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The Influence of Areas of Worklife and Compassion Satisfaction on Burnout of Mental Health Nurses

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Abstract

The prevalence of burnout among nurses is linked to sub-optimal wellbeing and is reflected in higher than average rates of illness and absenteeism (Canadian Institute for Health Information, [CIHI], 2007). Additionally, there are consequences for clients including increased staff related errors and poor patient satisfaction. An improved person-job match in the six areas of worklife and higher compassion satisfaction may result in a workforce that is more engaged and able to achieve positive client outcomes. This study explores the relationship between person-job match and both compassion satisfaction and the emotional exhaustion component of burnout of mental health nurses through a secondary analysis of data previously collected as part of a larger study of compassion satisfaction, compassion fatigue and burnout among mental health staff. Findings indicated that compassion satisfaction partially mediates the relationship between person-job match and the emotional exhaustion component of burnout. Further, overall person-job match and compassion satisfaction explained 43% of the variance in emotional exhaustion ($F_{(2, 65)} = 25.092$, $p = 0.005$, $R^2 = 0.430$). Findings suggest that improved person-job match and compassion satisfaction would be beneficial in reducing burnout among mental health nurses.

Keywords: Compassion Satisfaction, Burnout, Areas of Worklife, Mental Health Nurse

Dedication

I dedicate this thesis to Jean and Robert Fredette and Vera and Marcus Rowe

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Chapter One

Introduction

Increasing concern regarding a potential nursing shortage has created increased interest in exploring the factors that influence recruitment and retention such as work environments, nurse staffing, workload, and culture with an emphasis on identifying strategies to mitigate negative stress related physical and mental health outcomes which lead to illness, absenteeism and turnover (Kowalski et al., 2010; Kutney-Lee, Wu, Sloane, & Aiken, 2013; Leiter, Jackson, & Shaughnessy, 2009; Leiter & Maslach, 2009). This is especially important within mental health care where nurses are considered to be at a higher risk for burnout (Breen & Sweeny, 2013; Caldwell, Gill, Fitzgerald, Sclafani, & Grandison, 2006; Gibb, Cameron, Hamilton, Murphy, & Naji, 2010; Ward, 2011). In 2011, nurses reported the second highest rates of absenteeism within the health care professions (Stewart, 2013). According to the Canadian Institute for Health Information (2007), absenteeism among nurses was 58% higher than that of the overall Canadian labour force. In addition to the direct costs of absenteeism, there are additional indirect costs such as replacement costs for absent workers, administrative costs for time spent arranging staffing, a reduction in morale, increased workload, reduced productivity and decreased satisfaction (Stewart, 2013). These factors in turn contribute to increased stress and risk of burnout to the remaining staff (Devi, Rao, Mayya, & Bairy, 2010).

There are a number of factors that have been identified as contributors to nurse absenteeism and turnover rates. A systematic review of the literature on contributing factors and health outcomes among nurses found several studies confirming that nurses in general experience high levels of work related stress, higher than average rates of burnout, and increased physical and mental health complaints (Khamisa, Peltzer, &

Oldenburg, 2013). In the process of providing around the clock care, nurses are in contact with patients continuously which requires longer working hours as well as frequent direct, physical and emotional contact with patients (Khamisa et al., 2013; Stewart, 2013). Working within a stressful environment increases a nurse's susceptibility to various stressors which have been identified as risk factors for burnout (Stewart, 2013). Sixty percent of health care workers report high levels of work overload (Stewart, 2013). Nearly half of all nurses reporting feeling afraid of contracting a serious illness in the course of their work (Stewart, 2013). Over a quarter of nurses have reported being physically assaulted by a patient while at work and 44 percent reported emotional abuse (Stewart, 2013). The emotional and physical stress of performing extremely complex work within a highly demanding culture where everything is urgent, there is a lack of staff, and workloads are considered unmanageable, contributes to the higher than average rates of job stress and burnout reflected in higher than average absenteeism and turnover within the health care sector (Stewart, 2013). Previous studies have indicated that nurses have higher rates of psychiatric comorbidity related to the physical and psychological effects of witnessing suffering, constant exposure to stressors such as sickness and death, and having to attend to urgent or complex demands (Collins & Long, 2003; Gascon et al., 2013; Lombardo, & Eyre, 2011; Sabo, 2011). The physical, mental and emotional demands of nursing increase the risk for job-stress related outcomes such as burnout.

Mental health nurses in particular experience a more intense therapeutic relationship with their clients and often face higher levels of challenging and disturbed patient behavior, suicidality, and violence (Breen & Sweeny, 2013; Currid, 2009; Gascon et al., 2013; Lasalvia et al., 2009; Seidler et al., 2014) . These aspects of mental health nursing differentiate it from any other kind of health work (Breen & Sweeny, 2013).

Within mental health nursing, stress experienced as a result of interacting with patients who make physical threats, are suicidal, or exhibit disturbed behavior is reported as being the most significant occupational health problem (Ward, 2011). This increased stress has been identified as a major reason why some nurses fail to function at optimum levels (Breen & Sweeny, 2013). Elevated stress can impact the nurses capacity to produce positive patient outcomes and can affect the collaboration needed for team functioning (Breen & Sweeny, 2013; Caldwell et al., 2006). The findings from Breen and Sweeny (2013) indicate that approximately half of mental health nurses show signs of high burnout in association with emotional exhaustion.

Burnout is a stress-related adaptive process (Seidler et al., 2014) that results from prolonged exposure to chronic, work related, emotional and interpersonal stressors (Maslach, Schaufelli, & Leiter, 2001). Burnout is characterized by emotional exhaustion, cynicism, and decreased personal efficacy resulting from the accumulation of prolonged and unrelenting environmental stressors (Leiter & Maslach, 2003; Van Bogaert, Dilles, Wouters, & Van Rompaey, 2014). The presence of burnout within nurses is directly linked to sub-optimal wellbeing and is a contributing factor in higher than average rates of illness, absenteeism and turnover (Carter & Tourangeau, 2012; DeCola & Riggins, 2010; Lasalvia et al., 2009; Leiter & Maslach, 2009). Burnout manifests in both physical and emotional symptoms such as chest pain, heart palpitations, shortness of breath, gastrointestinal pain, dizziness, fainting, and/or headaches, as well as feelings of irritability, moodiness, anger, and hostility, depression and anxiety or loss of interest in engaging with others or in normal activities (Leiter & Maslach, 2009; Maslach et al., 2001). The physical and emotional symptoms of burnout have been shown to contribute to negative consequences for staff, clients and organizations such as elevated sick time

and turnover rates, lowered morale, lowered productivity, and poor patient satisfaction (Bakker, Albrecht, & Leiter, 2011; Leiter, Jackson, & Shaughnessy, 2009; Maslach et al., 2001).

Within healthcare, burnout is considered a byproduct of engaging in helping relationships with patients and the therapeutic alliance required for this work (Figley, 2002; Leiter et al., 2009; Maslach et al., 2001). Burnout is influenced by the individual's perceptions of factors within the work context (Leiter & Maslach, 1999, 2003). Monroe (2008) suggested that professionals affected by burnout are more likely to make poor professional judgments than professionals who are not affected; therefore, patient experience and patient outcomes could be improved by a greater understanding of burnout and the contributing and mitigating factors. Although burnout is described as having three components: emotional exhaustion, cynicism, and decreased personal efficacy, emotional exhaustion is believed to be the core component (Brenninkmeijer & Van Yperen, 2003; Robins, Meltzer, & Zelikovsky, 2009; Schaufeli & Taris, 2005).

Despite all nurses having some exposure to the various stressors thought to contribute to burnout, not all nurses are negatively affected or develop the symptoms related to burnout. Some nurses are able to overcome and even thrive within highly stressful work settings. Many nurses enter the profession with the intrinsic goal of helping others and to gain a sense of satisfaction and reward through their work. One perspective on this sense of satisfaction and reward has been framed as compassion satisfaction. Compassion satisfaction is described as the feeling of invigoration and inspiration experienced through connecting with a patient to relieve and alleviate a patient's pain or suffering (Coetzee & Klopper, 2010). It encompasses the emotional reward and satisfaction received through providing compassionate and competent care

and witnessing how this care contributes to decreasing patient suffering and creating positive change (Coetzee & Klopper, 2010). For nurses, providing quality care creates a sense of fulfillment that energizes them and contributes to positive staff morale and enthusiasm to continue to provide quality care (Coetzee & Klopper, 2010). Coetzee and Klopper (2010) propose that the ability to connect with patients and empathetically experience their suffering creates an emotional and spiritual connection which evokes a response of kindness, sensitivity, care, concern, understanding, and warmth. Witnessing how this response alleviates the suffering of others creates a desire to continue to provide care and instills a sense of purpose and meaning in nursing work that invigorates and enhances both personal and professional self-worth, allowing nurses to build on this experience to become more involved and confident as they continue in their career (Coetzee & Klopper, 2010). This experience of satisfaction and reward is thought to offset some of the negative effects brought on by high stress creating a sense that the positive outcomes outweigh the stress and effort.

Both burnout and compassion satisfaction are highly influenced by the nurses perception of their work environment. The Areas of Worklife model described by Leiter and Maslach (2003) explores the relationship between the workspace and the worker in terms of how the workers perception of their work environment aligns with their expectations. They proposed that an improved person-job match in six key areas of worklife would result in a workforce that is more engaged, possesses a better understanding of the client population and needs, experiences a greater effort reward balance, less emotional conflict, less work related stress, and is more invested in positive client outcomes and client strengths, leading to decreased prevalence of burnout. Several studies have identified the relationships between person–job match in the six areas of

work life (control, rewards, workload, values, fairness and community) and burnout (Bamford, Wong, & Laschinger, 2013; Gupta, Paterson, Lysaght, & Von Zweck, 2012; Leiter & Maslach, 1999, 2003); however, there is limited literature exploring the influence of compassion satisfaction on person-job match, particularly in mental health nurses.

Given the known impact of sub-optimal nursing health on patient outcomes and both organizational and personal functioning, understanding how mental health nurses interact and perceive their work environments, and how this relates to the nurses perception of compassion satisfaction and burnout is a high priority for mental health organizations (Caldwell et al., 2006; Van Bogaert, Clarke, Wouters, et al., 2013). A greater understanding of the relationship between person-job match, the prevalence of burnout, specifically the emotional exhaustion component, and the influence of compassion satisfaction on this relationship may provide insight for improvement of the work environment. This understanding could inform strategies which leverage the buffering or mitigating effects of compassion satisfaction and reduce burnout among mental health nurses. An improved understanding of the relationship between nurses and the practice environment has the potential to improve staff health and satisfaction, client outcomes, reduce organizational costs and positively impact retention and recruitment issues. The purpose of this study is to explore the relationship between Leiter and Maslach's (2003) six areas of worklife, compassion satisfaction, and emotional exhaustion and the potential mediating role of compassion satisfaction on the relationship between areas of worklife and burnout.

References

Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology, 20*(1), 4–28. http://doi.org/10.1080/1359432X.2010.485352

Bamford, M., Wong, C. A. ., & Laschinger, H. (2013). The influence of authentic leadership and areas of worklife on work engagement of registered nurses. *Journal of Nursing Management, 21*(3), 529–540. http://doi.org/10.1111/j.1365-2834.2012.01399.x

Breen, M., & Sweeny, J. (2013). Burnout : The experiences of nurses who work in inner city areas. *Mental Health Practice, 17*(2), 12–20.

Brenninkmeijer, V., & Van Yperen, N. (2003). How to conduct research on burnout: Advantages and disadvantages of a unidimensional approach in burnout research. *Occupational and Environmental Medicine, 60*(6). Retrieved from http://go.galegroup.com/ps/i.do?id=GALE%7CA104209360&v=2.1&u=lond95336&it=r&p=AONE&sw=w&asid=e6b6d5b4208c83d616c6643c12dbb1c9

Caldwell, B. A., Gill, K. J., Fitzgerald, E., Sclafani, M., & Grandison, P. (2006). The association of ward atmosphere with burnout and attitudes of treatment team members in a state psychiatric hospital. *American Journal of Psychiatric Rehabilitation, 9*(2), 111–129. http://doi.org/10.1080/15487760600876303

Carter, M. R., & Tourangeau, A. E. (2012). Staying in nursing: What factors determine whether nurses intend to remain employed? *Journal of Advanced Nursing, 68*(7), 1589–1600. http://doi.org/10.1111/j.1365-2648.2012.05973.x

Coetzee, S. K., & Klopper, H. C. (2010). Compassion fatigue within nursing practice: A concept analysis. *Nursing and Health Sciences, 12*(2), 235–243. http://doi.org/10.1111/j.1442-2018.2010.00526.x

Collins, S., & Long, A. (2003). Working with the psychological effects of trauma: Consequences for mental health-care workers--a literature review. *Journal of Psychiatric and Mental Health Nursing, 10*(4), 417–424. http://doi.org/10.1046/j.1365-2850.2003.00620.x

Currid, T. (2009). Experiences of stress among nurses in acute mental health settings. *Nursing Standard, 23*(44), 40–46.

DeCola, P. R., & Riggins, P. (2010). Nurses in the workplace: Expectations and needs. *International Nursing Review, 57*(3), 335–342. http://doi.org/10.1111/j.1466-7657.2010.00818.x

Devi, E. S., Rao, A., Mayya, S., & Bairy, K. (2010). Perception and attitude towards work-life balance among allied and nursing health care professionals, *International Journal of Nursing Education 2*(2), 13-14.

Figley, C. R. (2002). Compassion fatigue: Psychotherapists' chronic lack of self care. *Journal of Clinical Psychology, 58*(11), 1433–1441. http://doi.org/10.1002/jclp.10090

Gascon, S., Leiter, M. P., Andrés, E., Santed, M. A. ., Pereira, J. P., Cunha, M. J., … Martínez-Jarreta, B. (2013). The role of aggressions suffered by healthcare workers as predictors of burnout. *Journal of Clinical Nursing, 22*(21-22), 3120–3129. http://doi.org/10.1111/j.1365-2702.2012.04255.x

Gibb, J., Cameron, I. M., Hamilton, R., Murphy, E., & Naji, S. (2010). Mental health nurses' and allied health professionals' perceptions of the role of the occupational health service in the management of work-related stress: How do they self-care? *Journal of Psychiatric and Mental Health Nursing, 17*(9), 838–845. http://doi.org/10.1111/j.1365-2850.2010.01599.x

Gupta, S., Paterson, M. L., Lysaght, R. M., & Von Zweck, C. M. (2012). Experiences of burnout and coping strategies utilized by occupational therapists. *Canadian Journal of Occupational Therapy, 79*(2), 86–95. http://doi.org/10.2182/cjot.2012.79.2.4

Khamisa, N., Peltzer, K., & Oldenburg, B. (2013). Burnout in relation to specific contributing factors and health outcomes among nurses: A systematic review. *International Journal of Environmental Research and Public Health, 10*(6), 2214–2240. http://doi.org/10.3390/ijerph10062214

Kowalski, C., Ommen, O., Driller, E., Ernstmann, N., Wirtz, M. a., Köhler, T., & Pfaff, H. (2010). Burnout in nurses - the relationship between social capital in hospitals and emotional exhaustion. *Journal of Clinical Nursing, 19*(11-12), 1654–1663. http://doi.org/10.1111/j.1365-2702.2009.02989.x

Kutney-Lee, A., Wu, E. S., Sloane, D. M., & Aiken, L. H. (2013). Changes in hospital nurse work environments and nurse job outcomes: An analysis of panel data. *International Journal of Nursing Studies, 50*(2), 195–201. http://doi.org/10.1016/j.ijnurstu.2012.07.014

Lasalvia, A., Bonetto, C., Bertani, M., Bissoli, S., Cristofalo, D., Marrella, G., … Ruggeri, M. (2009). Influence of perceived organisational factors on job burnout: Survey of community mental health staff. *British Journal of Psychiatry, 195*(6), 537–544. http://doi.org/10.1192/bjp.bp.108.060871

Leiter, M. P., Jackson, N. J., & Shaughnessy, K. (2009). Contrasting burnout, turnover intention, control, value congruence and knowledge sharing between baby boomers and generation X. *Journal of Nursing Management, 17*(1), 100–109. http://doi.org/10.1111/j.1365-2834.2008.00884.x

Leiter, M. P., & Maslach, C. (1999). Six areas of worklife: A model of the organizational context of burnout. *Journal of Health and Human Services Administration, 21*(4), 473–489.

