <http://www.journals.elsevier.com/teaching-and-teacher-education>
- Harrison, C., & Killion, J. (2007). Ten roles for teacher leaders. *Educational Leadership*, 65(1), 74-77. Retrieved from <http://www.csun.edu/~krowlands/Content/SED610/Leadership/harrison%20and%20killion%20ten%20roles%20for%20teacher%20leaders.pdf>

- Hatcher, S. S., Bride, B. E., Oh, H., King, D. M., & Catrett, J. F. (2011). An assessment of secondary traumatic stress in juvenile justice education workers. *Journal of Correctional Health Care, 17*, 208-217. doi: 10.1177/1078345811401509
- Herman, J. (1997). *Trauma and recovery: The aftermath of violence - from domestic abuse to political terror*. New York, NY: Basic Books.
- Hill, A. C. (2011). *The cost of caring: An investigation in the effects of teaching traumatized children in urban elementary settings*. (Unpublished doctoral dissertation). University of Massachusetts Amherst, USA.
- Hill, N. R. (2004). The challenges experienced by pretenured faculty members in counselor education: A wellness perspective. *Counselor Education and Supervision, 44*(2), 135-146. Retrieved from <http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291556-6978>
- Hoffman, S., Palladino, J. M., & Barnett, J. (2007). Compassion fatigue as a theoretical framework to help understand burnout among special education teachers. *Journal of Ethnographic & Qualitative Research, 2*, 15-22. Retrieved from <http://www.cedarville.edu/event/eqrc/journal/journal.htm>
- Hong, J. Y. (2010). Pre-service and beginning teachers' professional identity and its relation to dropping out of the profession. *Teaching and Teacher Education, 26*, 1530-1543. doi:10.1016/j.tate.2010.06.003
- Hong, J. Y. (2012). Why do some beginning teachers leave the school, and others stay? Understanding teacher resilience through psychological lenses. *Teachers and Teaching: Theory and Practice, 18*, 417-440. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/13540602.2012.696044#.UtRZrLTWujE>
- Hultell, D., & Gustavsson, P. (2011). Factors affecting burnout and work engagement in teachers when entering employment. *Work, 40*, 85-98. doi: 10.3233/WOR-2011-1209

- Jaafar, S. B., Freeman, S., Spencer, B., & Earl, L. (2005). Experiencing secondary school reform: Students, teachers, and administrators. *Orbit*, 35(1), 13-16.
- Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). The experience of work-related stress across occupations. *Journal of Managerial Psychology*, 20, 178-187. doi: 10.1108/02683940510579803
- Jordan, J. (2000). The role of mutual empathy in relational/cultural therapy. *Journal of Clinical Psychology. In Session*, 56(80), 1005-1016. Retrieved from <http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291097-4679>
- Jordan, J. (2010). *Relational-Cultural Theory*. Washington: APA.
- Kantas, A., & Vassilaki, E. (1997). Burnout in Greek teachers: Main findings and validity of the Maslach Burnout Inventory. *Work & Stress: An International Journal of Work, health & Organisations*, 11, 94-100. doi: 10.1080/02678379708256826
- Klem, A. M., & Connell, J. P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. *Journal of School Health*, 74(7), 262-273. Retrieved from <http://onlinelibrary.wiley.com/journal/10.1111/%28ISSN%291746-1561>
- Knight, C. (1997). Therapists' affective reactions to working with adult survivors of child sexual abuse: An exploratory study. *Journal of Child Sexual Abuse*, 6(2), 17-41. Retrieved from <http://www.tandfonline.com/loi/wcsa20#.UI7yyBB4QVY>
- Kokkinos, C. M. (2006). Factor structure and psychometric properties of the Maslach Burnout Inventory - Educators Survey among elementary and secondary school teachers in Cyprus. *Stress and Health*, 22, 25-33. doi: 10.1002/smi.1079
- Kokkinos, C. M. (2007). Job stressors, personality and burnout in primary school teachers. *The British Psychological Society*, 77, 229-243. doi: 10.1348/000709905X90344
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall.

