

“Two things that remain eternally true and complement each other, in my view are: don’t snuff out your inspiration and power of imagination, don’t become a slave to the model; and the other, take a model and study it, for otherwise your inspiration won’t take on material form.”

- Vincent Van Gogh, 1882

**THE EFFECT OF STRUCTURAL EMPOWERMENT ON BURNOUT AND
SUBSEQUENT QUALITY OF PATIENT CARE IN MENTAL HEALTH NURSES
IN NEW BRUNSWICK**

by

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ABSTRACT

Although nursing burnout has been generally associated with lack of empowerment and poorer patient outcomes, research about the mental health nurse population is sparse. This study tested a hypothesized model examining the associations between structurally empowering work environments on burnout and subsequent quality of patient care among registered nurses working in mental health care in New Brunswick. A cross-sectional survey was conducted and SPSS was used to analyze descriptive statistics, correlations, and three mediation models using Hayes' PROCESS macro. Significant correlations were found between scales for structural empowerment and cynicism (-.42), interpersonal strain and access to information (-.36), and interpersonal strain and quality of care (-.39). Results showed that the direct association of structural empowerment on cynicism was significant ($r = -.48$, $\beta = -.32$, $t = -2.69$, $p = .01$, $R^2 = 16.7$). The COVID-19 pandemic prevented further participant recruitment, leading this study to act as a pilot for further research.

Keywords: structural empowerment, burnout, quality of care, mental health nurse, psychiatric nurse

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I conducted this work as a guest in Wolastoqey territory and acknowledge the land where I live is unsundered and unceded.

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Chapter 1: Introduction

Even before the COVID-19 pandemic, burnout has been a hot topic in the organizational literature for over 20 years and is heavily researched in nursing. Job burnout is the reaction to ineffectively coping with constant stressors at work (Maslach & Leiter, 2016); nursing burnout has been linked with poorer quality of care, absenteeism, high turnover rates, attrition from the profession, and job dissatisfaction (Laschinger et al., 2013; Laschinger & Fida, 2015; López-López et al., 2019). However, there is a paucity of research about this phenomenon among mental health nurses specifically, as most studies do not differentiate between nursing specialties in their sample (Laschinger & Fida, 2015; López-López et al., 2019; Maslach & Leiter, 2016). Research on nursing burnout in this specialty area is needed, as mental health working environments have unique stressors that distinguish the mental health nurse's role from that of other areas of nursing (Edward et al., 2017; López-López et al., 2019; Maslach & Leiter, 2016).

The aim of this research was to examine how structural empowerment, defined as organizational support in the work environment, affects quality of patient care delivered by mental health nurses directly and when mediated by burnout. In this chapter, I will introduce the working environment of mental health nurses and what differentiates it from other nursing areas. I will also discuss the theoretical and empirical links between empowering work environments, burnout, and quality of patient care, as well as the significance of these phenomena for nurses, patients, and the healthcare system.

Background

Mental health is a demanding nursing specialty with unique work environment characteristics and stressors. In a study by Sahraian et al. (2008), mental health nurses showed higher levels of burnout (46.7%) when compared to nurses in general (25%). Mental health nurses are particularly prone to burnout because of the intense interpersonal relationships built with patients and their families as a part of their role (Edward et al., 2017; López-López et al., 2019; Maslach & Leiter, 2016; McVicar, 2016; Sahraian et al., 2008). Nurses working in this specialty also have the added difficulty of balancing authenticity in their care with professionalism in trying to build rapport and trusting relationships with their patients through use of self, active listening, and empathy (Edward et al., 2017). A mental health nurse must continuously manage their emotions in the workplace to allow for appropriate patient interactions, which can lead to burnout from suppression of feelings (Edward et al., 2017).

The working environment in mental health nursing is unique and includes stressors less common in other areas of nursing such as patients with frequent admissions, physical and verbal abuse, threats, and difficult patient behaviours such as self-harm, suicidality, and unpredictability that can lead to the use of environmental, chemical, or physical restraints (Angermeyer et al., 2006; Elsayed et al., 2018; Hanrahan et al., 2010; Jenkins & Elliott, 2004; López-López et al., 2019). However, perhaps one of the greatest areas of difficulty that differentiates mental health nursing from that of general nursing is the legal and ethical considerations of hospitalizing and treating patients involuntarily. Patients experiencing psychosis or extreme mood disorders can be difficult to help as, by definition of their illnesses, they lack appropriate judgement and insight into their well-

being (Roche & Duffield, 2010). In Canada under the regulation of provincial mental health acts, patients experiencing this level of illness who are at risk of hurting themselves or others can be legally admitted to hospitals and treated against their will (e.g., *Mental Health Act*, 1973). As involuntary patients are common in this setting, mental health nurses are often placed in the difficult situation of administering a medication against a patient's wishes which can lead to aggression, seclusion, and invasive intramuscular injections. These challenging situations can lead to burnout as they are high risk, emotionally exhausting, and can also challenge the personal feelings of the nurse when becoming forceful with a patient with whom a therapeutic bond has been established. The ethical considerations of working with this vulnerable population only furthers the emotional burden and burnout risk of mental health nurses caring for them in their greatest times of need (Roche & Duffield, 2010).

Preventing burnout can be difficult when organizational or role stressors out of one's control are ruling the work environment (Braunschneider, 2013). Even nurses with great coping skills cannot continuously take care of themselves when repeatedly exposed to harsh working conditions (Hanrahan et al., 2010). Empowering work environments that provide resources for nurses to do their job well have the potential to create safer, healthier working conditions and improve the quality of care that patients receive (Laschinger & Fida, 2015; López-López et al., 2019).

Significance

According to a national study in 2017, nurses in New Brunswick were suffering from the highest levels of burnout across Canada (Read & Maillet, 2017); this has been

significantly exacerbated by the pandemic, which occurred after data collection for this study (Cox, 2021). In 2021, New Brunswick had over 800 vacant registered nursing positions out of 8000, and the number is quickly climbing (Cox, 2021). New Brunswick nurses worked over 353,000 hours of overtime in 2020, and unsurprisingly, 25% of all nurses have screened positive for burnout (Doucet, 2021). In addition, 41% of New Brunswick nurses are eligible to retire within the next five years (Doucet, 2021), which further adds burden to an already stressed healthcare system. Registered nurses (RNs) have been contacting the president of the New Brunswick Nurses Union themselves to express their concerns over negative working conditions and their increasing levels of burnout (Steeves, 2021).

Along with the high levels of burnout, the state of mental health care in New Brunswick is also concerning. According to the Canadian Institutes for Health Information (2017), there have been an increase in the number of discharged patients from psychiatric facilities in New Brunswick over the past decade, resulting in an increased demand for outpatient mental health services. With this increase in use and demand, patients in crisis are met with waitlists, for example, Moncton, New Brunswick, has a waitlist of approximately six months to one year to receive outpatient mental health services (Bhattacharya, 2018).

In 2017 the government of New Brunswick allocated \$104.3 million to mental health care services throughout the province (Bhattacharya, 2018). However, despite this financial support, little progress has been made. For example, in February of 2019 The Canadian Press released an article commenting on Vitalité health authority's mental health facility in the Restigouche Hospital Centre not reaching even the minimum

standards of care (Bissett, 2019). Horizon Health Network, the other regional health authority within the province, has also recently been under public scrutiny for poor quality of care specific to mental health concerns. After the suicide of a teenage girl in Fredericton who sought help at the local emergency department, investigative reports have found that New Brunswick nurses are lacking training and mental health resources, such as a standardized suicide assessment tool or safety plan (Brown, 2021). These examples highlight the need for more investment and support for mental health services in New Brunswick – including investment and support for mental health nurses.