Leiter, M. P., & Maslach, C. (2003). Areas of worklife: A structured approach to organizational predictors of job burnout. *Research in Occupational Stress and Well Being 3*,91-134 http://doi.org/10.1016/S1479-3555(03)03003-8

Leiter, M. P., & Maslach, C. (2009). Nurse turnover: The mediating role of burnout. *Journal of Nursing Management, 17*(3), 331–339. http://doi.org/10.1111/j.1365-2834.2009.01004.x

Lombardo, B., & Eyre, C. (2011). Compassion fatigue: A nurse's primer. *Online Journal of Issues in Nursing, 16*(1), 1 http://doi.org/10.3912/OJIN.Vol16No01Man03

Maslach, C., Schaufelli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*, 397–422.

Monroe, A. (2008). *Psychiatric nurses' management of compassion fatigue through self-care* (Doctoral dissertation) (Order No. 3318656). Retrieved from http://search.proquest.com/docview/304442931?accountid=15115

Robins, P. M., Meltzer, L., & Zelikovsky, N. (2009). The experience of secondary traumatic stress upon care providers working within a children's hospital. *Journal of Pediatric Nursing, 24*(4), 270–279. http://doi.org/10.1016/j.pedn.2008.03.007

Sabo, B. (2011). Reflecting on the concept of compassion fatique. *The Online Journal of Issues in Nursing, 16*(1), 1–14. http://doi.org/10.3912/OJIN.VOL16No01Man01

Schaufeli, W. B., & Taris, T. W. (2005). The conceptualization and measurement of burnout: Common ground and worlds apart. *Work & Stress, 19*(3), 256–262. http://doi.org/10.1080/02678370500385913

Seidler, A., Thinschmidt, M., Deckert, S., Then, F., Hegewald, J., Nieuwenhuijsen, K., & Riedel-Heller, S. G. (2014). The role of psychosocial working conditions on burnout and its core component emotional exhaustion - a systematic review. *Journal of Occupational Medicine and Toxicology (London, England), 9*(1), 10. http://doi.org/10.1186/1745-6673-9-10

Stewart, N. (2013). Missing in action: Absenteeism trends in Canadian organizations. *Ottawa: The Conference Board of Canada*. http://doi.org/10.1353/cal.2002.0008

Van Bogaert, P., Clarke, S., Wouters, K., Franck, E., Willems, R., & Mondelaers, M. (2013). Impacts of unit-level nurse practice environment, workload and burnout on nurse-reported outcomes in psychiatric hospitals: A multilevel modeling approach. *International Journal of Nursing Studies, 50*(3), 357–365. http://doi.org/10.1016/j.ijnurstu.2012.05.006

Van Bogaert, P., Kowalski, C., Weeks, S. M., Van heusden, D., & Clarke, S. P. (2013). The relationship between nurse practice environment, nurse work characteristics, burnout and job outcome and quality of nursing care: A cross-sectional survey. *International Journal of Nursing Studies, 50*(12), 1667–1677. http://doi.org/10.1016/j.ijnurstu.2013.05.010

Ward, L. (2011). Mental health nursing and stress: Maintaining balance. *International Journal of Mental Health Nursing, 20*(2), 77–85. http://doi.org/10.1111/j.1447-0349.2010.00715.x

Chapter Two

Manuscript

Background and Significance

In response to ongoing concerns of a nursing shortage, increasing importance has been placed on creating healthy work environments that reduce workplace stress and burnout (Kowalski et al., 2010; Kutney-Lee et al., 2013; Leiter et al., 2009; Leiter & Maslach, 2009). Stress related illness, absenteeism and turnover are considered significant contributors to nursing shortages, particularly within mental health nursing (Breen & Sweeny, 2013; Caldwell et al., 2006; Carter & Tourangeau, 2012). Current literature has neglected the role the relationship between compassion satisfaction and organizational factors plays in preventing workplace stress and promoting positive outcomes for care providers (Kulkarni, Bell, Hartman, & Herman-Smith, 2013). Improving the work environment for mental health nurses may foster a greater sense of compassion satisfaction and reduce burnout.

When the energy expended by nurses in their efforts to care for others exceeds their restorative processes it can manifest in negative physical, emotional, and intellectual changes such as burnout (Coetzee & Klopper, 2010). Boyle (2010) proposes that burnout occurs as a result of failed coping strategies and as a perceived failure to achieve work related goals. Burnout is influenced by the individual's perceptions of factors within the work context and is characterized by emotional exhaustion, cynicism and decreased personal efficacy resulting from prolonged and unrelenting environmental stressors (Leiter & Maslach, 2003; Van Bogaert, Clarke, Willems, & Mondelaers, 2013). Burnout has been shown to contribute to multiple physical and mental health consequences for

staff, negative organizational outcomes including financial costs, lowered morale and productivity, and negative patient outcomes including increased errors and poor patient satisfaction (Demerouti, Bakker, Nachreiner, & Schaufeli, 2000; Fiabane, Giorgi, Sguazzin, & Argentero, 2013; Leiter et al., 2009; Maslach et al., 2001). Monroe (2008) suggested that professionals affected by burnout are more likely to make poor professional judgments. The negative effects of burnout, both physical and emotional, have been identified as possible outcomes for nurses working within stressful environments; however there remains discord in the literature in identifying causative factors and effective strategies for prevention.

Nurses report higher than average work related stress, physical and mental health complaints including burnout (Currid, 2009; Demerouti et al., 2000; Khamisa et al., 2013). The presence of burnout within nurses has been linked to sub-optimal wellbeing and is a contributing factor in higher than average rates of illness and absenteeism (Fiabane et al., 2013; Leiter et al., 2009; Stewart, 2013). Previous studies have indicated that nurses have increased physical and mental health comorbidity rates related to the physical and psychological effects of witnessing suffering, constant exposure to stressors such as sickness and death, and having to attend to urgent or complex demands (Collins & Long, 2003; Gascon et al., 2013; Lombardo & Eyre, 2011; Sabo, 2011). Nurses report increasingly negative perceptions of their work environment with almost half of the nurses within an international sample indicating that their workload is worse today than it was 5 years ago (DeCola & Riggins, 2010). Typically, nurses are responsible for around the clock care of the patient which includes longer working hours, irregular shift work and extended contact both physically and emotionally with the patients which is unique from other health care professionals (Khamisa et al., 2013).

Mental health nurses face additional challenges due to the intense therapeutic relationship with patients that is required to provide care (Breen & Sweeny, 2013; Currid, 2009; Demerouti et al., 2000; Gascon et al., 2013). The work-related stress experienced by mental health nurses appears to be the most significant occupational health problem for mental healthcare professions and is a major reason why some mental health nurses fail to function at optimum levels (Breen & Sweeny, 2013). In addition, mental health patients tend to demonstrate higher levels of challenging and disturbed behaviour, aggression, violence, and risk of harm for both the patients and staff (Breen & Sweeny, 2013; Gascon et al., 2013; Hanrahan, Aiken, McClaine, & Hanlon, 2010). Frequently engaging with patients suffering from graphic histories of trauma or abuse place mental health nurses at an increased risk for experiencing emotional distress and burnout as a result of their efforts to help patients cope with these events (Breen & Sweeny, 2013; Currid, 2009; Gascon et al., 2013; Gibb et al., 2010; Hanrahan et al., 2010). Nurses who spend significant time within inpatient wards with elevated violent behaviour tend to perceive aggression as a normal and unavoidable behaviour further reinforcing negative perceptions of the work environment (Caldwell et al., 2006). In studies, approximately half of mental health nurses showed signs of emotional exhaustion associated with burnout (Breen & Sweeny, 2013). This level of emotional exhaustion has a major impact on nurse's ability to function and contribute to positive patient outcomes and contributes to a sense of hopelessness and negativity (Bride, Radey, & Figley, 2007; Caldwell et al., 2006; Carter & Tourangeau, 2012). Strategies to create a more supportive work environment may improve nurses' satisfaction in the care they provide, and reduce the work related stress experienced by mental health nurses.

Although all nurses are potentially exposed to the same stressors, not all nurses suffer from burnout. Many nurses report high levels of job satisfaction and appear to thrive despite continuous exposure to the same contributing factors associated with burnout (Adams, Figley, & Boscarino, 2007; Collins & Long, 2003). The drive for many nurses to enter the profession is an intrinsic desire to help others through the acts of caring (Bakker et al., 2011; Carter & Tourangeau, 2012; Chirkowska-Smolak, 2012). The process of compassion satisfaction is thought to be a restorative process that reflects a positive feedback loop or symbiotic relationship between the patient and the nurse, where each receive positive gain or fulfillment from the other (Coetzee & Klopper, 2010). Coetzee and Klopper (2010) describe compassion satisfaction as being invigorated and inspired through connecting with patients and providing comfort or alleviating their pain or suffering. Nurses receive emotional reward, fulfillment and purpose through using their knowledge and skill to provide care, reduce the suffering of others which in turn creates a sense of purpose and meaning for the nurse which enhances the nurse's perception of their personal and professional self-worth (Bakker et al., 2011; Chirkowska-Smolak, 2012; Coetzee & Klopper, 2010). This emotional reward creates a feeling of fulfillment and reenergizes the nurse leading to elevated morale which in turn supports a more positive workplace (Coetzee & Klopper, 2010).

The concept analysis conducted by Coetzee and Klopper (2010) describes compassion satisfaction as the contrary case to compassion fatigue and proposes that compassion satisfaction may be a significant protective factor for nurses working in stressful environments, however it is grossly underdeveloped and understudied. The authors noted that no formal definition of compassion satisfaction was identified in the literature and that compassion satisfaction has not been described or explored outside of

the concept of compassion fatigue (Coetzee & Klopper, 2010). Coetzee and Klopper (2010) suggest that the emotional and spiritual fulfillment gained through connecting with patients, creates an emotional response of kindness, empathy, and concern, as well as a desire to respond. The process of compassion satisfaction is viewed as restorative where the positive aspects of the experience outweigh any negative experiences.

Leiter and Maslach (2003) proposed that an improved person-job match in six key areas of worklife would decrease the prevalence of burnout and result in a workforce that is more engaged and satisfied, experiences less emotional conflict and work related stress, and is more invested in positive client outcomes. Several studies have identified the relationships between person–job match in the six areas of work life (*control, rewards, workload, values, fairness and community*) and burnout, however, there is limited literature relating areas of worklife and person-job match with compassion satisfaction, particularly in mental health nurses (Breen & Sweeny, 2013; Coetzee & Klopper, 2010; Gascon et al., 2013). Given the known impact of sub-optimal nursing health on both personal and organizational functioning, understanding how mental health nurses interact and perceive their work environments and how this relates to the nurse's perception of compassion satisfaction and burnout is a high priority for mental health organizations. Hence, the purpose of this study is to explore the relationship between Leiter and Maslach's (2003) six areas of worklife, compassion satisfaction and emotional exhaustion and the potential mediating role of compassion satisfaction on the relationship between areas of worklife and burnout.

Theoretical Framework

Leiter and Maslach (2003) describe burnout as a "fundamental disconnect between the worker and the workplace" (p.91). Furthering the body of research on

burnout, Leiter and Maslach (1999) noted that the organizational precursors typically associated with burnout readily fit within six general categories: *workload, control, reward, community, fairness, and values*. Leiter and Maslach (1999) utilized these six key areas of worklife to describe the organizational context of burnout. They proposed that it is not an absolute value of a measure that is critical in determining its contribution to burnout, but rather the degree of disconnect between staff expectations and their perceived reality in the work setting (Leiter & Maslach, 1999). The Areas of Worklife model was further developed to address the gap between theory and practice with regards to preventing burnout, and to integrate, rather than replace, the existing burnout research (Leiter & Maslach, 2003). All six areas of worklife were found to be significantly related to the established dimensions of burnout. The validity of the model was supported by the relationship patterns remaining stable across multiple time periods (Leiter & Maslach, 2003). Leiter and Maslach (2003) identified that the absence of a generally accepted organizational model would inhibit theory development and proposed that a widely applicable model of burnout's organizational context was needed to further effective research development.

In the Areas of Worklife model, the internal experience of stress is assumed to play a mediating role between the impact of external job demands or stressors and work-related outcomes (Leiter & Maslach, 2003). Leiter and Maslach (2003) suggest that previous frameworks for understanding burnout provided only narrow parameters for defining the individual or organizational factors that influence burnout and focused mainly on personality traits of the individual or the tasks involved in the work. The approach proposed by Leiter and Maslach (2003) differs from previous frameworks in that the focus is on the ongoing relationship that is formed between employees and the

job. Leiter and Maslach (2003) suggest that this relationship is similar to a psychological contract where problems arise when the terms of the contract are broken and critical issues remain unresolved, or the relationship changes to something considered unacceptable to the employee.

The Areas of Worklife model (Leiter & Maslach, 1999, 2003) focuses on a perceived discrepancy, or inequity, created by a mismatch between an individual's expectation and reality in six key areas of workplace. These six key areas are *rewards, community, fairness, values, workload and control,* (Leiter & Maslach, 1999, 2003). *Reward* refers to the process by which positive reinforcement shapes behavior and encompasses the monetary, social, and intrinsic rewards and how they align with the expectations of the individual. Leiter and Maslach (2003) highlight that intrinsic rewards, such as the positive feeling derived through meaningful or satisfying work, may exceed the importance of extrinsic rewards or monetary rewards. The pleasure and satisfaction experienced with a positive day-to-day workflow increases an employee's engagement and investment in work (Bakker et al., 2011; Carter & Tourangeau, 2012). *Community* is focused around the quality of social interaction at work. This includes experiences of interpersonal conflict, social support, closeness, and the ability to form partnerships and work as a team (Leiter & Maslach, 2003). Typically, people thrive within positive community settings where they are able to share praise, comfort, happiness, and humor with people they like and respect (Bakker et al., 2011; Leiter & Maslach, 2003).