- Kristensen, T. S., Borritz, M., Villadesen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress, 19*, 192-207. doi: 10.1080/02678370500297720
- Kyriacou, C. (1998). Teacher stress: Past and present. In J. Dunham and V. Varma (Eds). *Stress in teachers: Past, present and future*. London, England: Whurr Publishers Ltd.
- Lieberman, A., & Miller, L. (1999). *Teachers transforming their world and their work*. New York, NY: Teachers College Press.
- Lim, N., Kim, E. K., Kim, H., Yang, E., Lee, S. M. (2010). Individual and work-related factors influencing burnout of mental health professionals: A meta-analysis. *Journal of Employment Counseling, 47*(2), 86-96. Retrieved from <http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%292161-1920/issues>
- Lopez, J. M. O., Bolaño, C. C., Mariño, J. S., & Pol, E. V. (2010). Exploring stress, burnout, and job dissatisfaction in secondary school teachers. *International Journal of Psychology and Psychological Therapy, 10*(1), 107-123. Retrieved from <http://www.ijpsy.com>
- Marzuq, N., & Drach-Zahavy, A. (2012). Recovery during a short period of respite: The interactive roles of mindfulness and respite experiences. *Work & Stress: An International Journal of Work, Health & Organizations, 26*, 175-194. doi: 10.1080/02678373.2012.683574
- Maschi, T., & Brown, D. (2010). Professional self-care and prevention of secondary trauma. In N. B. Webb (Ed.), *Helping bereaved children: A handbook for practitioners* (pp. 345-373). New York: The Guilford Press.
- Maslach, C. (1982). *Burnout: The cost of caring*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior, 2*, 1-15. Retrieved from <http://www.jstor.org/journals/01422774.html>

- Maslach, C., Jackson, S. E., & Leiter M. P. (1996). *Maslach Burnout Inventory manual* (3rd ed.). Mountain View, CA: CPP, Inc.
- Maslach, C., Jackson, S. E., & Schwab, R. L. (1996). *Maslach Burnout Inventory – Educators Survey* (MBI-ES). In C. Maslach, S. E. Jackson, & M. P. Leiter, *MBI Manual* (3rd ed.). Mountain View, CA: CPP, Inc.
- Maytum, J. C., Bielski, H., & Garwick, A. W. (2004). Compassion fatigue and burnout in nurses who work with children with chronic conditions and their families. *Journal of Pediatric Health Care*, 18, 171-179. doi:10.1016/j.pedhc.2003.12.005
- Murphy, P. K., Delli, L. A. M., & Edwards, M. N. (2004). The good teacher and good teaching: Comparing Beliefs of second-grade students, preservice teachers, and inservice teachers. *The Journal of Experimental Education*, 72(2), 69-92. Retrieved from <http://www.tandfonline.com/toc/vjxe20/current>
- Myers, J. E., Sweeney, T. J., & Witmer, J. M. (2000). The wheel of wellness counseling for wellness: A holistic model for treatment planning. *Journal of Counseling & Development*, 78, 251-266. Retrieved from <http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291556-6678>
- National Center for Children in Poverty. (2007). Facts about trauma for policymakers. Retrieved January 11, 2014, from http://www.nccp.org/publications/pub_746.html
- Newell, J. M., & MacNeil, G. A. (2010). Professional burnout, vicarious trauma, secondary traumatic stress, and compassion fatigue: A review of theoretical terms, risk factors, and preventive methods for clinicians and researchers. *Best Practices in Mental Health*, 6(2), 58-68. Retrieved from <http://lyceumbooks.com/MentalHJournal.htm>
- Newman-Carlson, D., & Horne, A. M. (2004). Bully Busters: A psychoeducational intervention for reducing bullying behavior in middle school students. *Journal of Counseling and Development*, 82(3), 259-267. Retrieved from <http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291556-6678>