This research coincides with increased availability of provincial government funding for mental health care, acknowledgment of high levels of burnout among nurses, and ongoing public concerns regarding quality of care in facilities that provide mental health care services. The findings of this study will add to our understanding of structural empowerment and burnout among RNs working in mental health care, as well as the impacts they have on quality of patient care. The link of structural empowerment and burnout to quality of patient care deserves greater attention, as in healthcare, the patient is the ultimate consideration (Laschinger & Fida, 2015). Findings from this research may be used to educate nurses and health care administrators regarding the benefits of structurally empowering work environments, potentially leading to positive practice and care changes.

Purpose

The purpose of this research was to test a theoretical model examining the direct associations between structurally empowering work environments, burnout, and quality

of patient care, as well as the indirect association between structurally empowered work environments and quality of patient care when mediated by burnout among RNs working in mental health care in New Brunswick.

Chapter 2: Literature Review

This chapter provides the theoretical framework for this study supported by evidence from the research literature. In this chapter, I will discuss the hypothesized relationships between study variables and their theoretical rationale. I will also acknowledge the gap in the literature about structural empowerment and burnout in the mental health nurse population and support the need for this study.

Theoretical Framework

Job demands-resources model. The overarching theoretical framework for this study is the job demands-resources (JD-R) model which categorizes working conditions into two broad categories: job demands and job resources (Demerouti et al., 2001). Job demands are the physical, social, and organizational duties associated with a job that requires physical or mental effort, while job resources are the physical, psychological, social, or organizational aspects of the job that promote the attainment of work goals, enable employees to meet job demands, and encourage personal development (Demerouti et al., 2001). The JD-R model also includes personal resources, such as an individual employee's resiliency, self-efficacy, and optimism (Demerouti et al., 2001).

According to the JD-R model, the balance between job demands and job resources can lead to two different outcomes: health impairment or motivation (Bakker & Demerouti, 2014). Health impairment occurs when there is continuous strain while on the job from high demands such as work pressure and emotional demands, and/or insufficient job resources. This imbalance between job demands and job resources can lead to employee health problems such as exhaustion, psychosomatic complaints, and physical

injury (Bakker & Demerouti, 2014). An alternative outcome, job motivation, describes the engagement of the employee in their job through access to adequate resources to meet the demands of their job and leads to excellence in work performance and job enjoyment (Bakker & Demerouti, 2014; Maslach & Leiter, 2016). This model proposes that if the available job resources are adequate to meet the demands of the job, high-demand jobs can still lead to a positive outcome (job motivation); similarly, limited access to job resources may be sufficient to accomplish the job if job demands are low (Bakker & Demerouti, 2014; Demerouti et al., 2001; McVicar, 2016). Conversely, a highly demanding job with limited access to resources will likely lead to health impairment (Demerouti et al., 2001). In other words, job demands and availability of job resources alone do not determine the pathway to motivation or health impairment, but rather the balance between these factors will create its respective outcome.

Mental health nursing has been identified to be both high in demands and low on resources. Maslach and Leiter (2016) note that health care, as a therapeutic service provider for patients, requires continuous and intense relationships with patients, creating a highly demanding work environment. Mental health care has also been identified to have less supportive leadership and opportunities for job growth (Roche & Duffield, 2010) while healthcare in general has sociopolitical influences to consider, such as government funding in a public healthcare system with budget constraints causing low resources and less opportunity for structural empowerment (Maslach & Leiter, 2016). As highly demanding jobs are closely associated with exhaustion, and lack of job resources can result in disengagement (Demerouti et al., 2000, 2001), employees working in jobs that have both high demands and low resources, such as mental health nursing, are likely

to experience both exhaustion and disengagement, phenomena that are components of burnout syndrome (Maslach & Leiter, 2016). Logically, mental health nurses are likely to follow the health impairment pathway of the JD-R model.

Structural empowerment. Structural empowerment has been heavily researched in the literature since its operationalization in nursing in the early 2000s (Laschinger et al., 2001). Kanter's theory of structural empowerment states that people are rational and will react accordingly in a given situation, therefore an employee who feels empowered will rise to the challenges of their organization (Kanter, 1977; Laschinger et al., 2001). This theory purports that there are four structures within organizations that facilitate employee empowerment: access to information, access to support, access to resources, and access to opportunities to learn and grow (Laschinger & Fida, 2015). These structures have been associated with better organizational outcomes, as nurses are more effective at meeting organizational goals when they have what they need to do their job (Laschinger et al., 2001; Laschinger & Fida, 2015). When these four structural components are in place, employees are empowered because they are able to accomplish their work in meaningful ways (Laschinger et al., 2013). Nurses benefit from empowering work environments, as it offers a sense of control at work through autonomy and inclusion in the decision-making process, leading to job satisfaction, and lower levels of burnout (Bakker & Demerouti, 2014; Laschinger et al., 2001; López-López et al., 2019; McVicar, 2016).

Structural empowerment has been identified as a valuable job resource for nurses and has been associated with lower levels of burnout and higher quality of care among

this population (Copanitsanou et al., 2017; Goedhart et al., 2017; Halm, 2019; Laschinger et al., 2001; López-López et al., 2019), though not with mental health nurses specifically.

This study conceptualizes structurally empowering working conditions as a job resource to lead to lower levels of burnout among mental health nurses, ultimately improving quality of patient care. As noted by Laschinger and Read (2017), structural empowerment can act as a resource within the JD-R model through its four pillars. Information is a resource of knowledge; support is the resource of collaborative interpersonal relationships; resources needed to do the job are resources of physical and financial means; and the opportunity to learn and grow is a resource of professional development.

For mental health nurses, these pillars could be best illustrated through the following examples: First, access to information could be provided through specialty training in mental health care to better prepare nurses for this unique environment because of the difference in patient behaviours and accompanying nursing care (Angermeyer et al., 2006). Access to support could be provided by healthcare managers with strong leadership skills who facilitate collaboration to address practice and professional issues (Braunschneider, 2013; Edward et al., 2017; Karanikola & Papathanassoglou, 2013). Access to resources such as adequate staffing can alleviate a major risk factor for burnout through lower patient ratios, allowing nurses the time they need to provide quality care to each of their patients. Finally, providing opportunities to learn and grow could involve promoting continuing education, supporting nurses' autonomy in decision making, and creating and hiring specialist or advanced roles (Delaney, 2016; Hanrahan et al., 2010; Jenkins & Elliott, 2004; Karanikola &

Papathanassoglou, 2013). Thus, within the JD-R framework, structural empowerment is logically positioned as a job resource that helps mental health nurses meet the demands of their job, which may lead to decreased burnout and ultimately improve the quality of care that nurses can provide to their patients.