The concept of *fairness* derives from equity and social justice. Fairness includes perceptions of the decision making processes and whether individuals are treated in a respectful manner that confirms their self-worth. The area of *values* reflects the cognitive-emotional response to job goals or expectations and encompasses the ideals and initial

motivations of the individual in seeking a certain type of employment. When there is a gap between individual and organizational values, the individual is forced to choose between work they want to do and work they have to do. *Workload* reflects the amount of work performed or expected to be performed. While a challenging but sustainable workload can provide opportunities to develop or refine existing skills and build an individual's capacity and confidence, a critical point is reached when sufficient recovery does not occur. Heavy workload and a perception of overload occur when job demands exceed reasonable limitations. Both the quality and quantity of work need to be considered as factors in overload as they both contribute to depleting the capacity to meet the demands leading to exhaustion. The area of *control* involves the individual's perceived ability to influence decisions that affect their work. Control captures the need for professional autonomy, role clarity or role conflict, and access to necessary resources.

The overall quality of the relationships between an employee and the work environment, including the interaction between staff and patients, peers, and leaders, as well as work environment factors, are impacted by the alignment of person-job match (Lasalvia et al., 2009). The incongruence between expectation and demands creates distress for staff (Lasalvia et al., 2009; Leiter & Maslach, 1999, 2003). This distress continues to impact the staff member outside of work and can progress to burnout (Chirkowska-Smolak, 2012; Lasalvia et al., 2009; Yoder, 2010). As exhaustion progresses, the ability to form a therapeutic alliance and be efficient within a care giver role decreases, creating a wider discrepancy between expectations and reality (Collins & Long, 2003; Sabo, 2008; Thieleman & Cacciatore, 2014). While existing literature has not articulated a clear connection between areas of worklife and compassion satisfaction, much of the literature on compassion satisfaction and compassion fatigue would suggest

that improvement in the six areas of worklife would serve as a means of improving satisfaction and reducing fatigue (Slatten, Carson, & Carson, 2011). The Areas of Worklife model suggests that the work environment needs to be in alignment with the expectations of the individual in order to maintain a balance within the six areas of worklife and maintain the health and satisfaction of staff. Leiter and Maslach (2003) propose that the greater the disparity between the individual's expectations and their perceived reality of the work environment, the greater the likelihood of burnout.

Leiter and Maslach (2003) suggest that the Areas of Worklife model provides advantage over previous models that centered on defining organizational characteristics in that it considers the ways that individuals interact with and make sense of their work settings and is transferable to a variety of functional job environments and personal aspirations that shaping the way people work. The model defines leverage points that can influence elements of burnout and the energy and engagement of employees rather than merely proposing an ideal job or employee characteristics.

Literature Review

An integrated literature review of the major study variables was conducted including a search of various data bases (CINAHL, ProQuest, Pubmed, Medline, SCOPUS, PsycInfo) for each of the main concepts (areas of worklife, compassion satisfaction, and burnout), as key words and subject suggestions. Unpublished papers such as theses and dissertations were included. Exclusion criteria included articles that were not English language. Pivotal historical articles and frequently cited works were retained regardless of date. References of relevant articles and descendancy searches were used to locate frequently cited or pivotal works. Handsearching was conducted with the assistance of library services to obtain articles that were not attainable electronically.

Areas of Worklife

Lasalvia et al. (2009) explored the influence of perceived organizational factors on job burnout within a community mental health setting in a sample of interprofessional mental health care staff including nurses. Lasalvia et al. (2009) found that burnout was more closely predicted by a higher frequency of face-to-face interaction, as well as longer tenure in mental healthcare, weak work group cohesion and perceived unfairness. Within this sample, workload was indicated as the main predictor of exhaustion (Lasalvia et al., 2009). Low workload, high control, reward, fairness, positive changes and work-group cohesion all showed evidence of being important protective factors against the risk of burnout suggesting that improving the workplace atmosphere within psychiatric services could be one of the most important targets in burnout prevention strategies (Lasalvia et al., 2009).

Setti and Argentero (2011) utilized the Maslach Burnout Inventory-General Survey (MBI-GS) along with the AWS and the General Health Questionnaire to determine the engagement level among healthcare workers. Participants were primarily nurses and physicians and indicated a positive person-job fit in the areas of *community* (M = 3.56, SD =0.70), *control* (M = 3.50, SD = 0.73), *values* (M = 3.48, SD = 0.64), and *reward* (M= 3.39, SD = 0.82). *Workload* (β = 0.54, $p < 0.01$) and *values* (β = 0.22, $p <$ 0.01) were the main predictors of energy explaining 44% of the variance. *Values* (β = 0.39, $p < 0.01$) was found to be the main predictor of involvement. *Reward* (β = 0.25, $p <$ 0.01) and *control* (β = 0.22, $p < 0.01$) were the main predictors of efficacy.

Gupta, Paterson, Lysaght, and Von Zweck (2012) utilized the AWS and MBI to examine the burnout, practice implications and coping strategies within a sample of occupational therapists within Ontario. Results indicated that workload was the only

variable predictive of emotional exhaustion (β = 0.49, p <0.01) explaining 29.9% of the variance. The combined AWS subscales explained 35.3% of the variance in emotional exhaustion within the sample. Occupational therapists with a high degree of emotional exhaustion reported significantly lower use of the coping strategies than those with low and average exhaustion.

Laschinger and Grau (2012) looked at the influence of personal dispositional factors and organizational resources on workplace violence, burnout, and health outcomes in new graduate nurses using the AWS, the emotional exhaustion and cynicism subscales of the MBI-GS, Negative Acts Questionnaire-Revised, Psychological Capital Questionnaire, and the *physical symptoms* and the *energy levels* subscales of the Pressure Management Indicator. Participants indicated the best fit with expectations in *community* (*M* = 3.64, *SD* = .94), and the poorest fit in workload (*M* = 2.69, *SD* = .85) and fairness (*M* = 2.90, *SD* = .66). Higher overall areas of worklife fit was negatively related with both bullying exposure (β = 0.56) and emotional exhaustion (β = 0.20) and was shown to influence both the physical and mental health of staff. The results supported and expanded Areas of Worklife model to include personal resources.

Bamford, Wong, and Laschinger (2013) identified the influence of authentic leadership and areas of worklife on work engagement of registered nurses. This sample reflected the greatest perceived person-job match in *community* (*M* = 3.63, *SD*= 0.75), followed by *rewards* (*M* =3.42, *SD*= 0.87), *values* (*M* = 3.41, *SD*=0.70), *control* (*M* = 3.25, *SD*= 0.82), *workload* (*M* = 2.74, *SD*= 0.78) and lastly *fairness* (*M* = 2.86, *SD*= 0.70). Their finding support that an overall person–job match in the six areas of worklife fully mediated the relationship between authentic leadership and work engagement and

that nurses who work for managers demonstrating authentic leadership report a greater overall person–job match and greater work engagement (Bamford et al., 2013).

Kulkarni, Bell, Hartman, and Herman-Smith (2013) found similar patterns of person-job fit within a sample of domestic violence services workers including advocates, councilors, shelter workers and educators. The greatest alignment was found in *values* (*M*=3.84, *SD*= 0.75), followed by *community* (*M*=3.83, *SD*=0.81), *control* (*M*=3.69, *SD*= 0.82), *rewards* (*M*=3.45, *SD*= 0.93), *fairness* (*M*=3.12, *SD*= 0.59) and finally *workload* (*M*= 2.89, *SD*=0.79). Compassion satisfaction was positively associated with greater alignment in *values* and higher levels of work experience. The author's hypothesis that employees' perceptions of the six areas of worklife would correlate with compassion satisfaction was partially supported in this sample. The authors highlight that the existing research with regards to compassion satisfaction has neglected the role of organizational factors and propose that preventative strategies that target both individual and organizational factors would lead to stronger effects as well as more sustained effects over time than the interventions that targeted only individual change.

Compassion Satisfaction

Compassion satisfaction is rooted in the relationship between care givers and recipients and the individual's experience of working to alleviate or reduce discomfort of others (Figley, 2002; Monroe, 2008; Yoder, 2010). Compassion satisfaction has been vastly understudied in the literature and has not been explored as a separate or unique concept, but rather as the positive counter balance within compassion fatigue studies, with the majority of the literature focusing on compassion fatigue.

Burtson and Stichler (2010) examined the relationships among compassion satisfaction, job satisfaction, stress, burnout and compassion fatigue and nurse caring

within a sample of medical surgical, emergency and critical care nurses. The findings showed statistically significant relationships between nurse caring and compassion satisfaction ($r = 0.51$, $p < 0.001$), and burnout ($r = 0.22$, $p< 0.01$) with compassion satisfaction alone explaining 28.7% of the variance in nurse caring (Burtson & Stichler, 2010). Their findings suggest that nurses are motivated to care by the satisfaction they receive through caregiving, therefore, fostering compassion satisfaction and social interaction opportunities within nursing may improve nurse caring (Burtson & Stichler, 2010). This was the first study to measure the relationship between compassion satisfaction and nurse caring.

Neville and Cole (2013) examined the relationships among health promotion behaviors, compassion fatigue, burnout, and compassion satisfaction within a sample of staff nurses, nurse leaders and nurse practitioners responsible for direct care within both inpatient and outpatient settings within a community medical center. Their findings indicated significant positive relationships between total health promotion activities and compassion satisfaction ($r = 0.44$, $p < 0.001$), and an inverse relationship between total health promotion and burnout ($r = -0.41$, $p < 0.001$). The subscale scores of spiritual growth and interpersonal relations had the strongest relationships with compassion satisfaction and burnout.

The study completed by Flarity, Gentry, and Mesnikoff (2013) examined the effectiveness of a multifaceted education program to decrease compassion fatigue and burnout symptoms and increase compassion satisfaction within a sample of emergency department nurses. The authors proposed that individuals are wired for empathy not stoicism; therefore, caregiving comes naturally but can take a toll emotionally, physically, and spiritually. The results indicated that the physiological and emotional self-regulation

techniques proposed supported providers to be compassionate and connected to patients without internalizing the trauma and suffering of others. Comparison of pre and post implementations findings showed a 10% improvement in compassion satisfaction and a 34% improvement in burnout within the sample of emergency department nurses.

Ray, Wong, White, and Heaslip (2013) explored the relationships among compassion satisfaction, compassion fatigue, work life conditions and burnout among frontline interprofessional mental health practitioners including nurses. They found that compassion satisfaction was a significant predictor of emotional exhaustion ($\beta = -.271$, $p < .001$) as was areas of work life ($\beta = -.253$, $p < .001$). Their findings indicated that higher levels of compassion satisfaction, lower levels of compassion fatigue, and higher overall degree of fit in the six areas of work life were predictive of lower burnout. Compassion satisfaction was significantly and positively associated with person–job match in the six areas of work life. Both compassion satisfaction and compassion fatigue were significantly associated with emotional exhaustion.

Burnout

Burnout is a fairly broad topic with a vast body of research associated with it. For the purpose of this study, the literature review was focused on burnout in the context of health care settings, specifically searching for articles related to metal health nursing and the influence of the work environment. While there were many articles exploring the relationship between burnout and work environment, very few articles were found which focus on burnout within mental health nursing. Although burnout is described as having three components: emotional exhaustion, cynicism and decreased personal efficacy, emotional exhaustion is believed to be the core component (Brenninkmeijer & Van Yperen, 2003; Robins et al., 2009; Schaufeli & Taris, 2005).

Bakker, Killmer, Siegrist, and Schaufeli (2000) tested the hypothesis that the imbalance of high extrinsic efforts spent and low extrinsic rewards obtained are associated with burnout within a sample of nurses across various departments at a university hospital in Germany. The authors found that burnout was positively correlated with the amount of time nurses spent with their patients, the intensity of the emotional demands made by their patients, and exposure to patients with a poor prognosis.

Demerouti, Bakker, Nachreiner, and Schaufeli (2000) tested a theoretical model of burnout and overall life satisfaction separating working conditions into job demands and job resources within a sample surgery, oncology, intensive care, cardiology, neonatal care and nursing home nurses. The results confirmed that job demands and job resources have a strong effect on emotional exhaustion as well as confirmed the mediating role of burnout between working conditions and life satisfaction. The findings suggest that job demands are most strongly related to exhaustion, while job resources are most strongly related to disengagement. Nurses across all settings who reported demanding patients, high time pressure, high workload, unfavorable environments, and shift-work schedules, also reported relatively high emotional exhaustion.

Caldwell, Gill, Fitzgerald, Sclafani, and Grandison (2006) completed an assessment of ward atmosphere within a mental health setting. Within the multidisciplinary sample, more than half of the participants were nurses (53.2%). Nurses reported higher levels of emotional exhaustion than the other professions (M= 23.38, SD=12.83). Differences in burnout were noted based on the type of care areas with the forensic care area showing higher levels of support, autonomy, order, and organization and lower levels of emotional exhaustion. The authors suggest that the extended time spent by mental health nurses providing direct care on the units may cause staff to

normalize aggressive behaviors and likely contributed to elevated burnout, while collegiality, positive nursing culture, and strong leadership have been shown to produce more favorable clinical practice outcomes.

A systematic review conducted by Gershon et al. (2007) reinforced the association between burnout and adverse mental health problems such as depression and anxiety within nursing. The authors found evidence for an association between negative aspects of organizational climate and burnout, especially emotional exhaustion. Burnout was highly influenced by leadership variables. Overall, settings with more positive organizational climates had lower rates of adverse occupational outcomes such as burnout.

Summary of the literature

The literature supports the notion that burnout is highly influenced by the relationship and perceived fit between the worker's expectations and the work environment. A poor fit may result in negative outcomes including poor physical and psychological health, increased sick time, lower morale and decreased productivity and hopelessness with substantial costs to organizations, patients and nurses (Lasalvia et al., 2009; Leiter & Maslach, 1999, 2003; Seidler et al., 2014). Research findings suggest that nurses experience high levels of work related stress related to the physical and psychological effects of their work (Breen & Sweeny, 2013; Chirkowska-Smolak, 2012; Gascon et al., 2013).