- Nussey, C., Pistrang, N., & Murphy, T. (2013). How does psychoeducation help? A review of the effects of providing information about Tourette syndrome and attention-deficit/hyperactivity disorder. *Child: Care, Health and Development*, 39, 617-627. doi:10.1111/cch.12039
- Okojie, M. C. (2011). The changing roles of teachers in a technology learning setting. *International Journal of Instructional Media*, 38(1), 17-25. Retrieved from <http://www.adprima.com/ijim.htm>
- Ontario Education Act. (1990). *Chapter E.2*. Retrieved from http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90e02_e.htm
- Pearlmann, L. A., & Mac Ian, P. S. (1995). Vicarious traumatization: An empirical study of the effects of trauma work on trauma therapists. *Professional Psychology: Research and Practice*, 26(6), 558-565. Retrieved from <http://www.apa.org/pubs/journals/pro/index.aspx>
- Peisah, C., Latif, E., Wilhelm, K., & Williams, B. (2009). Secrets to psychological success: Why older doctors might have lower psychological distress and burnout than younger doctors. *Aging & Mental Health*, 13, 300-307. doi: 10.1080/13607860802459831
- Perkins, E. B., & Sprang, G. (2013). Results from the Pro-QOL-IV for substance abuse counselors working with offenders. *International Journal of Mental Health Addiction*, 11, 199-213. doi: 10.1007/s11469-012-9412-3
- Pettersson, T., Postholm, M. B., Flem, A., & Gudmundsdottir, S. (2004). The classroom as a stage and the teacher's role. *Teaching and Teacher Education*, 20, 589-605. doi:10.1016/j.tate.2004.06.004
- Pollio, D. E., North, C. S., Reid, D. L., Miletic, M. M., & McClendon, J. R. (2006). Living with severe mental illness - what families and friends must know: Evaluation of a one-day psychoeducation workshop. *Social Work*, 51(1), 31-38. Retrieved from <http://www.naswpress.org/publications/journals/sw.html>

- Prochaska, J. O., & Norcross, J. C. (2001). Stages of change. *Psychotherapy*, 38(4), 443-448.
Retrieved from <http://psycnet.apa.org/index.cfm?fa=browsePA.volumes&jcode=pst>
- Pryce, J. G., Shackelford, K. K., & Pryce, D. H. (2007). *Secondary traumatic stress and the child welfare profession*. Chicago, IL: Lyceum Books, Inc.
- Roeser, R. W., Schonert-Reichl, K. A., Jha, A., Cullen, Wallace, L., Wilensky, R., ...
Harrison, J. (2013). Mindfulness training and reductions in teacher stress and burnout: Results from two randomized, waitlist-control field trials. *Journal of Educational Psychology*, 105, 787-804. doi: 10.1037/a0032093
- Sanders, W. L., & Rivers, J. C. (1996). *Cumulative and residual effects of teachers on future student academic achievement*. Knoxville: University of Tennessee.
- Schauben, L. J., & Fraizer, P. A. (1995). Vicarious trauma: The effects on female counselors of working with sexual violence survivors. *Psychology of Women Quarterly*, 19, 49-64. Retrieved from [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1471-6402](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1471-6402)
- Schaufeli, W. B., Daamen, J., & Van Mierlo, H. (1994). Burnout among Dutch teachers: An MBI-validity study. *Educational and Psychological Measurement*, 54, 803-814.
doi:10.1177/0013164494054003027
- Schaufeli, W. B., & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis*. London: Taylor & Francis.
- Schaufeli, W. B., Leiter, M. P., Maslach, C., & Jackson, S. E. (1996). *Maslach Burnout Inventory- General Survey (MBI-ES)*. In C. Maslach, S. E. Jackson, & M. P. Leiter, *MBI Manual* (3rd ed.). Mountain View, CA: CPP, Inc.
- Schunk, D. H. (2004). *Learning theories: An educational perspective* (4th ed.). Upper Saddle River, New Jersey: Person Education.
- Schwarzer, R., & Hallum, S. (2008). Perceived teacher self-efficacy as a predictor of job stress and burnout: Mediation analyses. *Applied Psychology: An International Review*, 57, 152-171. doi: 10.1111/j.1464-0597.2008.00359.x