Burnout. Job burnout is a psychological phenomenon that is a response to ineffectively coping with constant interpersonal stressors and challenging situations at work (Maslach & Leiter, 2016; McTiernan & McDonald, 2015). Maslach developed a theory of burnout which has evolved over the past several years to consist of three dimensions: emotional exhaustion, cynicism, and personal inefficacy (Maslach & Leiter, 2016). Emotional exhaustion is the feeling of wearing out, a loss of energy, emotional depletion, and fatigue. Cynicism is harboring negative or harmful attitudes, irritability, and withdrawal from your work. Inefficacy is reduced productivity or capability, low morale, and an inability to cope (Maslach & Leiter, 2016).

For the purpose of this research, I have used Borgogni et al.'s (2012) adaptation of Maslach and Leiter's concept of burnout. This model includes interpersonal strain in place of personal inefficacy, as it is more relevant to the intense interpersonal relationships in mental health nursing such as patient and family interactions as well as peer interactions with other members of the interdisciplinary team (Edward et al., 2017; McVicar, 2016). Interpersonal strain reflects the disengagement and emotional and cognitive distancing from demanding social situations in the workplace (Borgogni et al., 2012). Work settings where interpersonal relationships and interactions are integral to the job tend to have more relation to interpersonal strain (Borgogni et al., 2012; Laschinger et

al., 2015). Due to the importance of therapeutic relationships in the mental health field, interpersonal strain is highly salient to the role of mental health nurses.

Interpersonal strain as a component of burnout was first validated in 2012 by Borgogni et al. It has since been used and further validated in other studies, including Laschinger et al. (2015). Interpersonal strain has been shown to be positively associated with burnout while also remaining distinct from emotional exhaustion and cynicism (Borgogni et al., 2012; Laschinger et al., 2015).

Burnout has been recognized as a job hazard for the helping professions, such as nursing, for decades (Maslach & Leiter, 2016). Burnout can negatively influence judgment, cognitive function, and decision-making abilities and can also makes nurses less effective at the bedside, leading to unsafe care (Iacono, 2010). Within mental health nursing, burnout may result in emotional avoidance behaviours at work consistent with the concept of interpersonal strain such as medicating a patient with anxiety, rather than engaging in talk therapies and encouraging use of coping skills (Jenkins & Elliott, 2004). Within mental health nursing, emotional exhaustion may present through nurses who feel mentally drained and unable to engage in an emotional, therapeutic conversation. Similarly, nurses experiencing feelings of cynicism may feel the patient would not benefit from conversation and it would be a waste of time; and lastly, interpersonal strain may prevent the nurse from initiating a conversation with a patient or engaging only superficially but without an appropriate therapeutic connection. Alternatively, nurses who are not experiencing feelings of burnout would engage in their work leading to good quality of care for their patients. Therefore, it is logical that lower levels of emotional

exhaustion, cynicism, and interpersonal strain (i.e., burnout) would lead to better quality of patient care delivered by mental health nurses.

Nurse-assessed quality of patient care. Quality of patient care has typically been defined by patient outcomes, such as mortality and complication rates, and patient satisfaction with the practice of nursing care delivered (McHugh & Stimpfel, 2012). However, McHugh and Stimpfel (2012) have noted that nurses are in an ideal position to comment on the quality of care that patients receive. Nurses work all hours of the day, have continuous interactions with patients, and are involved in all aspects of care through communication with other members of the interdisciplinary healthcare team. Nurse-assessed quality of care is comparable to measures of patient outcomes and satisfaction, as nurses are equally likely to admit dissatisfaction with care as patients or their families (Aiken et al., 2001; McHugh & Stimpfel, 2012). As nurses are easily accessible and convenient to survey, this method of assessing quality of care has become common practice over the past 20 years and has been determined to be an effective indicator of quality of care (Aiken et al., 2001; McHugh & Stimpfel, 2012).

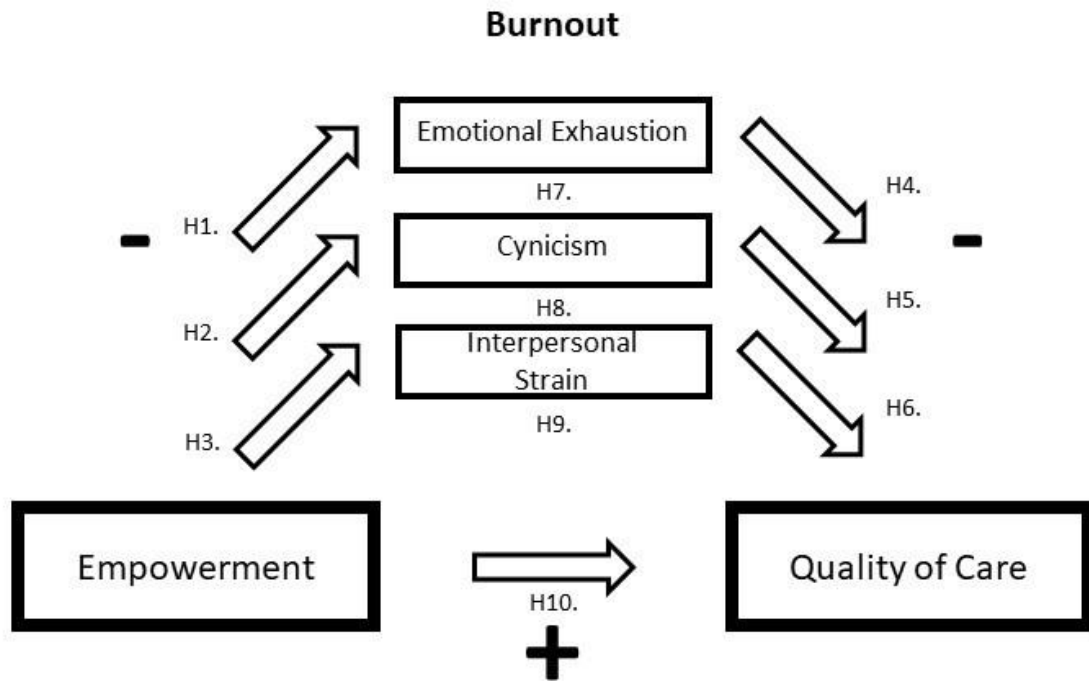
According to Jenkins and Elliott (2004) and McTiernan and McDonald (2015) organizational stressors have previously been identified as a large contributor to high levels of burnout, which has subsequently been related to poorer quality of patient care (Laschinger et al., 2001). The research evidence to date suggests that burnout among nurses is an important factor influencing the quality of patient care. However, further research is required to examine this relationship within the context of mental health nursing.

Statement of the Problem

The high risk of burnout among mental health nurses because of the imbalance between their highly demanding jobs and lack of resources to be able to do their work properly is a significant problem in health care. This imbalance can impact the mental health of the nurses themselves (Munro et al., 1998) and lead to poorer quality of care including improper treatment of patients and adverse events (Laschinger et al., 2001).

Research in other specialties of nursing, as well as nursing in general, has shown a connection between structurally empowering work environments, burnout, and quality of patient care, however no research has been dedicated to the mental health nursing population despite acknowledgement that this work environment differs greatly from other areas of nursing. This study aims to address the gap in knowledge about this unique population's work environment to determine the association between structural empowerment and burnout in mental health nurses and the quality of patient care they deliver, as well as to assess if burnout mediates the effects that structural empowerment has on quality of patient care. Theoretically, within the JD-R model, structural empowerment is conceptualized as a job resource that would balance the high job demands of mental health nursing to reduce rates of burnout and improve quality of patient care. This study uses the JD-R model by Demerouti, Bakker, Nachreiner, and Schaufeli (2001) as a guiding theoretical framework to test a model examining the associations of structural empowerment on job burnout and the subsequent quality of care that patients receive. Figure 1 provides an overview of the conceptual model for the study.