While highly under researched and poorly defined, there is increasing literature supporting a link between the work environment as defined by the Areas of Worklife model and compassion satisfaction suggesting that the degree of congruence between staff expectations and experience will influence both the degree of burnout and

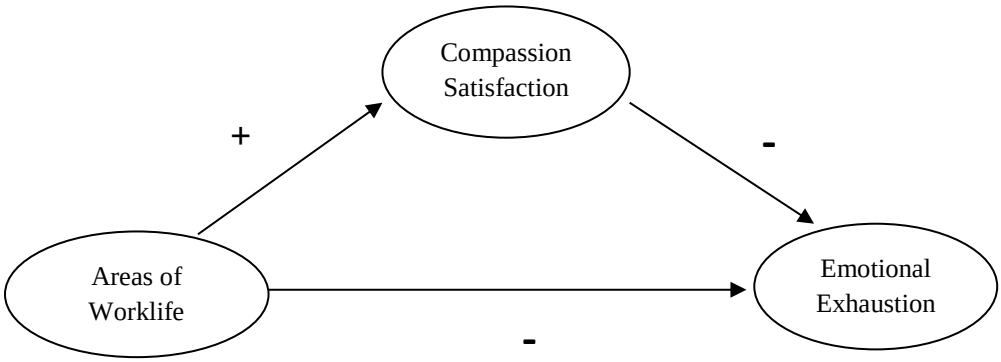
compassion satisfaction (Burtson & Stichler, 2010; Coetzee & Klopper, 2010). There is a need to further identify the link between compassion satisfaction and the six areas of worklife, as well as the relationship between compassion satisfaction and burnout (Demerouti et al., 2000; Van Dierendonck, Schaufeli, & Sixma, 1994). The overall qualities of the relationships experienced by staff are impacted by the alignment of personal expectations and the realities of the work setting (Lasalvia et al., 2009). The incongruence between expectation and reality creates distress for staff which impacts their ability to form a healthy therapeutic alliance and be efficient within a care giver role (Lasalvia et al., 2009; Leiter & Maslach, 1999, 2003). This, in turn, creates a wider discrepancy between expectations and reality (Collins & Long, 2003; Sabo, 2011; Thieleman & Cacciatore, 2014). While existing literature has not articulated a clear connection between areas of worklife and compassion satisfaction, much of the literature would suggest that improved alignment in the six areas of worklife and compassion satisfaction would serve as a means of prevention of burnout (Slatten et al., 2011). Furthermore, little research has examined the relationships among these concepts (areas of worklife, compassion satisfaction and burnout) in mental health nurses.

Hypotheses and Rationale

Based on the six areas of worklife defined by Leiter and Maslach (2003), the concept analysis presented by Coetzee and Klopper (2010) of compassion satisfaction, and a review of the literature, the model in Figure 1 was tested and the following hypothesis was proposed.

Hypothesis: Compassion satisfaction partially mediates the relationship between nurses' overall degree of fit in the six areas of worklife and emotional exhaustion.

Figure 1. *Hypothesized Model*



While the components and experience of burnout has been shown to be transferable outside of human services delivery, there is a personal connection required to the work within healthcare. Chirkowska-Smolak (2012) highlight that high demands, complex tasks, and high workload do not necessarily result in burnout; and may in some cases support employees to increase their identification with their work, which may suggest that compassion satisfaction and intrinsic reward are a means to overcome the challenges associated with burnout. Changes to the work environment have been proposed to address burnout and improve alignment in workload, control, reward, community, fairness and values, to create an environment that would align more closely with staff's expectations and foster greater staff satisfaction (Leiter & Maslach, 2003). Increased compassion satisfaction has also been shown to promote personal coping skills, team cohesiveness, increased autonomy, empowerment, and supportive social networks and may address the more personal components of burnout experienced in health care workers.

Methods

Design and Sample

A secondary analysis of data from the study entitled, C*ompassion satisfaction, compassion fatigue, work life conditions, and burnout among frontline mental health care professionals* (Ray et al., 2013) was conducted. Ray et al. (2013) used a predictive non-experimental survey design to collect cross-sectional data. The original study utilized a convenience sample of 430 frontline mental health care professionals selected from human resources staff lists at one community mental health site, one community mental health crisis site, and one mental health outpatient and one inpatient mental health unit at a hospital site in Southwestern Ontario. Ethical approval for the original study was received from the University of Western Ontario Ethics Review Board for Health Sciences Research (Appendix A).

Participants met inclusion criteria if they were a health care provider whose primary role was to provide direct client care either on a one to one and/or group basis to individuals with mental health needs. The sample included members from a variety of disciplines including nursing (registered nurses [RN] and registered practical nurses [RPN]), allied health (including social work, psychology), case managers (from a variety of educational backgrounds), and mental health workers (from a variety of educational back grounds) and included full-time, part-time and casual employees. There were 195 responses returned (45% response rate), however 26 responses were excluded as the primary role identified did not include the provision of *direct client care either on a one to one and/or group* basis to individuals with mental health needs, therefore, a final sample of 169 was analyzed. Within the final sample, 66 participants identified as RNs,

however only 65 completed all of the data required for this study. The current study used only the data of the subsample of 65 RNs.

A power analysis was conducted using G*Power to determine the appropriate sample size for this study. The estimate was based on an alpha of 0.05, a power level of 0.80 and a moderate predicted effect size (0.15), using two predictors (Faul, Erdfelder, Lang, & Buchner, 2007). The calculation indicated that 68 participants would be required. The available RN sample is slightly less than what is indicated in the power analysis with only 65 of the RN participants completing all of the required information for all analysis; therefore the statistical power of the results of the current study may be slightly diminished.

Table 1. *Demographic Characteristics*

Demographic	***N***	**Mean**	**SD**
Age	61	45.44	12.96
Years in Nursing Profession	64	21.05	12.52
Years in Mental Health	64	14.70	10.38
Years in current position	65	7.73	8.56
Demographic		**Frequency (*n*)**	**Percent %**
Gender	Female	54	83.1
	Male	11	16.9
Employment Status	Full-time	35	54.7
	Part-time	10	15.6
	Casual	19	29.7
Education	Diploma	30	46.2
	Bachelor Degree	28	43.1
	Master Degree	7	10.8

Sample demographic characteristics are presented in Table 1. In this sample nurses averaged 45.4 (*SD*=12.96) years of age and the majority were female (83.1%). The majority of nurses (*n* =35; 54.7%) were employed full-time were primarily college diploma prepared (*n* =30; 46.2%). Nurses averaged 21.05 (*SD*=12.52) yrs. of experience in the nursing profession, 14.7 (*SD*=10.38) years in Mental Health, and 7.73 (*SD*=8.56) years employed in their current position.

Instruments and Measures

Three standardized self-report instruments were used to measure the main study variables. The *Areas of Worklife Scale* (AWS) (Appendix B) was used to measure congruency within the six areas of worklife defined by Leiter and Maslach (2003). The AWS is a 29-item self-reporting tool divided into six subscales for each of the areas of worklife (workload, control, reward, community, values, and fairness). Each item is rated using a 5 point Likert type scale (ranging from 1=strongly agree to 5=strongly disagree). The number of items per subscale vary as follows: workload (six items), control (three items), rewards (four items), community (five items), fairness (six items), and values (five items. There are ten negatively worded items which are reversed scored. For each of the six subscales, higher scores (greater than 3) indicate higher levels of congruence or person job fit, while lower levels (less than 3) suggest a mismatch (Leiter & Maslach, 2003). The mean of each subscale is summed to produce an overall measure of congruence in the six areas of worklife (AWS total) with possible scores ranging between six and 30. The AWS total score was used as the independent variable for this analysis. Leiter and Maslach (2003) report acceptable Cronbach alpha values for the AWS ranging from .70 to .82. Construct validity was supported by findings of a consistent factor structure across samples (Leiter & Maslach, 2003). Criterion-related validity is supported

by the strong correlations between the AWS and the three dimensions of the MBI-GS (Maslach, Jackson, & Leiter, 1996), across independent samples (Leiter & Maslach, 2003).

Compassion satisfaction was measured using *the Professional Quality of Life* (ProQOL) revision IV subscale for compassion satisfaction (Appendix C) which measures the pleasure obtained through the individual's work (Stamm, 2010a, 2010b). The ProQOL is comprised of two additional subscales including the compassion fatigue/secondary traumatic stress subscale scale measuring perceived secondary traumatic stress experienced as a result of employment and burnout which were not used in this secondary analysis. The compassion satisfaction subscale consists of 10 items designed to have participants rate the frequency of occurrence for each item within the past 30 days. A six level Likert-type scale is used to rate items from 0 (never) to 5 (very often) with possible sum scores ranging from 0 to 50. Scores of 22 or less indicate low compassion satisfaction. Scores between 23 and 41 indicate average compassion satisfaction and scores of 42 or more indicate high compassion satisfaction (Stamm, 2010a). Cronbach's alpha reliability estimates for the compassion satisfaction subscale have been previously reported as .87 (Stamm, 2010b). Within the current study, the Cronbach's alpha coefficient for the compassion satisfaction subscale was .88. Stamm (2010a) reported that a multitrait, multimethod approach to convergent and discriminant validity supports the discriminant validity of the ProQOL but factor validity studies have not been reported (Bride, Radey, & Figley, 2007).

The emotional exhaustion component of burnout was measured using the *Maslach Burnout Inventory-General Survey* (MBI-GS) (Appendix D) (Maslach et al., 1996). This tool measures burnout within three components including emotional exhaustion, cynicism

and reduced personal efficacy (Lasalvia et al., 2009; Ray et al., 2013). Emotional exhaustion, defined as the individual stress experience characterized by feelings of being overextended and depleted of emotional and physical resources, is considered the core element of burnout (Brenninkmeijer & Van Yperen, 2003; Leiter, Harvie, & Frizzell, 1998; Leiter & Maslach, 2003, 2009; Robins et al., 2009; Schaufeli & Taris, 2005) and was the only subscale used in this model. The emotional exhaustion subscale is comprised of 5 items rated on a Likert-type scale from 0 (never) to 6 (every day), used to rate frequency of feelings related to work. A Cronbach's alpha reliability estimate of .92 has been previously reported for the exhaustion subscale (Maslach et al., 1996). Within the current study the Cronbach's alpha coefficient for emotional exhaustion is reported as .92. Confirmatory factor analysis conducted by Schutte, Toppinen, Kalimo, and Schaufeli (2000) supported the three-factor model of burnout as superior to alternative one and two-factor models with factorial validity clearly demonstrated across occupational groups.

Additionally, the survey included a demographic questionnaire (Appendix E) to gather additional information including age, gender, employment status (full time/part-time/casual), years of experience (in nursing, in mental health and in current position), and level of education.

Data Collection

Data were collected using a modified Dillman approach that consisted of two questionnaire mailings (Dillman, 2011). The mailed package included a letter of information about the study, coded questionnaires, and a researcher-addressed, stamped envelope to return the completed questionnaires. Two weeks after the initial mailing a follow-up thank you card and a reminder letter were sent to all participants. An additional reminder letter, a follow-up letter and replacement questionnaires with a return

envelope were sent to non-respondents approximately one month after the initial mailing. Consent to participate was indicated by the participants completing and returning the questionnaire (Polit & Beck, 2008). Participants' confidentiality was maintained through the use of coding in ordered numbers for the individual questionnaires.

Data Analysis

All data were analyzed using the Statistical Package for Social Sciences (SPSS) version 23.0 (SPSS Inc., 2015). Means, standard deviations and ranges for all scores on all scales were calculated. Data were normally distributed and linear relationships existed between the independent variable (areas of worklife), mediator variable (compassion satisfaction) and dependent variable (emotional exhaustion). Relationships between the demographic variables, age, years in the profession, years in mental health, years in current setting, and the major study variables (areas of worklife, emotional exhaustion and compassion satisfaction) were analyzed using Pearson correlation. The relationships between gender and the major study variables were analyzed with t-tests. Finally, the demographic variables employment status, highest level of education, and the major study variables were assessed using ANOVA. Hierarchical multiple linear regression and mediation analysis were used to test the study hypothesis. Simple linear regressions and Pearson correlations were used to assess relationships between each of the AWS subscales, compassion satisfaction and the emotional exhaustion subscale of burnout. For all analyses the level of significance was set at $p < 0.05$. Internal consistency of each instrument and their subscales was calculated using Cronbach's alpha.

The partial mediation model was tested using the four conditions described by (Baron & Kenny, 1986). The four conditions necessary to establish mediation are: (1) the independent and dependent variables must be significantly related; (2) the independent

and mediator variables must be significantly related; (3) the mediator and dependent variables must be significantly related; (4) the relationship between the independent and dependent variables must be reduced (partial mediation) or removed and nonsignificant (full mediation) when the mediator is added. In addition, the Sobel test was conducted to confirm the significance of the mediation model using the procedure outlined by Preacher and Leonardelli (2001).

Results

Descriptive Results

The means, standard deviations and reliability coefficients for the major study variables are found in Table 2. The overall AWS total scores for nurses within this sample were moderate (*M*=20.35, *SD*= 3.53). Nurses perceived the greatest person-job match in the AWS subscale of community (*M*=3.77, *SD*=0.59), followed by rewards (*M*=3.45, *SD*=0.80), values (*M*=3.43, *SD*=0.75), control (*M*=3.41, *SD*=0.79) and fairness (*M*=3.22, *SD*=0.88). The subscale of workload showed the lowest perceived person-job match (*M*=3.08, *SD*=0.77). A similar pattern of person job match/mismatch in the six areas of worklife was found by (Bamford et al., 2013) with mean community showing the greatest perceived match (*M*=3.63, *SD*=0.75), followed by rewards (*M*=3.42, *SD*=0.87), values (*M*=3.41, *SD*=0.70), control (*M*=3.25, *SD*=0.70), fairness (*M*=2.86, *SD*=0.70) and workload showing the least perceived match (*M*=2.74, *SD*=0.78). Nurses in this study perceived a lower degree of compassion satisfaction (*M*=35.94, *SD*=6.57) than what has been reported in other studies including data from comparative samples of community health nurses (Neville & Cole, 2013)(*M*=40.18, *SD=5.65*), professionals and volunteers in bereavement work (Thieleman & Cacciatore, 2014)(*M*=42.39, *SD*=4.80), and nurses from medical surgical, emergency and critical care units (Burtson & Stichler,

2010) (*M*=37.94, *SD*=4.80). Nurses in this study perceived a moderate degree of burnout with the subscales for emotional exhaustion averaging below the midpoint based on the six-point scale (*M*=2.27, *SD*=1.32). Burnout was higher than what has been reported in larger multi setting studies such as Chirkowska-Smolak (2012) where emotional exhaustion scores averaged 2.51 (*SD*=1.0), but lower than other healthcare specific samples reported by Van Bogaert, Kowalski, Weeks, Van heusden, and Clarke (2013) (*M*=1.13, *SD*=1.24), and Lasalvia et al., (2009) (*M*=1.96 *SD*=1.25). Overall compassion satisfaction within this sample was average (*M*=36.05, *SD*=6.56) and overall emotional exhaustion within this sample was moderate (*M*=2.27, *SD*=1.32).