- Shaha, S. H., Lewis, V. K., O'Donnell, J., & Brown, D. H. (2004). Evaluating professional development: An approach to verifying program impact on teachers and students. National Staff Development Council www.nsd.org.
- Skovholt, T., & D'Rozario V. (2000). Portraits of outstanding and inadequate teachers in Singapore: The impact of emotional intelligence. *Teaching and Learning*, 21(1), 9-17. Retrieved from <http://repository.nie.edu.sg/jspui/bitstream/10497/342/1/TL-21-1-9.pdf>
- Smith, C., Hofer, J., Gillespie, M., Solomon, M., & Rowe, K. (2006). How teachers change: A study of professional development in adult education. In P. R. Villa (Ed.), *Teacher Change and Development*. New York: Nova Science Publishers.
- Stamm, B. H. (2010). *The concise ProQOL manual* (2nd ed.). Pocatello, ID: ProQOL.org
- Swearingen, C. (1990). The impaired psychiatrist. *Psychiatric Clinics of North America*, 13(1), 1-11. Retrieved from <http://www.psych.theclinics.com/>
- Tehrani, N. (2007). The cost of caring - the impact of secondary trauma on assumptions, values and beliefs. *Counselling Psychology Quarterly*, 20, 325-339. doi: 10.1080/09515070701690069
- Ting, L., Jacobson, J. M., Sanders, S., Bride, B. E., & Harrington, D. (2005). The Secondary Traumatic Stress Scale (STSS). *Journal of Human Behavior in the Social Environment*, 11, 177-194. doi:10.1300/J137v11n03_09
- TVDSB. (n.d.). Elementary standards - Reorganization & PCS. Retrieved January 5, 2014, from <http://www.tvdsb.ca/news.cfm?story=847>
- Um, M. Y., & Harrison, D. F. (1998). Role stressors, burnout, mediators, and job satisfaction: A stress-strain-outcome model and empirical test. *Social Work Research*, 22(2), 100-115. Retrieved from <http://swr.oxfordjournals.org/>

- Valli, L., & Buese, D. (2007). The changing roles of teachers in an era of high-stakes accountability. *American Educational Research Journal*, 44, 519-558. doi: 10.3102/0002831207306859
- Van Daele, T., Hermans, D., Van Audenhove, C., & Van den Bergh, O. (2012). Stress reduction through psychoeducation: A meta-analytic review. *Health Education and Behavior*, 39, 474-485. doi: 10.1177/1090198111419202
- Westman, M., & Etzion, D. (2001). The impact of vacation and job stress on burnout and absenteeism. *Psychology & Health*, 16, 595-606. doi: 10.1080/08870440108405529
- Wheeler, D. L., Vassar, M., Worley, J. A., & Barnes, L. L. B. (2011). A reliability generalization meta-analysis of coefficient alpha for the Maslach Burnout Inventory. *Educational and Psychological Measurement*, 71, 231-244. doi: 10.1177/0013164410391579
- Yassen, J. (1995). Preventing secondary traumatic stress disorder. In C. R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized* (pp.178-208). New York: Routledge/Taylor & Francis.
- Zhang, Q., & Sapp, D. A. (2008). A burning issue in teaching: The impact of teacher burnout and nonverbal immediacy on student motivation and affective learning. *Journal of Communication Studies*, 1(2), 152-168. Retrieved from http://www.marquettebooks.com/images/JCSVol1No2_reduced.pdf#page=52

Appendices

Appendix A: Researcher's Questionnaire

Mental Health Series – Burnout, Compassion Fatigue and Vicarious Trauma Pre-Evaluation