Figure 1
Hypothesized Model



Hypotheses.

Hypothesis 1: Structural empowerment will have a negative association with emotional exhaustion, such that higher levels of structural empowerment will result in lower levels of emotional exhaustion.

Hypothesis 2: Structural empowerment will have a negative association with cynicism, such that higher levels of structural empowerment will result in lower levels of cynicism.

Hypothesis 3: Structural empowerment will have a negative association with interpersonal strain, such that higher levels of structural empowerment will result in lower levels of interpersonal strain.

Hypothesis 4: Emotional exhaustion will have a negative association with quality of patient care, such that higher levels of emotional exhaustion will result in lower quality patient care.

Hypothesis 5: Cynicism will have a negative association with quality of patient care, such that higher levels of cynicism will result in lower quality patient care.

Hypothesis 6: Interpersonal strain will have a negative association with quality of patient care, such that higher levels of interpersonal strain will result in lower quality patient care.

Hypothesis 7: Structural empowerment will have a positive indirect association with quality of patient care, mediated by emotional exhaustion. That is, higher levels of structural empowerment will result in lower levels of emotional exhaustion, resulting in higher quality of care.

Hypothesis 8: Structural empowerment will have a positive indirect association with quality of patient care, mediated by cynicism. That is, higher levels of structural empowerment will result in lower levels of cynicism, resulting in higher quality of care.

Hypothesis 9: Structural empowerment will have a positive indirect association with quality of patient care, mediated by interpersonal strain. That is, higher levels of structural empowerment will result in lower levels of interpersonal strain, resulting in higher quality of care.

Hypothesis 10: Structural empowerment will have a direct positive association with quality of patient care.

Rationale for hypotheses. Mental health nurses working in structurally empowering work environments have access to four pillars of resources that empower

them to accomplish their work: information, support, resources needed to do the job, and opportunities to learn and grow (Laschinger & Fida, 2015). Emotional exhaustion would logically be reduced through structural empowerment, as adequate job resources could lessen the feeling of wearing out or fatigue. For example, access to adequate staffing (resources) and teamwork (support) could lighten the nurse's emotional workload through proper patient assignment and delegation of tasks (Hypothesis 1). Similarly, professional development (opportunities) and advanced knowledge (information) could lessen cynical or negative attitudes toward work through autonomy and inclusion in patient care decisions, as nurses could feel like their work has meaning and as though they are making a difference (Hypothesis 2). Access to adequate staffing or technology (resources) could also reduce interpersonal strain by allowing appropriate time to develop interpersonal relationships through efficiency and better time allocation (Hypothesis 3).

Nurses suffering from burnout are more likely to make poor decisions, especially when emotionally exhausted (Iacono, 2010; Jenkins & Elliott, 2004); therefore emotional exhaustion will result in a decreased quality of patient care through poor decision making from emotional depletion (Hypothesis 4). Cynicism will result in poor quality of care because the job will not feel meaningful leading to disengagement from work duties and patient care (Hypothesis 5). Interpersonal strain will also result in decreased quality of care as nurses will withdraw from demanding social situations at work such as therapeutic relationships with patients, their families, or members of the interdisciplinary team, preventing quality, holistic patient care (Hypothesis 6).

As outlined in hypotheses 1-3, it is hypothesized that empowering work conditions will reduce burnout; and as per hypotheses 4-6, burnout will lead to poorer

quality of patient care. Therefore, emotional exhaustion, cynicism, and interpersonal strain should mediate the relationship between structural empowerment on quality of patient care (Hypotheses 7, 8, 9). Similarly, patient care would likely improve directly from structurally empowering workplaces. Access to information allows for holistic care; support from team members and management allows opportunities for collaboration and assistance; having the resources needed to do the job such as adequate time, supplies, and equipment allows a nurse to take care of a patient appropriately; and opportunities to learn and grow allow that nurse to bring further knowledge to the bedside. This is particularly important in mental health nursing because of the daily, in-depth therapeutic conversations had with patients. Patient education and engagement in therapies are interactions that are intense in time and emotional energy, and are common methods of treatment to promote the use of coping skills rather than the over-use of medication (Jenkins & Elliott, 2004). Therefore, it is proposed that structural empowerment would have a direct positive association with patient care quality in mental health settings (Hypothesis 10).

Chapter 3: Methods

This chapter will outline the methods for the study including the study design, sample, sampling approach, and validated questionnaires used to measure the main study variables. In this chapter I will also review methods of recruitment and data collection, as well as discuss the initial analysis plan and the revised analysis plan due to the small sample size. This chapter begins to note the limitations of the small sample size however there is potential that the findings from this study could be used to guide future research and act as a pilot study.

Design

A cross-sectional survey of practicing mental health nurses working in New Brunswick, Canada, was conducted.

Sample and Setting

Inclusion criteria for participants began with staff RNs across New Brunswick, Canada, who work in a mental health specialty area. This included acute and chronic care settings such as hospitals, community clinics, and long-term care facilities. RNs could speak either French or English, and work for either regional health authority (Horizon Health Network or Vitalité Health Network), or for an independent company. Nurse managers and administrators were excluded from this study as it was aimed at RNs providing direct patient care. RNs who noted psychiatry/mental health as their primary area of employment on their 2020 registration were invited to participate in this study through a recruitment email through the Nurses Association of New Brunswick (NANB). NANB estimated 460 potential participants would be reached through this email link,

however the final usable response rate led to a small sample size of 38 participants. This altered the intended method of analysis (structural equation modeling) as is outlined in greater detail later in this chapter under the data analysis subheading.

Instruments

A survey comprised of demographic questions and validated questionnaires was used to test the hypothesized model (see Appendix B). Demographic questions included gender, age, employer, level of education, position classification, employment status, care setting, years of experience in nursing, years of experience in mental health, and years of experience in current position. This questionnaire was available in both French and English. The English version of the demographic questionnaire was translated into French by a bilingual, Francophone, New Brunswick researcher.

Structural empowerment. The English and French versions of the Conditions of Work Effectiveness-II (CWEQ-II) were used to measure levels of structural empowerment (Doré et al., 2018; Laschinger et al., 2001). This instrument includes 21 questions about access to information, support, resources, professional development, rewards, and flexibility. It uses a 5-point Likert scale (1 = none, 5 = a lot) to determine how much access to each empowerment structure is available in the workplace. Internal consistency for the CWEQ-II has been consistently reported at a Cronbach's alpha of 0.86-0.97 in both French and English (Bernardino et al., 2013; Doré et al., 2018; Laschinger et al., 2001) and in this study was measured at 0.76 for the English version, and 0.81 for the French version. Validity of this scale has been shown through good model fit and fit of statistics as reported by Laschinger et al. (2001).