Relationship of Demographic Variables to Major Study Variables

No significant relationships were found between the demographic variables and the major study variables (areas of worklife, compassion satisfaction and emotional exhaustion) except for age, and years in the profession. Years in the profession showed a significant and negative correlation with emotional exhaustion *(r* = -0.25, *p* = 0.046*).* Age correlated significantly and negatively with emotional exhaustion *(r* = -0.33, *p* = 0.010*),* and significantly and positively with compassion satisfaction *(r* = 0.28, *p* = 0.030*).*

Additional Analysis

The relationships between all major study variables and each of their subscales were analyzed with Pearson correlation (Table 2). All associations between the main study variables were statistically significant ($p < 0.01$). Compassion satisfaction showed a negative relationship with emotional exhaustion ($r = -0.60$, $p < 0.01$). The strength of the relationship between compassion satisfaction and the AWS subscales varied with rewards showing the strongest relationship ($r = 0.70$, $p < 0.01$), followed by control ($r = 0.65$, $p < 0.01$), workload ($r = 0.48$, $p < 0.01$) community ($r = 0.42$, $p < 0.01$), fairness (*r*

= 0.32, $p < 0.01$) and values ($r = 0.37$, $p < 0.01$). Emotional exhaustion showed the strongest negative relationship with the AWS subscale of workload ($r = -0.76$, $p < 0.01$), followed by control ($r = -0.57$, $p < 0.01$), rewards ($r = -0.50$, $p < 0.01$), community ($r = -0.36$, $p < 0.01$), fairness ($r = -0.32$, $p < 0.01$), and Values ($r = -0.30$, $p < 0.01$). An overall match in the six areas of worklife was positively and significantly related to compassion satisfaction ($r = 0.64$, $p < 0.01$) and negatively and significantly related to emotional exhaustion ($r = -0.61$, $p < 0.01$).

Test of Hypothesis

The hypothesis stated that the experience of compassion satisfaction partially mediates the relationship between the six areas of worklife and emotional exhaustion. In order to test the stated hypothesis, Baron and Kenny's (1986) method of mediation analysis was used. Three simple linear regressions, (Table 3) and one hierarchical multiple regression (Table 4) were performed. While years in profession and age showed a significant relationship with the major study variables, they were not used as controls due to their multicolinearity and the small sample size.

In the first equation, the AWS total was significantly related to the dependent variable emotional exhaustion ($\beta = -0.609$, $p < 0.001$), meeting the requirements of Condition 1. In the second equation, AWS total was significantly related to the mediator variable compassion satisfaction ($\beta = 0.640$, $p < 0.001$), meeting the requirements of Condition 2. In the third equation, compassion satisfaction was significantly related to the dependent variable emotional exhaustion ($\beta = -0.601$, $p < 0.001$), fulfilling the requirements of Condition 3.

Table 2. *Means, Standard Deviations, Reliability Analysis and Correlation Matrix*

Variable	Mean	SD	α	1	2	3	4	5	6	7	8
1. Areas of Worklife Total	20.35	3.53	.86								
2. Workload	3.08	.77	.81	.67**							
3. Control	3.41	.79	.74	.82**	.62**						
4. Rewards	3.45	.80	.82	.86**	.49**	.66**					
5. Community	3.77	.59	.70	.65**	.29*	.39**	.67**				
6. Fairness	3.22	.88	.85	.80**	.32**	.53**	.59**	.44**			
7. Values	3.43	.75	.83	.79**	.38**	.57**	.58**	.34**	.76**		
8. Compassion Satisfaction	36.05	6.56	.88	.64**	.48**	.64**	.70**	.41**	.34**	.38**	
9. Emotional Exhaustion	2.27	1.32	.92	-.61**	-.76**	-.58**	-.50**	-.36**	-.32**	-.30*	-.60**

*$p < 0.05$, two-tailed ** $p < 0.01$, two-tailed, M = mean, SD = standard deviation, α = Cronbach's alpha. N=65

Table 3.

Conditions 1-3 Coefficients of the Linear Regressions

Conditions	**Variables**	R^2	*F*	*B*	*SE*	*β*	*Sig.*
Condition 1	Areas of Worklife Total (dependent variable: Emotional Exhaustion)	.36	37.05***	-.228	.037	-0.61	<.001
Condition 2	Areas of Worklife Total (dependent variable: Compassion Satisfaction)	.40	44.49***	1.93	0.18	.64	<.001
Condition 3	Compassion Satisfaction (dependent variable: Emotional Exhaustion)	.35	35.65***	-.121	0.02	-.60	<.001

Note: ***p<0.001. N= 66. *(Barron & Kenny, 1986)*

In Model 1 of Condition 4 (Table 4), AWS total was used as the predictor of emotional exhaustion. In the second model, compassion satisfaction was added along with AWS total as predictors of emotional exhaustion. To indicate full mediation, the standardized beta coefficient (β) for the predictor variable (AWS total) should be reduced to zero and become non-significant when the mediating variable (compassion satisfaction) is entered in the second model in order for the conditions to be met for full mediation (Judd & Kenny, 2010). Partial mediation is indicated when the standardized beta coefficient (β) for the predictor variable is reduced yet remains significant when the mediating variable is entered (Judd & Kenny, 2010).

The fourth condition for mediation was tested using hierarchal multiple linear regression. In the first model, AWS total was significantly related to emotional exhaustion (β = -0.61, p < 0.001) and accounted for 36% of the variance in emotional exhaustion. When compassion satisfaction was added in the second, and final, model, the strength and significance of the relationship between AWS total and emotional

exhaustion remained significant, but the β was reduced (β = -0.38, $p < 0.001$) by almost half, indicating partial mediation. Compassion satisfaction was also a significant predictor (β = -0.36, $p < 0.001$) and accounted for an additional 8% of the variance of emotional exhaustion. The final model with both AWStotal and compassion satisfaction accounted for 43% of the variance in emotional exhaustion (Table 4).

Table 4.

Condition 4 Coefficients of the Hierarchical Multiple Linear Regression

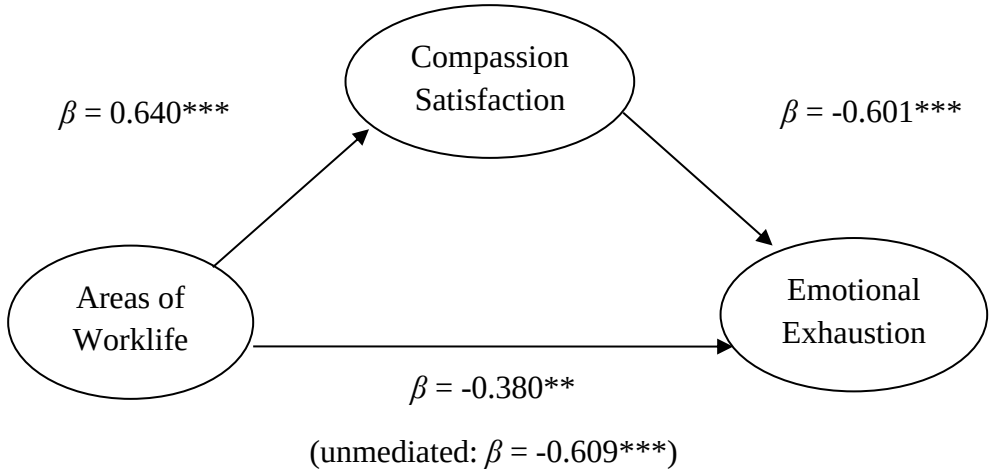
Model	**Variables**	**R^2**	**R^2 Change**	**F**	**F Change**	**B**	***β***	***t***	***Sig.***
Model 1	AWS Total	.36		37.05***		-.23	-0.61	-6.09	<.001
Model 2	AWS Total & Compassion Satisfaction	.43	.08		8.64**	-.14	-0.38	-3.10	.003
						-.07	-0.36	-2.94	.005

Condition 4 of Mediation (Barron & Kenny, 1986)

Note: Dependent variable: Emotional Exhaustion. ***p<0.001, **p=0.005. N=65

The Sobel (1982) test was used to further assess the significance of the mediation using the Preacher and Leonardelli (2001) online Sobel test calculator. The results confirmed that the mediation effect of compassion satisfaction on the relationship between areas of worklife and emotional exhaustion was significant (z = 4.48, $p < 0.001$). Therefore, the hypothesized model was supported, whereby compassion satisfaction partially mediated the relationship between areas of worklife and emotional exhaustion (Fig. 2).

Figure 2. *Final Model*



Note. $p < 0.001$***, $p < 0.005$**

Discussion

The purpose of this study was to examine the relationships among compassion satisfaction, the emotional exhaustion component of burnout, and mental health nurses' overall person-job match in the six areas of worklife. The hypothesis which stated that compassion satisfaction partially mediates the relationship between mental health nurses' emotional exhaustion and person-job match in the six areas of worklife was supported. Overall, compassion satisfaction and person-job match in the six areas of worklife explained 43% of the variance in emotional exhaustion. Statistically significant relationships were found between compassion satisfaction and each of the AWS subscales. Reward showed the strongest relationship with compassion satisfaction supporting the importance of intrinsic rewards and the positive feeling derived through meaningful or satisfying work (Leiter & Maslach, 2003). The emotional and spiritual connection between nurses and patients allows nurses to be not only aware of the suffering of others, but to empathetically experience that suffering through

compassionate interaction where nurses can empathetically feel the pain of others and work to alleviate or reduce the patients suffering or discomfort (Coetzee & Klopper, 2010). Non-monetary reward is gained through the positive feeling gained by the process of helping others, or increased compassion satisfaction (Slatten et al., 2011).

While there is a well-established relationship between the Areas of Worklife model and burnout, there is a lack of literature connecting compassion satisfaction to either the areas of worklife or burnout. These findings showed that there was a statistically significant relationship between compassion satisfaction, burnout and all six of the key areas of worklife. Compassion satisfaction is generally described as the opposite of compassion fatigue. Slatten et al. (2011) propose four main strategies for addressing compassion fatigue and improving compassion satisfaction. These strategies include limiting or reallocating the employees caseload, offer training in holistic self-care activities for employees, training, coaching and support for employee to learn how to maintain professional boundaries, and for organizations to support staff development and increase staff autonomy and control. The strategies outlined by Slatten et al. (2011) mirror the strategies identified within the burnout and areas of worklife literature such as reassignment of patients and redistribution of workload; staff development in holistic self-care, personal coping skills, and work/life balance, introducing supports to maintain professional boundaries, building community through team cohesiveness and teamwork, and organizational changes to support increased autonomy, control, staff development opportunities, empowerment, creation of supportive social networks and shared leadership models (Leiter et al., 2009; Leiter & Maslach, 1999, 2003; Slatten et al., 2011).

Workload is one of the factors within the Areas of Worklife model that is typically associated with burnout; however, changes to workload or caseload mix have shown to be closely related to compassion satisfaction and compassion fatigue (Showalter, 2010; Slatten et al., 2011). Similarly, a sense of community, fairness, and control through cohesive teams, teamwork and professional development is closely related to compassion satisfaction and burnout depending on whether the experience is positive or negative (Leiter & Maslach, 2003; Slatten et al., 2011). Witnessing a positive change in a patient creates a sense of purpose and meaning for the nurse which invigorates and enhances the nurse's feelings of personal and professional self-worth which fosters increased confidence and engagement with patients (Coetzee & Klopper, 2010).

The results for the final model tested (Fig. 2) support previous research which has demonstrated the positive effect of compassion satisfaction in mitigating the effects of workplace stressors for human service workers (Adams et al., 2007; Burtson & Stichler, 2010; Coetzee & Klopper, 2010; Collins & Long, 2003; Flarity et al., 2013; Neville & Cole, 2013). Further, this research provides support for a link between compassion satisfaction and Leiter and Maslach's (1999, 2003) six areas of worklife, suggesting that compassion satisfaction may positively influence job-fit and negatively influence burnout. These findings are important to note as mental health services aim to reduce burnout, absenteeism, and turnover while creating more positive work environments to enhance recruitment and retention in the midst of a potential nursing shortage. Compassion satisfaction is vastly understudied. Further research is needed to define and solidify the construct in order to understand the role of compassion satisfaction in

improving job-fit and reducing burnout as well as to identify strategies for leveraging compassion satisfaction to create healthy work environment, improve engagement and increase the satisfaction and sense of pride that nurses take in their work, which will in turn reinforce their commitment to the profession.

Limitations

The sample of registered nurses used for this study was a subset taken from a larger study and was therefore limited in size. The sample did not meet the size estimate recommended by G*Power analysis of 68, which may diminish the statistical power of the results, however, the fact that significant results were found is important. The cross-sectional design of this study inhibits the ability to determine causality (Polit & Beck, 2008). The nurses in this study were employed in mental health care settings therefore; this limits the generalizability of results to nurses employed in other settings. In addition, there is potential for response bias due to the use of self-report surveys and use of a convenience sampling method (Polit & Beck, 2008).

Conclusion

The results of this study provide support for the theoretical links between compassion satisfaction, the six areas of worklife and emotional exhaustion in mental health nurses. The findings suggest that when mental health nurses experience increased levels of compassion satisfaction they report a greater overall person job-match and subsequently, reduced burnout. The concept of compassion satisfaction required further study and development, but may be a useful measure for healthcare leaders in evaluating and creating positive work environments. There is significant literature to support the link between Leiter and Maslach's (2003) Areas of Worklife model and burnout. This research

suggests that compassion satisfaction partially mediates this relationship and contributes to improved person job-fit and reduces burnout.

References

Adams, R. E., Figley, C. R., & Boscarino, J. a. (2007). The compassion fatigue scale: Its use with social workers following urban disaster. *Research on Social Work Practice*, *18*(3), 238–250. http://doi.org/10.1177/1049731507310190

Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology*, *20*(1), 4–28. http://doi.org/10.1080/1359432X.2010.485352

Bakker, A. B., Killmer, C. H., Siegrist, J., & Schaufeli, W. B. (2000). Effort-reward imbalance and burnout among nurses. *Journal of Advanced Nursing*, *31*(4), 884–891. http://doi.org/10.1046/j.1365-2648.2000.01361.x

Bamford, M., Wong, C. A. ., & Laschinger, H. (2013). The influence of authentic leadership and areas of worklife on work engagement of registered nurses. *Journal of Nursing Management*, *21*(3), 529–540. http://doi.org/10.1111/j.1365-2834.2012.01399.x

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182. http://doi.org/10.1037/0022-3514.51.6.1173

Boyle, D. A. (2010). Countering compassion fatigue: a requisite nursing agenda. *Online Journal of Issues in Nursing*, *16*(1), 2. http://doi.org/10.3912/OJIN.Vol16No01Man02

Breen, M., & Sweeny, J. (2013). Burnout : The experiences of nurses who work in inner city areas. *Mental Health Practice*, *17*(2), 12–20.