Please answer the following questions about yourself:

Male Female Other

➤ Role (check one):

Teacher Educational Assistant School Administrator Guidance Staff Learning Support Teacher
 Student Success Teacher
 Support Staff (**please circle one**): Psychology Social Work/SSW TOSA SL/P Learning Coordinator
 Other _____

➤ Years of Service in Education: _____

➤ What type of school do you work in? (check one): Elementary School Secondary School Both

➤ Have you ever taken a class or workshop before on this topic? Yes No

If yes, where did you do this learning?
(please check all that apply)

in my formal post-secondary education program
 in a professional development (in-service) workshop
 in a continuing education/professional certification course
 I have read and learned about this on my own

This is the second workshop in the series. Please tell us what your plans are, if any, to attend other sessions:

Workshop Topic	Have you attended, registered or plan to register for another session? (check box)
Engaging Student Learning (Oct 2012)	<input type="checkbox"/> Y (attended) <input type="checkbox"/> N
Impact of Anxiety and Depression on Learning (March 2013)	<input type="checkbox"/> Y <input type="checkbox"/> N
Differentiated Instruction for Mental Health (Apr 2013)	<input type="checkbox"/> Y <input type="checkbox"/> N
Creating Mentally Healthy Environments (May 2013)	<input type="checkbox"/> Y <input type="checkbox"/> N

Mental Health, Burnout, Compassion Fatigue and Vicarious Trauma

"Where am I right now in terms of..."

(RESEARCHER'S QUESTIONNAIRE) Each item below describes an area of knowledge, skill, ability, or attitude relevant to mental health, burnout, compassion fatigue or vicarious trauma. Please circle the response to the right of each statement according to the scale to the right of this box.	Where I am right now					
	1 = No need for development 2 = Little need for development 3 = Some need for development 4 = Substantial need for development 5 = Urgent attention required 6 = Not relevant to my daily work					
My understanding of what burnout is	1	2	3	4	5	6
My knowledge of the signs and symptoms of burnout	1	2	3	4	5	6
My ability to recognize the potential risk factors of burnout in myself	1	2	3	4	5	6
My understanding of what vicarious trauma is	1	2	3	4	5	6
My knowledge of the signs and symptoms of vicarious trauma	1	2	3	4	5	6
My ability to recognize the potential risk factors of vicarious trauma in myself	1	2	3	4	5	6
My understanding of what compassion fatigue is	1	2	3	4	5	6
My knowledge of the signs and symptoms of compassion fatigue	1	2	3	4	5	6
My ability to recognize the potential risk factors of compassion fatigue in myself	1	2	3	4	5	6
My awareness of self-care skills I can use to prevent or minimize compassion fatigue, burnout, and vicarious trauma	1	2	3	4	5	6
My competency in using self-care skills in order to prevent or minimize compassion fatigue, burnout, and vicarious trauma	1	2	3	4	5	6
My knowledge of specific strategies to better assist students with learning	1	2	3	4	5	6
My knowledge of how to access internal TVDSB resources and supports for students with mental health issues	1	2	3	4	5	6
My knowledge of how to access internal TVDSB resources and supports for my own mental health needs	1	2	3	4	5	6
My knowledge of how to access community resources and supports for students with mental health issues	1	2	3	4	5	6
My knowledge of how to access community resources and supports for my own mental health needs	1	2	3	4	5	6
My knowledge of how to access crisis support services for mental health issues	1	2	3	4	5	6
My knowledge about general mental health diagnoses common among children and youth	1	2	3	4	5	6
My ability to provide information to students and families about mental health concerns	1	2	3	4	5	6
My ability to create a learning environment where all students can succeed	1	2	3	4	5	6
My understanding of how mental health issues affect the learning process	1	2	3	4	5	6
My understanding of how mental health issues impact teaching practices	1	2	3	4	5	6