Burnout. The English and French versions of the Maslach Burnout Inventory (MBI) were used to measure emotional exhaustion and cynicism (Dion & Tessier, 1994; Maslach et al., 1996). The MBI contains 5 questions related to emotional exhaustion and 5 items for cynicism rated on a 7-point Likert scale (0 = never, 6 = daily) to assess the frequency of experiencing these work-related feelings. Interpersonal strain was measured using 6 questions from Borgogni (2012), rated using the same 7-point Likert scale as the MBI (0 = never, 6 = daily). According to Borgogni's study (2012), these burnout measures have reported Cronbach's alpha estimates of .91 for emotional exhaustion, .81 for cynicism, and .86 for interpersonal strain; the English version in this study found .92 for emotional exhaustion, .90 for cynicism, and .83 for interpersonal strain. Internal consistency for the French translation of the MBI is .90 for emotional exhaustion and .79 for cynicism (Dion & Tessier, 1994); the French version of this study found .95 for emotional exhaustion and .87 for cynicism. This is the first known use of French items for the interpersonal strain scale; the English items were translated into French by a bilingual researcher and in this study Cronbach's alpha for this scale was .88. Validity for Borgogni's interpersonal strain scale has previously been demonstrated by Borgogni et al. (2012) through confirmatory factor analysis showing good psychometric properties, distinctiveness from other measures of burnout, and generalizability of the scale.

Nurse-assessed quality of care. Nurse-assessed quality of patient care was measured using a single-item question originating from McHugh and Stimpfel (2012) as influenced by Aiken et al. (2001), "How would you describe the quality of nursing care delivered to patients on your unit?". This question is on a 4-point Likert scale (1 = poor to 4 = excellent) and has been associated with patient outcomes and satisfaction

(McHugh & Stimpfel, 2012), and has been compared internationally in five countries by Aiken et al. (2001) with consistent findings. Quality of patient care was previously translated into French by Dr. Heather Laschinger and her team for their own research (personal communication, E. Read, May 2019).

Recruitment and Data Collection Procedures

According to NANB, there were over 400 RNs who identified as working in mental health in New Brunswick in 2020. Participants were recruited through an e-mail sent by NANB to all RNs who met the inclusion criteria previously outlined. Data was collected using an online survey through the Qualtrics platform (*Qualtrics, 2020*). The initial e-mail was sent Tuesday, February 25, 2020, and a reminder e-mail was sent two weeks later on March 10, 2020. The e-mail invitation (Appendix C) was written in both English and French and included a web link leading to the survey, beginning with the letter of information (Appendix A); the French invitation indicated a drop-down language menu would be available on the first webpage to appear when opening the link. Access to the survey was granted only after consent was provided, and participants who did not give consent were exited from the survey. The survey was open until midnight March 24, 2020, to give a four-week completion period from the initial recruitment e-mail. Participants who completed the online survey were given the opportunity to submit their name for a draw for a \$100 CAD Amazon gift card. Participants were asked to directly e-mail the primary researcher to convey interest in being added to the draw; by using a separate e-mail for this incentive the primary researcher was not able to link their personal information to their online survey responses on Qualtrics.

Data Analysis

The intention of this study was to test the hypothesized links between empowerment, burnout, and quality of care. The three dimensions of burnout (emotional exhaustion, cynicism, and interpersonal strain) were modeled as mediators between structural empowerment and quality of care. Mediation refers to a variable's effect on the relationship between the dependent and outcome variables (Preacher & Hayes, 2004); in this study, we tested the extent that the dimensions of burnout account for the relationship between structural empowerment and quality of care.

Descriptive Statistics. Data screening and descriptive statistics including frequencies, means, standard deviations skewness, and kurtosis were conducted on demographic and main study variables as appropriate using SPSS. Pearson's r correlation coefficients were calculated to examine relationships between main study variables. Scale reliabilities were calculated using Cronbach's alpha for each instrument.

Model testing: Initial analysis plan. The initial plan was to conduct structural equation modeling (SEM) to test the hypothesized model. SEM is a linear statistical test that allows for complex, multivariate models to be analyzed. It is comparable to other linear tests used to predict or understand variable relationships, however has a key advantage of being able to test multi-measurement, or dimensional, constructs (Weston & Gore, 2006). SEM also allows for the testing of mediation, the analysis of three or more variables with a causal relationship between all three, either directly or indirectly (Weston & Gore, 2006). This method would have provided the most robust statistical analysis because burnout is a multidimensional construct comprised of emotional exhaustion, cynicism, and interpersonal strain. It also had the benefit of testing the

construct of structural empowerment for mediating relationships with the dimensions of burnout on quality of patient care in a single analysis. However, a sample size of 150-200 participants is recommended for this method of analysis (Anderson & Gerbing, 1988; Weston & Gore, 2006) which this study was not able to meet.

With less than 475 eligible RNs in NANB's registry working in mental health to survey, plans were tentatively made for further recruitment of participants through presentations to mental health services across the province should response rates from the initial recruitment through NANB be too low for this method of analysis. Unfortunately, the initial online survey was available from February 25th through March 24th, 2020, during the declaration of the global pandemic COVID-19. After several months, the pandemic showed no sign of quick recovery, and it was decided that further recruitment would not be realistic or ethical on an already unduly stressed RN population. Therefore, this initial analysis plan was revised to best fit the data obtained between February and March 2020, acknowledging that another method of data analysis would be required and limitations to the study would be evident.

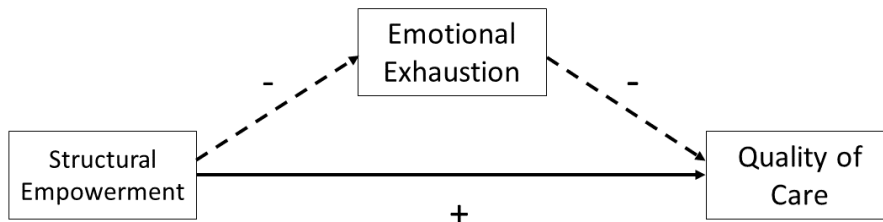
Model testing: Revised analysis plan. As the intended sample size was not reached due to low response rates and a premature end to data collection caused by the COVID-19 pandemic, multiple linear regression analyses were conducted instead of the initially planned structural equation modeling approach to allow for more statistical power. Multiple linear regression using the PROCESS macro was the most appropriate alternative to SEM, as my model included three mediator variables and this approach analyzes the effects of both the independent and mediator variables simultaneously (Hayes, 2013). Multiple linear regression also has the ability to quantify partial

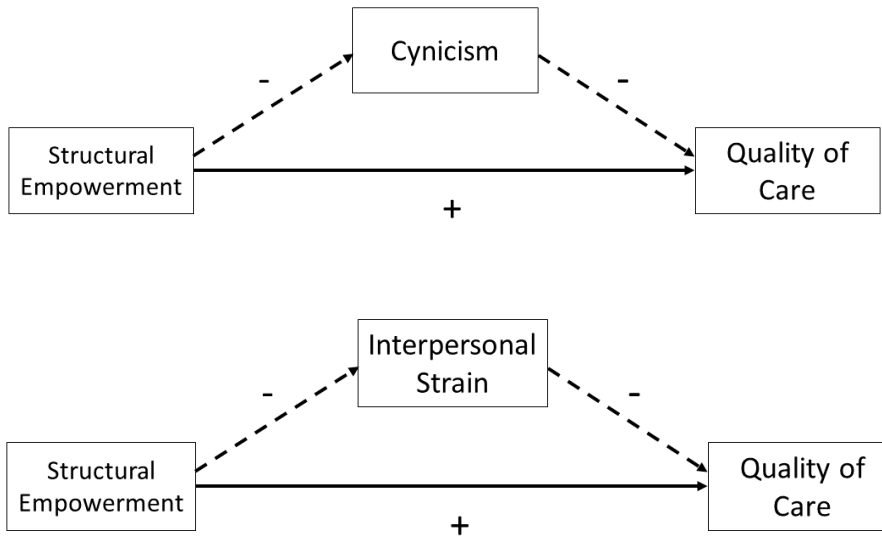
associations between the independent and outcome variables in relation to other variables in the model, meaning it has potential to allow the researcher to determine if there are other possible explanations or confounding factors contributing to their findings; this helps prevent false claims of causality (Hayes, 2013). The inability to prove causality and only show associations or relationships between variables is the greatest limitation to this statistical approach (Hayes, 2013). In addition, whereas SEM allows for the analysis of multiple mediators, using the PROCESS macro in SPSS only allows for the analysis of one mediator at a time, therefore a separate model was run to test the mediating effect of each component of burnout.