Brenninkmeijer, V., & Van Yperen, N. (2003). How to conduct research on burnout: advantages and disadvantages of a unidimensional approach in burnout research. *Occupational and Environmental Medicine*, *60*(6). Retrieved from http://go.galegroup.com/ps/i.do?id=GALE%7CA104209360&v=2.1&u=lond95336&it=r&p=AONE&sw=w&asid=e6b6d5b4208c83d616c6643c12dbb1c9

Bride, B. E., Radey, M., & Figley, C. R. (2007). Measuring compassion fatigue. *Clinical Social Work Journal*, *35*(3), 155–163. http://doi.org/10.1007/s10615-007-0091-7

Burtson, P. L., & Stichler, J. F. (2010). Nursing work environment and nurse caring: Relationship among motivational factors. *Journal of Advanced Nursing*, *66*(8), 1819–1831. http://doi.org/10.1111/j.1365-2648.2010.05336.x

Caldwell, B. A., Gill, K. J., Fitzgerald, E., Sclafani, M., & Grandison, P. (2006). The association of ward atmosphere with burnout and attitudes of treatment team members in a state psychiatric hospital. *American Journal of Psychiatric Rehabilitation*, *9*(2), 111–129. http://doi.org/10.1080/15487760600876303

Canadian Institute for Health Information. (2007). *Health Care in Canada*. Ottawa: CIHI

Carter, M. R., & Tourangeau, A. E. (2012). Staying in nursing: What factors determine whether nurses intend to remain employed? *Journal of Advanced Nursing*, *68*(7), 1589–1600. http://doi.org/10.1111/j.1365-2648.2012.05973.x

Chirkowska-Smolak, T. (2012). Does work engagement burn out? The person-job fit and levels of burnout and engagement in work. *Polish Psychological Bulletin*, *43*(2), 76–85. http://doi.org/10.2478/v10059-012-0009-2

Coetzee, S. K., & Klopper, H. C. (2010). Compassion fatigue within nursing practice: A concept analysis. *Nursing and Health Sciences*, *12*(2), 235–243. http://doi.org/10.1111/j.1442-2018.2010.00526.x

Collins, S., & Long, A. (2003). Working with the psychological effects of trauma: consequences for mental health-care workers--a literature review. *Journal of Psychiatric and Mental Health Nursing*, *10*(4), 417–424. http://doi.org/10.1046/j.1365-2850.2003.00620.x

Currid, T. (2009). Experiences of stress among nurses in acute mental health settings. *Nursing Standard*, *23*(44), 40–46.

DeCola, P. R., & Riggins, P. (2010). Nurses in the workplace: Expectations and needs. *International Nursing Review*, *57*(3), 335–342. http://doi.org/10.1111/j.1466-7657.2010.00818.x

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2000). A model of burnout and life satisfaction amongst nurses. *Journal of Advanced Nursing*, *32*(2), 454–464. http://doi.org/10.1046/j.1365-2648.2000.01496.x

Devi, E. S., Rao, A., Mayya, S., & Bairy, K. (2010). Perception and attitude towards work-life balance among allied and nursing health care professionals. *International Journal of Nursing Education*, *2*(2), 13–14.

Dillman, D. A. (2011). *Mail and Internet surveys: The tailored design method--2007 Update with new Internet, visual, and mixed-mode guide*. John Wiley & Sons.

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: a flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175–91. http://doi.org/10.3758/bf03193146

Fiabane, E., Giorgi, I., Sguazzin, C., & Argentero, P. (2013). Work engagement and occupational stress in nurses and other healthcare workers: The role of organisational and personal factors. *Journal of Clinical Nursing*, *22*(17-18), 2614–2624. http://doi.org/10.1111/jocn.12084

Figley, C. R. (2002). Compassion fatigue: Psychotherapists' chronic lack of self care. *Journal of Clinical Psychology*, *58*(11), 1433–1441. http://doi.org/10.1002/jclp.10090

Flarity, K., Gentry, J. E., & Mesnikoff, N. (2013). The effectiveness of an educational program on preventing and treating compassion fatigue in emergency nurses. *Advanced Emergency Nursing Journal*, *35*(3), 247–58. http://doi.org/10.1097/TME.0b013e31829b726f

Gascon, S., Leiter, M. P., Andrés, E., Santed, M. A. ., Pereira, J. P., Cunha, M. J., … Martínez-Jarreta, B. (2013). The role of aggressions suffered by healthcare workers as predictors of burnout. *Journal of Clinical Nursing*, *22*(21-22), 3120–3129. http://doi.org/10.1111/j.1365-2702.2012.04255.x

Gershon, R. R. M., Stone, P. W., Zeltser, M., Faucett, J., MacDavitt, K., & Chou, S.-S. (2007). Organizational climate and nurse health outcomes in the United States: A systematic review. *Industrial Health*, *45*(5), 622–636. http://doi.org/10.2486/indhealth.45.622

Gibb, J., Cameron, I. M., Hamilton, R., Murphy, E., & Naji, S. (2010). Mental health nurses' and allied health professionals' perceptions of the role of the occupational health service in the management of work-related stress: How do they self-care? *Journal of Psychiatric and Mental Health Nursing*, *17*(9), 838–845. http://doi.org/10.1111/j.1365-2850.2010.01599.x

Gupta, S., Paterson, M. L., Lysaght, R. M., & Von Zweck, C. M. (2012). Experiences of burnout and coping strategies utilized by occupational therapists. *Canadian Journal of Occupational Therapy*, *79*(2), 86–95. http://doi.org/10.2182/cjot.2012.79.2.4

Hanrahan, N. P., Aiken, L. H., McClaine, L., & Hanlon, A. L. (2010). Relationship between psychiatric nurse work environments and nurse burnout in acute care general hospitals. *Issues in Mental Health Nursing*, *31*(3), 198–207. http://doi.org/10.3109/01612840903200068

Judd, C. M., & Kenny, D. A. (2010). Data analysis in social psychology: Recent and recurring issues. In *Handbook of social psychology*.

Khamisa, N., Peltzer, K., & Oldenburg, B. (2013). Burnout in relation to specific contributing factors and health outcomes among nurses: A systematic review. *International Journal of Environmental Research and Public Health*, *10*(6), 2214–2240. http://doi.org/10.3390/ijerph10062214

Kowalski, C., Ommen, O., Driller, E., Ernstmann, N., Wirtz, M. a., Köhler, T., & Pfaff, H. (2010). Burnout in nurses - the relationship between social capital in hospitals and emotional exhaustion. *Journal of Clinical Nursing*, *19*(11-12), 1654–1663. http://doi.org/10.1111/j.1365-2702.2009.02989.x

Kulkarni, S., Bell, H., Hartman, J., & Herman-Smith, R. (2013). Exploring individual and organizational factors contributing to compassion satisfaction, secondary traumatic stress, and burnout in domestic violence service providers. *Journal of the Society for Social Work and Research*, *4*(2), 114–130. http://doi.org/10.5243/jsswr.2013.8

Kutney-Lee, A., Wu, E. S., Sloane, D. M., & Aiken, L. H. (2013). Changes in hospital nurse work environments and nurse job outcomes: An analysis of panel data. *International Journal of Nursing Studies*, *50*(2), 195–201. http://doi.org/10.1016/j.ijnurstu.2012.07.014

Lasalvia, A., Bonetto, C., Bertani, M., Bissoli, S., Cristofalo, D., Marrella, G., … Ruggeri, M. (2009). Influence of perceived organisational factors on job burnout: Survey of community mental health staff. *British Journal of Psychiatry*, *195*(6), 537–544. http://doi.org/10.1192/bjp.bp.108.060871

Laschinger, H. K. S., & Grau, A. L. (2012). The influence of personal dispositional factors and organizational resources on workplace violence, burnout, and health outcomes in new graduate nurses: A cross-sectional study. *International Journal of Nursing Studies*, *49*(3), 282–291. http://doi.org/10.1016/j.ijnurstu.2011.09.004

Leiter, M. P., Harvie, P., & Frizzell, C. (1998). The correspondence of patient satisfaction and nurse burnout. *Social Science and Medicine*, *47*(10), 1611–1617. http://doi.org/10.1016/S0277-9536(98)00207-X

Leiter, M. P., Jackson, N. J., & Shaughnessy, K. (2009). Contrasting burnout, turnover intention, control, value congruence and knowledge sharing between baby boomers and generation X. *Journal of Nursing Management*, *17*(1), 100–109. http://doi.org/10.1111/j.1365-2834.2008.00884.x

Leiter, M. P., & Maslach, C. (1999). Six areas of worklife: A model of the organizational context of burnout. *Journal of Health and Human Services Administration*, *21*(4), 473–489.

Leiter, M. P., & Maslach, C. (2003). Areas of worklife: A structured approach to organizational predictors of job burnout. *Research in Occupational Stress and Well Being*. http://doi.org/10.1016/S1479-3555(03)03003-8

Leiter, M. P., & Maslach, C. (2009). Nurse turnover: The mediating role of burnout. *Journal of Nursing Management*, *17*(3), 331–339. http://doi.org/10.1111/j.1365-2834.2009.01004.x

Lombardo, B., & Eyre, C. (2011). Compassion fatigue: A nurse's primer. *Online Journal Of Issues In Nursing*, *16*(1), 1. http://doi.org/10.3912/OJIN.Vol16No01Man03

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach burnout inventory: Manual* (3rd ed). Palo Alto, CA: Psychol. Press.

Maslach, C., Schaufelli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, *52*, 397–422.

Monroe, A. (2008). *Psychiatric nurses' management of compassion fatigue through self-care* (Doctoral dissertation) (Order No. 3318656). Retrieved from http://search.proquest.com/docview/304442931?accountid=15115

Neville, K., & Cole, D. A. (2013). The relationships among health promotion behaviors, compassion fatigue, burnout, and compassion satisfaction in nurses practicing in a community medical center. *JONA: The Journal of Nursing Administration*, *43*(6), 348–354. http://doi.org/10.1097/NNA.0b013e3182942c23

Polit, D. F., & Beck, C. T. (2008). *Nursing research: Generating and assessing evidence for nursing practice.* Lippincott Williams & Wilkins.

Preacher, K. J., & Leonardelli, G. J. (2001). Calculations for the sobel test. Retrieved June 1, 2015, from http://quantpsy.org/sobel/sobel.htm

Ray, S. L., Wong, C., White, D., & Heaslip, K. (2013). Compassion satisfaction, compassion fatigue, work life conditions, and burnout among frontline mental health care professionals. *Traumatology*, *19*(4), 255–267. http://doi.org/10.1177/1534765612471144

Robins, P. M., Meltzer, L., & Zelikovsky, N. (2009). The experience of secondary traumatic stress upon care providers working within a children's hospital. *Journal of Pediatric Nursing*, *24*(4), 270–279. http://doi.org/10.1016/j.pedn.2008.03.007

Sabo, B. (2008). Adverse psychosocial consequences: Compassion fatigue, burnout and vicarious traumatization: Are nurses who provide palliative and hematological cancer care vulnerable? *Indian Journal of Palliative Care*, *14*(1), 23. http://doi.org/10.4103/0973-1075.41929

Sabo, B. (2011). Reflecting on the concept compassion fatique. *The Online Journal of Issues in Nursing*, *16*(1), 1–14. http://doi.org/10.3912/OJIN.VOL16No01Man01

Schaufeli, W. B., & Taris, T. W. (2005). The conceptualization and measurement of burnout: Common ground and worlds apart. *Work & Stress*, *19*(3), 256–262. http://doi.org/10.1080/02678370500385913

Schutte, N., Toppinen, S., Kalimo, R., & Schaufeli, W. B. (2000). The factorial validity of the Maslach Burnout Inventory-General Survey (MBI-GS) across occupational groups and nations. *Journal of Occupational and Organizational Psychology*, *73*(1), 53–66. http://doi.org/10.1348/096317900166877

Seidler, A., Thinschmidt, M., Deckert, S., Then, F., Hegewald, J., Nieuwenhuijsen, K., & Riedel-Heller, S. G. (2014). The role of psychosocial working conditions on burnout and its core component emotional exhaustion - a systematic review. *Journal of Occupational Medicine and Toxicology (London, England)*, *9*(1), 10. http://doi.org/10.1186/1745-6673-9-10

Setti, I., & Argentero, P. (2011). Organizational features of workplace and job engagement among Swiss healthcare workers. *Nursing and Health Sciences*, *13*(4), 425–432. http://doi.org/10.1111/j.1442-2018.2011.00636.x

Showalter, S. E. (2010). Compassion fatigue: what is it? Why does it matter? Recognizing the symptoms, acknowledging the impact, developing the tools to prevent compassion fatigue, and strengthen the professional already suffering from the effects. *The American Journal of Hospice & Palliative Care*, *27*(4), 239–242. http://doi.org/10.1177/1049909109354096

Slatten, L. A., Carson, K. D., & Carson, P. P. (2011). Compassion fatigue and burnout. What managers should know. *Health Care Manager*, *30*(4), 325–333. http://doi.org/10.1188/10.CJON.E56-E62

Stamm, B. H. (2010a). 2010 The Concise ProQOL Manual. Retrived from http://www.proqol.org/uploads/ProQOL_Concise_2ndEd_12-2010.pdf.

Stamm, B. H. (2010b). Professional quality of life: compassion satisfaction and fatigue subscales, R-IV (ProQOL). Retrieved from https://class.waldenu.edu/bbcswebdav/institution/USW1/201270_01/MS_MMHC/COUN_6336_COUN_8336_HUMN_8336/Week 5/Resources/Resources/embedded/Compassion_Fatigue_Self_Test.pdf

Stewart, N. (2013). Missing in action: Absenteeism trends in Canadian organizations. *Ottawa: The Conference Board of Canada*. http://doi.org/10.1353/cal.2002.0008

Thieleman, K., & Cacciatore, J. (2014). Witness to suffering: Mindfulness and compassion fatigue among traumatic bereavement volunteers and professionals. *Social Work (United States)*, *59*(1), 34–41. http://doi.org/10.1093/sw/swt044

Van Bogaert, P., Clarke, S., Willems, R., & Mondelaers, M. (2013). Nurse practice environment, workload, burnout, job outcomes, and quality of care in psychiatric hospitals: A structural equation model approach. *Journal of Advanced Nursing*, *69*(7), 1515–1524. http://doi.org/10.1111/jan.12010

Van Bogaert, P., Clarke, S., Wouters, K., Franck, E., Willems, R., & Mondelaers, M. (2013). Impacts of unit-level nurse practice environment, workload and burnout on nurse-reported outcomes in psychiatric hospitals: A multilevel modelling approach. *International Journal of Nursing Studies*, *50*(3), 357–365. http://doi.org/10.1016/j.ijnurstu.2012.05.006

Van Bogaert, P., Dilles, T., Wouters, K., & Van Rompaey, B. (2014). Practice environment , work characteristics and levels of burnout as predictors of nurse reported job outcomes, quality of care and patient adverse events : A study across residential aged care services. *Open Journal of Nursing*, *4*, 343–355. Retrieved from http://dx.doi.org/10.4236/0jn.2014.45040

Van Bogaert, P., Kowalski, C., Weeks, S. M., Van heusden, D., & Clarke, S. P. (2013). The relationship between nurse practice environment, nurse work characteristics, burnout and job outcome and quality of nursing care: A cross-sectional survey. *International Journal of Nursing Studies*, *50*(12), 1667–1677. http://doi.org/10.1016/j.ijnurstu.2013.05.010

Van Dierendonck, D., Schaufeli, W. B., & Sixma, H. J. (1994). Burnout among general practitioners: A perspective from equity theory. *Journal of Social and Clinical Psychology*. http://doi.org/10.1521/jscp.1994.13.1.86

Ward, L. (2011). Mental health nursing and stress: Maintaining balance. *International Journal of Mental Health Nursing*, *20*(2), 77–85. http://doi.org/10.1111/j.1447-0349.2010.00715.x

Yoder, E. A. (2010). Compassion fatigue in nurses. *Applied Nursing Research*, *23*(4), 191–197. http://doi.org/10.1016/j.apnr.2008.09.003

Chapter Three

Discussion of Implications

The purpose of this study was to examine the relationships among nurses' overall person-job match in the six areas of worklife (Leiter & Maslach, 2003), compassion satisfaction (Stamm, 2010b), and emotional exhaustion (Maslach et al., 1996) within a sample of mental health nurses. In this study, compassion satisfaction partially mediated the relationship between overall person-job fit within the six areas of worklife and emotional exhaustion. Compassion satisfaction and overall person-job match explained 43% of the variance in emotional exhaustion. The theoretical, education, practice and research implications of these findings are discussed below.