[**MBI-ES would be here but due to copyright restrictions was removed from this copy of our Pre-Evaluation]**

***Within the last year and within your work environment, have you observed a student or co-worker who has experienced a trauma? (please circle one) Yes No

- If **Yes**, please indicate the nature of the trauma (check all that apply):

- Accidental death of a student Suicide of a student Death of a colleague Natural (weather) disaster
- Criminal investigation An experience of violence (sexual or other assault, child maltreatment)
- Family Tragedy Health crisis
- Other (please describe briefly):

- If **Yes**, please ONLY answer **questionnaire A**.
- If **No**, please proceed to questionnaire B and ONLY answer **questionnaire B**.

Questionnaire A (STSS). (answer only if you responded, "Yes" to the question above that asked about observing someone who had experienced a trauma).

The following is a list of statements made by persons who have been negatively impacted by traumatized individuals in their work environment. Read each statement then indicate how frequently the statement was true for you within the past year by circling the corresponding number next to the statement. Please answer as honestly as possible.

	1-----	2-----	3-----	4-----	5-----
	Never	Rarely	Occasionally	Often	Very Often
I felt emotionally numb	1	2	3	4	5
My heart started pounding when I thought about my work with students or co-workers	1	2	3	4	5
It seemed as if I was reliving the trauma(s) experienced by my student(s) or co-worker(s)	1	2	3	4	5
I had trouble sleeping	1	2	3	4	5
I felt discouraged about the future	1	2	3	4	5
Reminders of my work with students or co-workers upset me	1	2	3	4	5
I had little interest in being around others	1	2	3	4	5

I felt jumpy	1	2	3	4	5
I was less active than usual	1	2	3	4	5
I thought about my work with students or co-workers when I didn't intend to	1	2	3	4	5
I had trouble concentrating	1	2	3	4	5
I avoided people, places, or things that reminded me of my work with students or co-workers	1	2	3	4	5
I had disturbing dreams about my work with students or co-workers	1	2	3	4	5
I wanted to avoid working with some students	1	2	3	4	5
I was easily annoyed	1	2	3	4	5
I expected something bad to happen	1	2	3	4	5
I noticed gaps in my memory about being with students or co-workers	1	2	3	4	5

If you have completed section A, PLEASE STOP HERE. THANK YOU for completing our survey.

Questionnaire B (WAYS OF COPING SUBSCALES). (Answer only if you responded "No" to the question above that asked about observing someone who had experienced a trauma).

Please read each item below and indicate, by using the following rating scale, to what extent you used this way of coping in your work environment.

0-----1-----2-----3
 Not used Used somewhat Used quite a bit Used a great deal

Talked to someone to find out more about the situation	0	1	2	3
Talked to someone who could do something concrete about the problem	0	1	2	3
I asked a relative or friend I respected for advice	0	1	2	3
Talked to someone about how I was feeling	0	1	2	3
Accepted sympathy and understanding from someone	0	1	2	3
I got professional help	0	1	2	3
I knew what had to be done, so I doubled my efforts to make things work	0	1	2	3

I made a plan of action and followed it	0	1	2	3
Just concentrated on what I had to do next – the next step	0	1	2	3
Changed something so things would turn out all right	0	1	2	3
Drew on my past experiences; I was in a similar situation before	0	1	2	3
Came up with a couple of different solutions to the problem	0	1	2	3

THANK YOU

(TIME 2 AND 3 SELF-CARE QUESTION) Based on what you learned today, what action(s) do you intend to take to create positive changes in your life?

(Check boxes which apply)

- Physical activity
 Diet change
 Meditation
 Counselling
 Creating more time for myself
- Spend more time with family and/or friends
 Deep breathing
 Spend time with nature
- Create a work support group
 Other (Please describe below)

Are there any additional questions or comments that you have at this time?