The hypothesized relationships between structural empowerment, burnout, and nurse-assessed quality of patient care were tested using three separate multiple linear regression models using the PROCESS Macro (model 4) by Andrew Hayes (2013). Data was analyzed using SPSS version 21 (IBM Corp., 2012). The three statistical models are depicted in Figure 2.

Figure 2

Statistical Models





Note: The solid line represents the *direct* association of structural empowerment with quality of care. The dotted line represents the *indirect* association of structural empowerment with quality of care mediated by burnout.

Power Analysis. GPower (Faul et al., 2009) was used to calculate the number of participants needed to conduct linear regression analysis and determine if there was sufficient power to test my hypotheses with my small sample. To achieve 90% power for a one-tailed multiple linear regression analysis for an effect size, f^2 , of 0.15, with an alpha of .05 and two predictor variables, a sample size of 59 participants would have been required. The total usable sample size of 38 did not meet this requirement for high statistical power, however due to the acuity of the COVID-19 pandemic, I decided it was unrealistic to continue with recruitment and continued my study through a small sample size with weaker power, acknowledging that this was a great limitation and further research would be needed in the future to support any findings I may have.

Protection of Human Rights

Ethical approval was obtained prior to participant recruitment and data collection through the Research Ethics Board of the University of New Brunswick and can be referenced as file REB#2020-003. The letter of information included within the survey was used to convey all risks and benefits associated with participation in the study prior to consent (Appendix A). This letter also outlined how confidentiality continues to be maintained, including the use of anonymity and secured information through locked computers for electronic information. Regarding the prize draw, the winner was chosen by random draw and received electronic delivery of the Amazon gift card, therefore only the provided e-mail address was needed. Once the prize was delivered, I deleted all names and emails sent from participants who wanted to be included in the prize draw.

Chapter 4: Results

The following chapter outlines the results of the study. An overview of the characteristics of the sample, along with the response rate for the survey is provided. Descriptive statistics, scale reliabilities, and correlations are provided for the main study variables: structural empowerment, emotional exhaustion, cynicism, interpersonal strain, and nurse-assessed quality of patient care. The results of the simple mediation analyses, including both direct and indirect relationships, are also provided.

Participants

As noted within the previous chapter, data collection occurred through online survey links sent by e-mail to all nurses who identified their primary area of employment as psychiatry/mental health nursing during their 2020 annual registration with the regulatory body, NANB. NANB estimated 460 potential participants would be reached through this email link. Fifty-four responses to the survey were recorded at the end of the four-week survey period. Thus, the overall response rate was 11.74%.

I decided with a survey of 39 questions that greater than two missing values per survey (more than 5%) could have a detrimental effect with such a small sample size, as less than 5% of missing values has previously been considered to be inconsequential (Schafer, 1999). Of the 54 responses, 14 were unusable as they were largely incomplete, with only one to two questions answered at the beginning of the survey. An additional participant with 7 missing values (18%) was excluded for having too much missing data. Of the remaining 39, one participant was removed as they noted their position as “Nurse Manager”, despite the exclusion criteria within the letter of information stating nurse

managers and supervisors would not be included. This led to a total of 38 participants' data being utilized for analysis, for a useable response rate of 8.26%. This small sample size is acknowledged as a limitation of this study, and further research on this topic would benefit from a larger sample size to test mediation relationships using SEM.

Descriptive Statistics

Missing data. Four participants did not answer one of the questions within the CWEQ-II scale: three within the subscale of access to information, and one within the subscale of access to resources. Each of these subscales has three items. These missing values were left blank, and the averages of the reported items were used to calculate the subscale scores of the CWEQ-II for these participants. Missing values within the demographic questions were left blank. Gender, age and years of experience in mental health nursing are all noted at $n = 37$.

Participant characteristics. As noted in Table 1 below, only 89% of participants were female; this is lower than expected as 94% of the general nursing population in New Brunswick is female (Nurses Association of New Brunswick, 2018). Fifty-eight percent of participants worked for the health authority Horizon Health Network, and 84% held full time positions. Seventy-four percent of participants held a bachelor's degree and 84% worked as staff nurses. Participants worked in a variety of care settings, with the majority closely divided between community (45%) and inpatient (42%) settings, although forensics accounted for another 5% and "other", noted as Emergency Room Mental Health and Mobile Crisis Response teams, accounted for 8%.

Table 1***Participant Characteristics***

	n	%
Gender (n=37)		
Male	3	8.1
Female	33	89.2
Non-Binary	1	2.7
Language		
English	27	71.1
French	11	28.9
Employer		
Horizon	22	57.9
Vitalité	14	36.8
Other	2	5.3
Level of Education		
Diploma	6	15.8
Bachelor's Degree	28	73.7
Master's Degree	4	10.5
Position		
Staff nurse	32	84.2
Charge nurse	4	10.5
Other	2	5.3
Employment Status		
Full Time	32	84.2
Part Time	6	15.8
Care Setting		
Inpatient	16	42.1
Community	17	44.7
Forensics	2	5.3
Other	3	7.9

Language. Table 1 also includes the language in which the participants responded. Although most responses were in English (71.1%), 11 of 38 participants responded in French (28.9%). This is consistent with the proportion of English and French first-language speakers in the province of New Brunswick (*Statistics Canada*, 2017) . Table 2 below compares demographics by language.

Frequencies of gender and employment status remain similar between languages, however participants who responded in English were more likely to work in the English health authority of Horizon Health Network, while those who responded in French are more likely to work in the French health authority, Vitalité. Both French and English participants were most likely to have a bachelor's degree, however 81.8% of those who responded in French hold bachelor's degrees while only 70.4% of their English counterparts did; additionally, 11.1% of English participants and 9.1% of French participants hold Master's degrees. All charge nurses responded in English and both participants who stated their position as "other" responded in French while over 80% of participants were staff nurses. The greatest difference between French and English respondents was within care setting, as the majority of those who responded in English work in community settings (48.1%), while most of those who responded in French worked in inpatient settings (63.6%); also, forensics and emergency mental health and mobile crisis noted as "other" settings only had responses in English.

With a small sample size in each language subgroup, the minimum expected count of 5 responses per subcategory was not met, therefore the sample size was too small to test for meaningful differences (IBM Corp., 2012). The one statistically significant finding was a relationship between language and nursing position held ($p = .04$), however there is no obvious explanation for this, and the expected count continues to have less than five responses per subcategory, leaving this significant finding unreliable.