Implications for Theory

In this study, compassion satisfaction explained additional variance in emotional exhaustion with statistical significance and was shown to partially mediate the relationship between areas of worklife and emotional exhaustion. This finding provides support for expanding the focus of areas of worklife and burnout theories to include compassion satisfaction in order to create a greater understanding of the interaction among these variables. Additionally, there is a need to further explore and define the concept of compassion satisfaction and the role that it plays in nurses' well-being. Bride et al. (2007) describe compassion satisfaction as the pleasure health professionals derive from being able to help others through the course of their work. Higher levels of compassion satisfaction represent greater satisfaction related to one's ability to be an effective caregiver. However, within the literature, compassion satisfaction is only discussed in reference to being the positive counter balance to compassion fatigue. As a

separate concept, the theoretical construct of compassion satisfaction is vastly understudied and poorly defined. The existing research reflects that while some nurses experience burnout or compassion fatigue, many do not, suggesting that there are positive aspects of the work that serve as a buffer or reward for nurses that require further exploration and understanding (Bride et al., 2007).

This study contributed to theory development by establishing the theoretical link between Maslach and Leiter's (2003) six areas of worklife and compassion satisfaction to explain emotional exhaustion. Findings demonstrate that it is partially through compassion satisfaction that an overall match in the six areas of worklife influences nurses' emotional exhaustion. Further, this is one of few studies linking Maslach and Leiter's (2003) six areas of worklife to compassion satisfaction and findings provide additional support for Maslach and Leiter's (2003) theory which states that a mismatch in the six areas of worklife predicts burnout.

Implications for Education

The findings of this study indicate that compassion satisfaction partially mediates the relationship between mental health nurses' emotional exhaustion and person-job match in the six areas of worklife. Compassion satisfaction and person-job match in the six areas of worklife explained 43% of the variance in emotional exhaustion with statistically significant relationships between compassion satisfaction and each of the AWS subscales. Incorporating information about the importance of fostering compassion satisfaction and ensuring congruence in the six areas of worklife consistently into nursing education, may foster a greater awareness of the impact of compassion satisfaction and positive work environments and allow for early recognition of potential burnout and

proactive efforts to mitigate negative effects. The College of Nurses of Ontario (CNO) *Competencies for entry-level Registered Nurse practice* document (CNO, 2014) is used by the CNO to evaluate the curriculum of baccalaureate nursing education programs to ensure adequate preparation of students in alignment with the current standards. Strengthening the wording around the need for nurses to maintain their physical and mental health as a component of the CNO's competencies may ensure academic institutions are consistently and effectively including this information within the nursing curriculum. Wording of the competencies document could be revised to reflect the importance of congruence within these areas as well as the importance of reward and recognition.

Within this study, nurses perceived the greatest person-job match in the AWS subscale of community (M=3.77, SD=0.59), followed by rewards (M=3.45, SD=0.80), values (M=3.43, SD=0.75), control (M=3.41, SD=0.79). Reward also showed the strongest relationship with compassion satisfaction. Several sections of the competencies document (CNO, 2014) refer to creating safe and healthy work environments and the need to engage in reflective practice to identify the effect of personal values, beliefs and experiences on practice as well as recognizing potential conflicts and the impact of organizational culture on the provision of health care. There is no language within the document that speaks specifically to the value of reward and recognition within a team setting or the importance of developing and fostering community although there is brief mention of building relationships of trust with coworkers. While the document directs nurses to identify the effect of personal values, beliefs and experiences on practice, it does not speak to the importance of alignment between worker and employer.

Within this sample, mental health nurses showed lower levels of congruence in the areas of fairness (M=3.22, SD=0.88) and workload (M=3.08, SD=0.77) suggesting the greatest incongruence between nurses expectations and their perceived reality in these areas. The *Professional Responsibility and Accountability* subheading of the competencies document speaks to the need for nurses to develop skills for organizing and managing workload, balance competing nursing care values and priorities and create healthy and culturally safe practice environments. The wording within the CNO document suggests that the onus is solely on nurses to manage and cope with workload issues and conflicting values or priorities suggesting that failure to do so are the fault of the nurse, even if workload expectation are unreasonable, rather than a joint failing of the partnership between the nurse and the employer. The CNO could propose development of nurse's ability to understand, evaluate and advocate for workloads that are both safe and manageable. This subsection of the competencies also outlines the need for nurses to identify and take action to prevent actual and potentially abusive situations that may cause harm to the client, self or others. While the physical or emotional abuse or violence has been indicated as a key risk factor impacting the wellbeing of mental health nurses, this wording does not encompass recognition of highly stressful situations that may cause harm to the client, self or others.

Ontario baccalaureate nursing education curriculum typically includes a brief overview of self-care and self-reflection as part of the first year content. Current literature would support that more in-depth education and focus on understanding burnout and the development of self-management and coping strategies may mitigate the negative effects of workplace stress.

Previous studies have indicated that education aimed at physiological and emotional self-regulation techniques to decrease compassion fatigue and burnout symptoms and increase compassion satisfaction was effective in improving compassion satisfaction and reducing burnout (Flarity et al., 2013). Incorporating more detailed information about the indicators and effects of burnout as well as self-care and physiological and emotional self-regulation techniques into core nursing curriculum, may better prepare new nurses to recognize and manage workplace stress. Educating nurses about the strong relationship between person-job fit and burnout may also prompt nurses to more thoughtfully reflect on their personal expectations and how this aligns with potential employers, thereby choosing to pursue employment in areas that are more congruent with their expectations. Additionally, health care organizations employing mental health nurses may benefit from offering similar education and training for existing staff.

Implications for Practice

This study corroborates previous research that has found an inverse relationship between compassion satisfaction and burnout (Burtson & Stichler, 2010; Collins & Long, 2003; Flarity et al., 2013) suggesting that mental health nurses with higher levels of compassion satisfaction experienced a better person- job fit which was related to decreased emotional exhaustion. Impacts of burnout on nursing practice include reduced productivity and lower morale and poor staff and patient satisfaction (Stewart, 2013). These stressors have the potential to create a continuous cycle where staff experience increased stress and emotional exhaustion, resulting in increased illness, absenteeism and missed work, creating increased workload and lowered morale for the remaining staff

(Devi et al., 2010). The resulting nursing shortage will increase job dissatisfaction and this dissatisfaction will result in greater nurse turnover (DeCola & Riggins, 2010). Several studies have proposed similar strategies for increasing compassion satisfaction, improving person-job match and reducing burnout. As articulated in the Areas of Worklife model, the focus should be on attempting to align staff expectations with their perceived reality, rather than obtaining a definitive workload value or prescriptive staff to patient ratio.

Employers should conduct routine assessments of the work environment and staff wellbeing using a variety of validated assessments such as the AWS, ProQOL and the MBI to ensure a fulsome understanding of the current state of the work environment and to assess the degree of mismatch and burnout experienced by staff. Routine assessment will allow employers to identify where the greatest gaps are and focus their efforts accordingly.

Nurses' perceptions of overall person-job fit in the areas of worklife reflects the quality of work environment, while compassion satisfaction is a more personal measure of the individuals positive feelings gained through work. The model tested in this study suggests that compassion satisfaction and nurses' overall person-job match in each of the six areas of worklife (control, workload, rewards, community, values and fairness) are closely related, therefore, compassion satisfaction should be considered as a valuable supplement to Leiter and Maslach's (2003) Areas of Worklife model when considering strategies to reduce nurse burnout. These results provide preliminary support to suggest that improved compassion satisfaction can influence the quality of the work environment and create organizational climates which employees perceive as more rewarding.

Within this study, only 3.1% of the participants had low compassion satisfaction scores suggesting job dissatisfaction. Areas of Worklife subscale scores indicate that nurses experienced a moderate but positive person-job match in all six areas of worklife, with the greatest fit experienced in community (*M*=3.76), followed by rewards (*M*=3.44), values (*M*=3.43), control (*M*=3.39), fairness (*M*=3.22) and finally workload (*M*=3.07). Given the positive link between all areas of worklife and compassion satisfaction, it would be reasonable to predict that creating working conditions which reflect greater congruence between nurses' work expectations and experience would also improve nurses' compassion satisfaction.

The workload for mental health nurses should be closely monitored as patient acuity and demands fluctuate. Where possible, nursing workloads should be reduced or redistributed as acuity increases to offset increasing demands. Frontline nurses should be included in decisions regarding distribution of workload and patient assignments to promote shared leadership and a sense of control, autonomy and fairness in the decision making process.

Implications for Mental Health Care Organizations

The greatest person-job mismatch within this sample was found in workload (*M*=3.08) and fairness (*M*=3.22). Creation of detailed role descriptions at the unit or program level which outline typical patient characteristics and workload expectations would create greater transparency and allow organizations to recruit staff whose expectations align with the program. A consistent and equitable method of creating and reevaluating assignments and caseload should be implemented. Additionally, as patient demographics and healthcare trends change, organizations should routinely reevaluate

patient trends to ensure that staffing and skill mix aligns with current patient needs. Organizational guidelines that provide clear role descriptions can assist in reducing role ambiguity and clarifying staff expectations and accountability, contributing to a greater perception of fairness. Fairness may also be positively influenced by ensuring organizational policies include behavioral expectations for staff conduct and relationship standards as well as consistent attendance management strategies. Staff perception of control may be strengthened by ensuring opportunity and support for frontline staff to participate in decision making processes such as shared leadership councils and organizational committees. This may also foster a greater sense of community through collaboration with peers. Additionally, organizations should ensure there is easy access to employee assistance programs and occupational health supports that are effective in addressing both the physical and mental health concerns of staff.

Reward showed the strongest relationship with compassion satisfaction ($r = 0.70$, $p < 0.01$). Despite the challenges identified within mental health nursing, many heath care workers are motivated and invigorated by a sense of satisfaction gained from helping others (Bride et al., 2007). Compassion satisfaction and the associated feeling of reward builds the capacity within nurses to continue to engage meaningfully with patients, build their confidence and skill which is carried into future interactions (Coetzee & Klopper, 2010). Health care workers that report witnessing the positive patient outcomes as a result of treatment are more positively influenced towards future work engagement (Bakker et al., 2011). Compassion satisfaction stems from the emotional reward gained through participation in meaningful work. Nurses gain emotional reward when witnessing successful patient outcomes. Reward and recognition can greatly influence compassion

satisfaction in nurses while fostering a sense of community and promoting shared values. Staff and leaders need to create opportunities to celebrate the successes and milestones of both patients and staff.

Reducing stress related illness, absenteeism and turnover will result in significant direct and indirect cost savings for organizations employing mental health nurses. The organizational costs, both direct and indirect, associated with the increased stress related illness and absenteeism, turnover, overtime, and replacement, are significant. Mental health facilities in particular have shown higher than average levels of stress and sickness amongst staff as well as higher staff vacancies, sick time, and absenteeism (Currid, 2009). Nurses who report negative perceptions of their work, role ambiguity and negative perceptions of work colleagues are more likely to exhibit negative behaviours such as lateness and absenteeism (Carter & Tourangeau, 2012).

In addition to the organizational impacts, burnout in healthcare workers has been associated with poor patient outcomes. Breen and Sweeny (2013) state that stress experienced at work is a major reason for nurses failing to function at optimum levels. Individuals suffering from burnout are at higher risk to make poor professional judgments, misdiagnosis, medication and treatment errors, poor treatment planning, abuse of clients and overall deterioration of the quality of care (Breen & Sweeny, 2013; Bride et al., 2007). Due to the significant interpersonal relationship required to provide care for clients with mental health issues, and the increased emotional demands of the work, mental health nurses are at an increased risk of burnout (Breen & Sweeny, 2013). Mental health nurses experience a more intense therapeutic relationship with their clients and often face higher levels of challenging behavior, violent incidents, and potential

suicides (Breen & Sweeny, 2013; Currid, 2009). Organizations should be mindful of this relationship when assessing patient safety indicators that may indicate poor nurse functioning such as increased falls, medication errors, and hospital acquired infections, as well as any incidence of incivility or abuse towards patient.

In order to achieve compassion satisfaction nurses must be able to engage with patients in a meaningful way whereby they are able to witness the positive effects of the care they have provided in relieving or decreasing the discomfort of others. In this sample nurses reported only an average level of compassion satisfaction. Without the ability to form therapeutic alliances with patients, mental health nurses are not able to utilize the therapeutic interventions needed leading to poorer patient outcomes and a diminished sense of satisfaction or reward for staff (Currid, 2009). The model of care within mental health facilities tends to be reactive and custodial in nature, with nurses' time spent attempting to contain behavior rather than engaging in proactive care planning and treatment (Currid, 2009). This type of environment may influence the lower levels of congruence observed in the workload, control and fairness. Organizations should promote proactive models of care, such as intentional rounding or routine safety rounding, where nursing workflow is structured in a way that proactively meets patient needs and allows for early assessment, identification and prevention of violence.

The findings of this study suggest that Maslach and Leiter's (2003) Areas of Worklife model can be used as a framework to foster greater compassion satisfaction which would influence nurses' overall emotional exhaustion. More specifically, nurses who reported a higher degree of overall person-job match in the six areas of worklife, reported greater compassion satisfaction and less emotional exhaustion. Therefore,

fostering compassion satisfaction and developing positive work environments that more closely align with nurses' expectations would be useful to minimize emotional exhaustion and burnout, thereby reducing absenteeism and turnover, improving patient outcomes and fostering greater engagement.

In summary, all six areas of worklife and compassion satisfaction showed significant inverse relationships with emotional exhaustion while compassion satisfaction showed significant positive relationships with all six areas of worklife. Of the six areas of worklife, workload was the most strongly related to emotional exhaustion while reward was most strongly related to compassion satisfaction. Therefore focusing on strategies that improve nurses' overall match in the six areas of worklife may foster compassion satisfaction and subsequently reduce emotional exhaustion. Further, evaluating nurses' perceptions of their work environment and creating supports that improve working conditions and increase satisfactions of nurses is likely to decrease emotional exhaustion.