Appendix B: Ethics Approval

Western Education
WESTERN UNIVERSITY
FACULTY OF EDUCATION
USE OF HUMAN SUBJECTS - ETHICS APPROVAL NOTICE

Review Number: 1210-3
Principal Investigator: Susan Rodger
Student Name:
Title: *Evaluating Pre and Post – Educator Perspectives on a Series of Mental Health Workshops*
Expiry Date: April 30, 2014
Type: Faculty
Ethics Approval Date: November 20, 2012
Revision #: 2
Documents Reviewed & Approved: Letter of Information & Consent for Workshop 2, Script Workshop 2, Pre and Post Questionnaires Workshop 2

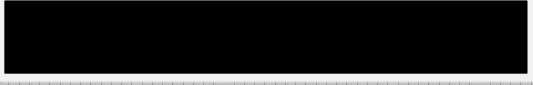
This is to notify you that the Faculty of Education Sub-Research Ethics Board (REB), which operates under the authority of the Western University Research Ethics Board for Non-Medical Research Involving Human Subjects, according to the Tri-Council Policy Statement and the applicable laws and regulations of Ontario has granted approval to the above named research study on the date noted above. The approval shall remain valid until the expiry date noted above assuming timely and acceptable responses to the REB's periodic requests for surveillance and monitoring information.

During the course of the research, no deviations from, or changes to, the study or information/consent documents may be initiated without prior written approval from the REB, except for minor administrative aspects. Participants must receive a copy of the signed information/consent documentation. Investigators must promptly report to the Chair of the Faculty Sub-REB any adverse or unexpected experiences or events that are both serious and unexpected, and any new information which may adversely affect the safety of the subjects or the conduct of the study. In the event that any changes require a change in the information/consent documentation and/or recruitment advertisement, newly revised documents must be submitted to the Sub-REB for approval.


for Dr. Alan Edmunds (Chair)

2012-2013 Faculty of Education Sub-Research Ethics Board

Dr. Alan Edmunds	Faculty of Education (Chair)
Dr. John Barnett	Faculty of Education
Dr. Farshnaz Faez	Faculty of Education
Dr. Wayne Martino	Faculty of Education
Dr. George Gadanidis	Faculty of Education
Dr. Elizabeth Nowicki	Faculty of Education
Dr. Julie Byrd Clark	Faculty of Education
Dr. Kari Veblen	Faculty of Music
Dr. Jason Brown	Faculty of Education
Dr. Susan Rodger	Faculty of Education
	Faculty of Education, Associate Dean, Research (<i>ex officio</i>)
Dr. Shelley Taylor	Faculty of Education, Western Non-Medical Research Ethics Board (<i>ex officio</i>)
Dr. Ruth Wright	Faculty of Music, Western Non-Medical Research Ethics Board (<i>ex officio</i>)
Dr. Kevin Watson	Faculty of Music, Western Non-Medical Research Ethics Board (<i>ex officio</i>)


Copy: Office of Research Ethics

Adam Koenig

Curriculum Vitae

ACADEMIC INFORMATION

Master of Arts - Counselling Psychology **Anticipated Graduation Date: June 2014**
The University of Western Ontario, London, Ontario, Canada

Master's Thesis:

- Learning to Prevent Burning and Fatigue: Teacher Burnout and Compassion Fatigue
 - Examining the impact of professional development on teacher burnout and compassion fatigue

Bachelor of Arts - Honours Specialization in Psychology **Graduated: June 2012**
The University of Western Ontario, London, Ontario, Canada

Bachelor's Thesis:

- What's Your Name Again? Physical Attractiveness and Its Impact on Name Recognition
 - Examined the impact of female physical attractiveness on name recognition of targets

Scholarships:

- | | |
|--|-------------------------------|
| Social Science Dean's Honor List | June 2009 to June 2012 |
| ○ Minimum average of 80% | |
| Rogers Family Award for Social Science valued at \$2500 | December 2011 |
| ○ Based on improved academic performance from first to second year | |
| UWO in Course Scholarship valued at \$700 | December 2011 |
| ○ Based on second year competitive academic average | |