Table 2*Language Comparison for Demographic Variables*

Variable	English (n=27)		French (n=11)		Chi-square Test	
	n	Percent	n	Percent	χ^2	p-value
Gender					.44	.80
Male	2	7.4	1	9.1		
Female	24	88.9	10	90.9		
Non-Binary	1	3.7	0	0.0		
Employer					2.55	.28
Horizon	17	63.0	5	45.5		
Vitalité	8	29.6	6	54.5		
Other	2	7.4	0	0.0		
Education					.61	.74
Diploma	5	18.5	1	9.1		
Bachelor's	19	70.4	9	81.8		
Master's	3	11.1	1	9.1		
Position					6.55	.04
Staff RN	23	85.2	9	81.8		
Charge RN	4	14.8	0	0.0		
Other	0	0.0	2	18.2		
Employment Status					.07	.80
Full Time	23	85.2	9	81.8		
Part Time	4	14.8	2	18.2		
Care Setting					3.98	.26
Inpatient	9	33.3	7	63.6		
Community	13	48.1	4	36.4		
Forensics	2	7.4	0	0.0		
Other	3	11.1	0	0.0		

Correlations. Table 3 shows Pearson r correlations between key study variables and the reliability of each scale; this study found 20 significant correlations ($p < .05$). Age and years as an RN were very highly correlated ($r = .86$). Age was also positively correlated with years in mental health nursing ($r = .44$), and years in current position ($r = .54$). There were also positive correlations between years as an RN and years in mental health nursing ($r = .54$), and years in current position ($r = .48$). Finally, there was a positive correlation between years in mental health nursing and years in current position ($r = .55$). One demographic characteristic, years as an RN, was also significantly inversely correlated with interpersonal strain ($r = -.34$).

In terms of correlations between study variables, there were positive correlations between total structural empowerment and its subscales: access to opportunities to learn and grow ($r = .60$), information ($r = .72$), support ($r = .57$), and resources ($r = .66$). Interesting to note is also the positive correlation between two of the subscales, access to opportunities and access to resources ($r = .47$).

Like structural empowerment, the components of burnout showed positive correlations with each other including emotional exhaustion and cynicism ($r = .71$), emotional exhaustion and interpersonal strain ($r = .71$), and cynicism and interpersonal strain ($r = .71$).

Inverse correlations were found between total structural empowerment and cynicism ($r = -.48$), access to opportunities and cynicism ($r = -.42$), and access to support and cynicism ($r = -.41$). Lastly, there were inverse relationships between access to information and interpersonal strain ($r = -.36$), and between interpersonal strain and quality of care ($r = -.39$).

Scale reliabilities are also shown on the diagonal of Table 3. Total structural empowerment (.76) and access to resources (.77) showed good reliability; access to information (.82), cynicism (.89), and interpersonal strain (.88) show better reliability; and emotional exhaustion shows strong reliability (.92). Scale reliabilities are also compared between languages of response in Table 4. When compared, the internal consistency of this study's scales in French scored slightly better for total structural empowerment (.81 French to .76 English), access to information, (.88 French to .78 English), and interpersonal strain (.94 French to .83 English). Results were also comparable for access to resources (.77 English to .74 French), emotional exhaustion (.95 French to .92 English), and cynicism (.90 English to .87 French).

Table 4 also shows the independent t-test comparison of language on main study variables. There were no statistically significant differences in responses between languages as means were similar across all variables.

Table 3***Correlations and Reliabilities***

		M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1	Age (n = 37)	47.08	11.54	-											
2	Years as RN	21.37	12.22	.86**	-										
3	Years as MHN (n=37)	14.70	10.60	.44**	.54**	-									
4	Years in Position	7.37	6.94	.54**	.48**	.55**	-								
5	Empowerment	10.69	2.14	-.24	-.09	.03	-.08	.76							
6	Opportunity	3.42	0.68	-.11	.01	-.29	-.29	.60**	.59						
7	Information	2.41	0.93	-.20	-.04	.17	.10	.72**	.23	.82					
8	Support	2.46	0.80	-.11	-.02	.25	-.04	.57**	.10	.30	.64				
9	Resources	2.39	0.77	-.09	-.04	-.20	-.04	.66**	.47**	.20	.13	.77			
10	Emotional exhaustion	4.12	1.59	.04	-.06	-.01	.23	-.18	-.12	-.12	-.20	-.07	.92		
11	Cynicism	3.28	1.69	.01	-.12	.00	.19	-.48**	-.42**	-.30	-.41*	-.14	.71**	.89	
12	Interpersonal Strain	2.46	1.28	-.19	-.34*	-.27	.04	-.30	-.24	-.36*	-.16	-.02	.71**	.71**	.88
13	Quality Care	2.29	0.61	.13	.12	.01	.09	.28	.29	.32	.07	.01	-.28	-.32	-.39*

*significance at 0.05 (two-tailed)

** significance at 0.01 (two-tailed)

Note: Cronbach's alphas for each scale (English-language version) are on the diagonal

Table 4*Independent t-test comparison of main study variables by language (English/French)*

Variable	English (n = 27)			French (n = 11)			t-value	p-value
	Mean	SD	α	Mean	SD	α		
Age (Years)	47.96	10.84		45.00	13.36		.65	.53
Years as RN	22.41	11.57		18.82	13.93		.76	.46
Years as MHN	15.81	10.69		12.09	10.43		.98	.34
Years in Position	7.78	7.66		6.36	4.93		.68	.51
Quality of Care	2.81	0.56		2.45	0.69		1.54	.14
Structural Empowerment	10.79	2.18	.76	10.44	2.11	.81	.46	.65
<i>Opportunities</i>	3.42	0.70	.58	3.42	0.67	.68	-.02	.96
<i>Information</i>	2.48	0.92	.78	2.24	0.98	.88	.69	.50
<i>Support</i>	2.59	0.78	.62	2.15	0.78	.61	1.58	.13
<i>Resources</i>	2.30	0.80	.77	2.62	0.68	.74	-1.28	.22
Burnout								
<i>Emotional Exhaustion</i>	4.06	1.59	.92	4.25	1.64	.95	-.34	.74
<i>Cynicism</i>	3.11	1.74	.90	3.69	1.56	.87	-1.00	.33
<i>Interpersonal Strain</i>	2.26	1.11	.83	2.94	1.58	.94	-1.51	.14

Multiple Linear Regression Results

The three hypothesized models were tested using the PROCESS macro by Andrew Hayes in SPSS (2013). The results are outlined in Table 5 and summarized in Figure 3, below. Overall, there was only one significant path within the three mediation models: structural empowerment had a significant direct relationship with cynicism ($\beta = -.32$, $t = -2.69$, $p = .01$, $R^2 = 16.7$). All remaining direct and indirect relationships were insignificant.