Recommendations for Future Research

While there is a rich body of research on burnout, and the link between burnout and Maslach and Leiter's (2003) six areas of worklife, there is a considerable gap regarding compassion satisfaction as a distant concept or linking compassion satisfaction to burnout or areas of worklife. Compassion satisfaction is only discussed in the literature in terms of the relationship to compassion fatigue, with the theory that increased levels of compassion satisfaction indicate lower level of compassion fatigue. This framing has limited the exploration of compassion satisfaction since the focus of the existing research was to identify ways to decrease compassion fatigue rather than exploring ways to

increase compassion satisfaction. Future research should aim to better define and conceptualize compassion satisfaction as a district and measurable concept. In identifying the attributes and antecedents of compassion satisfaction, researchers will be better positioned to explore the relationship between compassion satisfaction, overall match in the six areas of worklife and burnout.

This study focused only on the emotional exhaustion component of burnout. Further research should explore the potential relationship between compassion satisfaction, areas of worklife and the other components of burnout, cynicism and decreased personal efficacy. This would allow a greater understanding of the process by which compassion satisfaction influences person-job match and burnout. This is the first study to illuminate the mediation role of compassion satisfaction in the relationship between overall person-job match in the six areas of worklife and nurses' emotional exhaustion within mental health nurses. Further research using a larger sample size is needed to further validate the mediation relationship as well as to determine if this relationship is consistent across other subspecialties within nursing, or across other healthcare professions or settings.

Conclusion

In closing, the results of this study support the theoretical proposition that compassion satisfaction partially mediates the relationship between person-job fit and emotional exhaustion. Compassion satisfaction had a positive effect on overall match in the six areas of worklife and an inverse effect on emotional exhaustion. Results also support Maslach and Leiter's (2003) theory that an overall match in the six areas of worklife influences emotional exhaustion in nursing. Person-job fit was shown to have a

direct effect on emotional exhaustion, as well as an indirect effect on emotional exhaustion through compassion satisfaction. Expanding the Areas of Worklife model to include compassion satisfaction provided additional explanation for the variance in emotional exhaustion. The concept of compassion satisfaction may prove to be a valuable factor in reducing emotional exhaustion experienced by nurses, but requires further development.

References

Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology*, *20*(1), 4–28. http://doi.org/10.1080/1359432X.2010.485352

Breen, M., & Sweeny, J. (2013). Burnout : the experiences of nurses who work in inner city areas. *Mental Health Practice*, *17*(2), 12–20.

Bride, B. E., Radey, M., & Figley, C. R. (2007). Measuring compassion fatigue. *Clinical Social Work Journal*, *35*(3), 155–163. http://doi.org/10.1007/s10615-007-0091-7

Burtson, P. L., & Stichler, J. F. (2010). Nursing work environment and nurse caring: Relationship among motivational factors. *Journal of Advanced Nursing*, *66*(8), 1819–1831. http://doi.org/10.1111/j.1365-2648.2010.05336.x

Carter, M. R., & Tourangeau, A. E. (2012). Staying in nursing: What factors determine whether nurses intend to remain employed? *Journal of Advanced Nursing*, *68*(7), 1589–1600. http://doi.org/10.1111/j.1365-2648.2012.05973.x

Coetzee, S. K., & Klopper, H. C. (2010). Compassion fatigue within nursing practice: A concept analysis. *Nursing and Health Sciences*, *12*(2), 235–243. http://doi.org/10.1111/j.1442-2018.2010.00526.x

College of Nurses of Ontario (2014) Competencies for entry-level registered nurse practice. Retried from http://www.cno.org/globalassets/docs/reg/41037_entrytopracitic_final.pdf

Collins, S., & Long, A. (2003). Working with the psychological effects of trauma: consequences for mental health-care workers--a literature review. *Journal of Psychiatric and Mental Health Nursing*, *10*(4), 417–424. http://doi.org/10.1046/j.1365-2850.2003.00620.x

Currid, T. (2009). Experiences of stress among nurses in acute mental health settings. *Nursing Standard*, *23*(44), 40–46.

DeCola, P. R., & Riggins, P. (2010). Nurses in the workplace: Expectations and needs. *International Nursing Review*, *57*(3), 335–342. http://doi.org/10.1111/j.1466-7657.2010.00818.x

Devi, E. S., Rao, A., Mayya, S., & Bairy, K. (2010). Perception and attitude towards work-life balance among allied and nursing health care professionals, *International Journal of Nursing Education 2*(2), 1–3.

Flarity, K., Gentry, J. E., & Mesnikoff, N. (2013). The effectiveness of an educational program on preventing and treating compassion fatigue in emergency nurses. *Advanced Emergency Nursing Journal*, *35*(3), 247–58. http://doi.org/10.1097/TME.0b013e31829b726f

Leiter, M. P., & Maslach, C. (2003). Areas of worklife: A structured approach to organizational predictors of job burnout. *Research in Occupational Stress and Well Being 3*, 91-134 http://doi.org/10.1016/S1479-3555(03)03003-8

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach burnout inventory: Manual* (3rd ed). Palo Alto, CA: Psychol. Press.

Stamm, B. H. (2010). Professional quality of life: compassion satisfaction and fatigue subscales, R-IV (ProQOL). Retrieved from https://class.waldenu.edu/bbcswebdav/institution/USW1/201270_01/MS_MMHC/COUN_6336_COUN_8336_HUMN_8336/Week 5/Resources/Resources/embedded/Compassion_Fatigue_Self_Test.pdf

Stewart, N. (2013). Missing in action: Absenteeism trends in Canadian organizations. *Ottawa: The Conference Board of Canada*. http://doi.org/10.1353/cal.2002.0008

Appendix A

Ethics Approval

Office of Research Ethics

The University of Western Ontario
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Telephone: (519) 661-3036 Fax: (519) 850-2466 Email: ethics@uwo.ca
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Use of Human Subjects - Ethics Approval Notice

Principal Investigator: Dr. S.L. Ray
Review Number: 15427E **Review Level:** Expedited
Review Date: August 21, 2008
Protocol Title: Compassion Satisfaction, Compassion Fatigue and Burnout among Frontline Mental Health Staff
Department and Institution: Nursing, University of Western Ontario
Sponsor: Lawson Health Research Institute IRF
Ethics Approval Date: September 17, 2008 **Expiry Date:** September 30, 2010
Documents Reviewed and Approved: UWO Protocol, Letter of Information, Reminder letters (2 weeks, 5 weeks)
Documents Received for Information:

This is to notify you that The University of Western Ontario Research Ethics Board for Health Sciences Research Involving Human Subjects (HSREB) which is organized and operates according to the Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans and the Health Canada/ICH Good Clinical Practice Practices: Consolidated Guidelines; and the applicable laws and regulations of Ontario has reviewed and granted approval to the above referenced study on the approval date noted above. The membership of this REB also complies with the membership requirements for REB's as defined in Division 5 of the Food and Drug Regulations.

The ethics approval for this study shall remain valid until the expiry date noted above assuming timely and acceptable responses to the HSREB's periodic requests for surveillance and monitoring information. If you require an updated approval notice prior to that time you must request it using the UWO Updated Approval Request Form.

During the course of the research, no deviations from, or changes to, the protocol or consent form may be initiated without prior written approval from the HSREB except when necessary to eliminate immediate hazards to the subject or when the change(s) involve only logistical or administrative aspects of the study (e.g. change of monitor, telephone number). Expedited review of minor change(s) in ongoing studies will be considered. Subjects must receive a copy of the signed information/consent documentation.

Investigators must promptly also report to the HSREB:

a) changes increasing the risk to the participant(s) and/or affecting significantly the conduct of the study;
b) all adverse and unexpected experiences or events that are both serious and unexpected;
c) new information that may adversely affect the safety of the subjects or the conduct of the study.

If these changes/adverse events require a change to the information/consent documentation, and/or recruitment advertisement, the newly revised information/consent documentation, and/or advertisement, must be submitted to this office for approval.

Members of the HSREB who are named as investigators in research studies, or declare a conflict of interest, do not participate in discussion related to, nor vote on, such studies when they are presented to the HSREB.

Ethics Officer to Contact for Further Information			
☐ Janice Sutherland (jsuther@uwo.ca)	☐ Elizabeth Wambolt (ewambolt@uwo.ca)	☐ Grace Kelly (grace.kelly@uwo.ca)	☒ Denise Grafton (dgrafton@uwo.ca)

This is an official document. Please retain the original in your files.

cc: ORE File
LHRI

Appendix B

Areas of Worklife Scale (AWS) (Leiter & Maslach, 2003)

Indicate the extent to which you agree with the following statements.

	1	**2**	**3**	**4**	**5**		**6**	
	strongly disagree	**disagree**	**sometimes disagree**	**agree**	**strongly agree**		**unable to determine**	
1.	I do not have time to do the work that must be done.	1	2	3	4	5	6	
2.	I can influence management to obtain the equipment and space I need for my work.	1	2	3	4	5	6	
3.	I work intensely for prolonged periods of time.	1	2	3	4	5	6	
4.	After work I come home too tired to do the things I like to.	1	2	3	4	5	6	
5.	Members of my workgroup cooperate with one another.	1	2	3	4	5	6	
6.	I have so much work to do on the job that it takes me away from my personal interests.	1	2	3	4	5	6	
7.	I have enough time to do what's important in my job.	1	2	3	4	5	6	
8.	Management treats all employees fairly.	1	2	3	4	5	6	
9.	I leave my work behind when I go home at the end of the workday.	1	2	3	4	5	6	
10.	Members of my work group communicate openly.	1	2	3	4	5	6	
11.	I have control over how I do my work.	1	2	3	4	5	6	
12.	Favouritism determines how decisions are made at work.	1	2	3	4	5	6	
13.	I have professional autonomy/independence in my work.	1	2	3	4	5	6	
14.	There are effective appeal procedures available when I question the fairness of a decision.	1	2	3	4	5	6	
15.	My work is appreciated.	1	2	3	4	5	6	

1 strongly disagree	2 disagree	3 sometimes disagree	4 agree	5 strongly agree	6 unable to determine

16.	My efforts usually go unnoticed.	1	2	3	4	5	6
17.	I don't feel close to my colleagues.	1	2	3	4	5	6
18.	I do not get recognized for all the things I contribute.	1	2	3	4	5	6
19.	People trust one another to fulfill their roles.	1	2	3	4	5	6
20.	I am a member of a supportive work group.	1	2	3	4	5	6
21.	Resources are allocated fairly here.	1	2	3	4	5	6
22.	It's not what you know but who you know that determines a career here.	1	2	3	4	5	6
23.	Opportunities are decided solely on merit.	1	2	3	4	5	6
24.	I receive recognition from others for my work.	1	2	3	4	5	6
25.	My values and the Organization's values are alike.	1	2	3	4	5	6
26.	The Organization's goals influence my day to day work activities.	1	2	3	4	5	6
27.	My personal career goals are consistent with the Organization's stated goals.	1	2	3	4	5	6
28.	The Organization is committed to quality.	1	2	3	4	5	6
29.	Working here forces me to compromise my values.	1	2	3	4	5	6

Legend

Workload = 1, 3, 4, 6, 7, 9
Control = 2, 11, 13
Reward = 15, 16, 18, 24
Community = 5, 10, 17, 19, 20
Fairness = 8, 12, 14, 21, 22, 23
Values = 25, 26, 27, 28, 29

Appendix C

Compassion Satisfaction (Stamm, 2010)

Helping others puts you in direct contact with other people's lives. As you probably have experienced, your compassion for those you help has both positive and negative aspects. We would like to ask you questions about your experiences, both positive and negative, as a helper. Consider each of the following questions about you and your current situation. Write in the number that honestly shows how often the statement has been true for you ***in the last 30 days***.

0=Never 1=Rarely 2=A Few Times 3=Somewhat Often 4=Often 5=Very Often

_____1. I get satisfaction from being able to help people.

_____2. I have more energy after working with those I help.

_____ 3. I like my work as a helper.

_____ 4. I am pleased with how I am able to keep up with helping techniques and protocols.

_____ 5. My work makes me feel satisfied.

_____ 6. I have happy thoughts and feelings about those I help and how I could help them.

_____ 7. I believe I can make a difference through my work.

_____ 8. I plan to be a helper for a long time.

_____ 9. I have thoughts that I am a "success" as a helper.

_____ 10. I am happy that I chose to do this work.

Appendix D

Emotional Exhaustion from MBI – General Survey (Maslach, Jackson & Leiter, 1996)

0 Never	1 Sporadic A few times a year or less	2 Now and Then Once a month or less	3 Regular A few times a month	4 Often Once a week	5 Very Often A few times a week	6 Daily

Using the scale above, mark a number on the answer sheet to indicate how often, if ever, you have experienced these feelings. If you have never experienced this thought or feeling, mark 0. If you did have this thought or feeling, fill in the best fitting answer.

1.	I feel emotionally drained from my work.	0	1	2	3	4	5	6
2.	I feel used up at the end of the workday.	0	1	2	3	4	5	6
3.	I feel tired when I get up in the morning and have to face another day on the job.	0	1	2	3	4	5	6
4.	Working all day is really a strain for me.	0	1	2	3	4	5	6
5.	I feel burned out from my work.	0	1	2	3	4	5	6

Appendix E

Demographic Information

1. **Gender:**
   - ❑ Female
   - ❑ Male

2. **Age:** _____years

3. **Highest level of Education:**
   - ❑ High School
   - ❑ Diploma
   - ❑ Bachelor Degree
   - ❑ Masters
   - ❑ PhD
   - ❑ Other: _____

4. **What is your current employment status at this setting?**
   - ❑ Full time
   - ❑ Part time
   - ❑ Casual

5. **How many years have you worked……**
   a) In your profession? ____ Years _____months

   b) In mental health?
   _____Years _____months

   c) In your present setting?
   ____ Years _____months

Appendix F

Curriculum Vitae

Name:	Michelle Fredette-Carragher
Post-Secondary Education And Degrees:	University of Western Ontario London, ON, Canada 2012-2016 MScN University of Western Ontario London, ON, Canada 2007-2011 BScN Fanshawe College London, ON, Canada 1995-1998 Diploma in Nursing
Related Work Experience:	St. Joseph's Health Care London Registered Nurse, Inpatient Surgical Services, 1998-2012 St. Joseph's Health Care London Sexual Assault Nurse Examiner, Sexual Assault and Domestic Violence Treatment Center, 2004-2012 St. Joseph's Health Care London Professional Practice Consultant, 2012-present
Professional Memberships	Canadian Nurses Association College of Nurses of Ontario Nursing Best Practice Research Unit Nursing Leadership Network Registered Nurses Association of Ontario Sigma Theta Tao Honor Society of Nurses