CLINICAL EXPERIENCE

Clinical Intern **August 2013-Present**
Counselling and Accessibility Services, Fanshawe College, London, Ontario, Canada

- Conducted individual personal, career, and academic counselling with students through the effective use of verbal communication and listening skills fostering student success at college
- Efficiently managed case load of clients with presenting issues such as stress, anxiety, phobias, depression, self-injury, suicidal ideation, trauma, grief, relational issues, abuse, anger, and self-esteem, in order to provide effective service and help students develop self-management skills
- Helped support students by using critical thinking skills to conceptualize client cases, plan treatments, and evaluate client outcomes
- Provided triage services ranging from information to pre-admissions individuals to supporting students in crisis which allowed for effective client service and care

- Assessed clients with formal assessments such as the Myers-Briggs Type Inventory, Strong Interest Inventory, Beck Depression Inventory, Beck Anxiety Inventory, Brown Attention Deficit Disorder Scale, and Delta Screener for learning disabilities in order to identify other services that would further enable student success, resulting in better student service
- Conducted career testing interpretations with students and supported them in making career and life related decisions aiding in student fulfillment
- Co-developed and facilitated a psychoeducational stress and anxiety group, using empirically validated treatments, which taught students about stress and anxiety management techniques aiding in the development of student self-awareness and self-care
- Co-facilitated meditation group to teach students mindfulness techniques and a way to reduce stress
- Fostered student awareness of Counselling and Accessibility Services by volunteering during a mental health awareness day at the college and provided students with resources and answered questions about our services

VOLUNTEER EXPERIENCE

Volunteer Co-Facilitator

January 2014-Present

Journey Through Loss Bereavement Support Group, London, Ontario, Canada

- Enabled client processing through effective reflection, insight, and metaphor use while in a co-facilitator role
- Debriefed with other facilitators tracking common themes across sessions and collaboratively brainstormed topics that may have been useful to discuss with the group aiding the client grieving process

Hospice Volunteer Visitor

June 2010-January 2014

St. Joseph's Hospice, London, Ontario, Canada

- Applied learned knowledge from psychology and thanatology classes to practice self-care strategies to maintain good mental health
- Visited with terminally ill clients on a weekly basis providing emotional support for clients as well as reprieve for family members
- Communicated with volunteer coordinator after visits to update status of client to determine if other services were also required

Wait-List Clinic Volunteer

September 2012-December 2012

Canadian Mental Health Association, London, Ontario, Canada

- Helped counsel individuals on the CMHA waitlist by providing critical and supportive feedback to student counsellors which aided in the improvement of student counselling skills and resultant client care
- Worked co-operatively as part of a team to plan treatments for clients and hypothesized ways to better support the clients accessing CMHA waitlist support

RESEARCH EXPERIENCE

Research Assistant (Paid)

March 2013-May 2013

Dr. Susan Rodger, University of Western Ontario, London, Ontario, Canada

- Aided with an environmental scan for PHE Canada on the topic of mental health, curricula, and teacher education
- Researched the topic of mental health in curriculums around the world and highlighted important findings in a literature review for PHE Canada

Research Assistant (Volunteer)

September 2011-April 2012

Dr. Campbell's Psychology Lab, University of Western Ontario, London, Ontario, Canada

- Acted as a confederate to elicit jealousy in couples to investigate effects on relational attachment

Research Assistant (Volunteer)

September 2010-April 2011

Dr. Dozois' Psychology Lab, University of Western Ontario, London, Ontario, Canada

- Used organizational and communication skills effectively to run participants through experiment to determine if attentional biases can be trained and whether they can affect vulnerability to depression

MEMBERSHIPS

Canadian Counselling and Psychotherapy Association

December 2012-Present

- Student Member - Access to professional development opportunities, accountable to a professional organization, network of professional peers

Canadian Psychological Association

May 2013-December 2013

- Student Member