Table 5

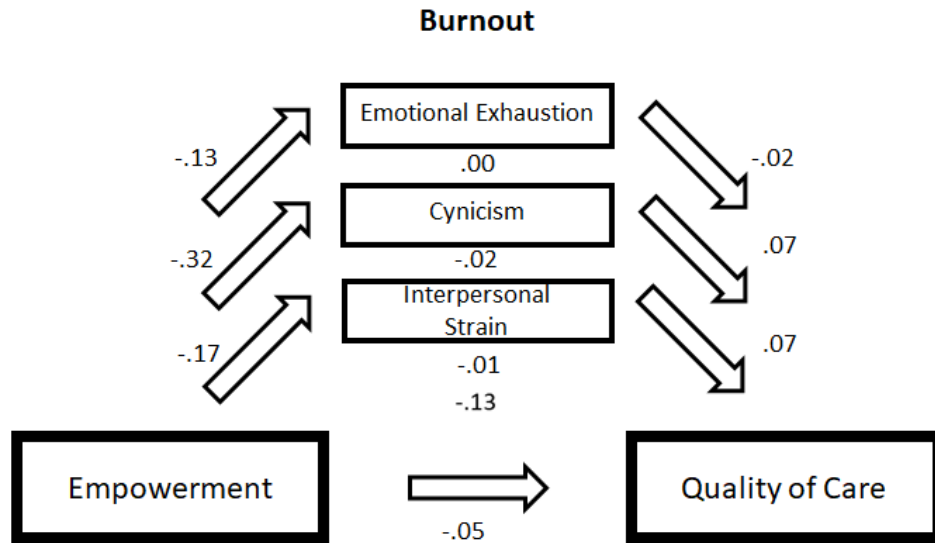
Regression Results

	β	<i>SE</i>	<i>t</i>	<i>p</i>	95% <i>LLCI</i>	95% <i>ULCI</i>
Structural Empowerment to Burnout						
<i>SE -> EE</i>	-.13	.12	-1.04	.31	-.37	.12
<i>SE -> Cyn</i>	-.32	.12	-2.69	.01**	-.57	-.08
<i>SE -> IPS</i>	-.17	.10	-1.73	.09	-.36	.03
Burnout to Quality of Patient Care						
<i>EE -> Care</i>	-.02	.10	-.20	.84	-.22	.18
<i>Cyn -> Care</i>	.07	.11	.61	.55	-.15	.28
<i>IPS -> Care</i>	.07	.11	.61	.55	-.16	.30
Structural Empowerment to Quality of Care						
<i>Direct Relationship</i>	-.05	.05	-.87	.39	-.15	.06
<i>Indirect Relationships</i>						
<i>SE -> EE -> Care</i>	.00	.02			-.53	.05
<i>SE -> Cyn -> Care</i>	-.02	.05			-.11	.10
<i>SE -> IPS -> Care</i>	-.01	.03			-.08	.03

Note: SE = Structural Empowerment, EE = Emotional Exhaustion, Cyn = Cynicism, IPS = Interpersonal strain, Care = Quality of Care, LLCI = Lower Limit Confidence Interval, ULCI = Upper Limit Confidence Interval, β = standardized beta coefficient, SE = standard error, t = t-value, p = p-value

Figure 3

Model Regression Results



Summary of Findings

In summary, correlational analysis identified 20 significant relationships between study variables. Comparison of language on study variables showed that there were no significant differences between responses from the English and French versions of the questionnaires. Scale reliabilities also remained fairly consistent between the English and French versions of the questionnaires. The ten hypotheses were tested using multiple linear regression and simple mediation analysis, however only the direct relationship between structural empowerment and cynicism was significant. Chapter five will further explore these findings and their implications.

Chapter 5: Discussion

Burnout has been a topic of interest in nursing for many years, even prior to the COVID-19 pandemic (Cox, 2021). Researchers have established significant relationships between burnout and nurses' working conditions (Bakker & Demerouti, 2014; Borgogni et al., 2012; Delaney, 2016; Halm, 2019). Many outcomes have been associated with poor working conditions and burnout including job satisfaction, attrition from the profession, and poor patient outcomes and quality of care (Copanitsanou et al., 2017; Laschinger & Fida, 2015; McHugh & Stimpfel, 2012; McVicar, 2016). In addition, past research has demonstrated that positive work environments characterized by structural and psychological empowerment, appropriate staffing ratios, social support, and leadership support play an important role in supporting employee health and wellbeing, including burnout prevention (Abhicharttibutra & Tungpunkom, 2019; Doré et al., 2018; Halm, 2019; Laschinger et al., 2013; Laschinger & Read, 2017). This chapter discusses the overall findings of this study examining the associations between structural empowerment, burnout, and quality of patient care among mental health nurses in New Brunswick, Canada, and acknowledges that differences have likely occurred over the past two years since data was collected, due to the nature of healthcare during the pandemic. Strengths and limitations of the study and recommendations for future research are also provided.

Overall, the results of this novel study add to the growing evidence linking structurally empowering work environments, burnout, and nurse-assessed quality of care. Although the study was underpowered, the results still showed significant inverse correlations between structural empowerment and cynicism, as well as between

interpersonal strain and nurse-assessed quality of care. Despite the small sample size, structural empowerment had a negative relationship with cynicism, suggesting that employees with access to the job resources they need to accomplish their work are less likely to feel pessimistic and skeptical about their job.

Descriptive Findings

In comparison to other studies of nurses in general, mental health nurses in this New Brunswick sample reported more negative experiences in their work environments. For example, in comparing total structural empowerment reported in this study (mean = 10.69) to that of the average of the general nursing sample in the study by Laschinger et al. (2019) (mean = 13.73), this study was notably lower. When comparing subscales within the CWEQ-II with findings from Laschinger et al.'s (2013) study, nurses in the current study also perceived having less access to opportunities (mean = 3.42 v. 3.98), information (mean = 2.41 v. 3.05), support (mean = 2.46 v. 2.94), and resources (mean = 2.39 v. 2.90). Similarly, a study of US mental health workers reported much higher levels of total structural empowerment (mean = 20.6) (Engström et al., 2015) compared to findings reported by mental health nurses in this study (mean = 10.69). This suggests that pre-pandemic mental health nurses in New Brunswick were not feeling very empowered at work.

In comparing burnout, rates of emotional exhaustion were higher in this study (mean = 4.12) than in three other studies measuring emotional exhaustion using the MBI with respective means of 3.38, 3.20, and 3.28 (Hamaideh, 2014; Laschinger et al., 2013, 2019). Nurses' cynicism was also significantly higher in this study (mean = 3.28) when

compared to previous studies by Leiter et al. (2018) (mean = 1.29), Laschinger et al. (2015) (mean = 1.60), and Rios-Risquez and Garcia-Izquierdo (2016) (mean =1.53). Lastly, interpersonal strain in this study was rated worse as well, with mean scores indicating feelings of strain ‘once a month’, while Laschinger et al (2015) found nurses in their sample had mean scores indicating these feelings ‘a few times a year’. This suggests that at the time of this study mental health nurses in this New Brunswick sample were suffering from greater burnout than previously reported by nurses in general.

Nurse-reported quality of care in this study was rated lower when compared with other studies conducted in Canada. For example, Laschinger et al. (2016) and Breau and Reaume (2014) found care to be rated as “good” by nurses in their samples, as opposed to “fair” in the current study. As these other studies looked at general samples of nurses (not just those working in mental health), the results of this study suggest that mental health nurses in this New Brunswick sample felt they are not able to give as good quality of patient care compared with those working in other nursing areas. However, due to the small sample size of the current study, it is important to interpret these findings with caution. Research on response bias has shown that often individuals with stronger feelings about a particular research topic are most likely to participate in research (Smith, 2012). There is also evidence to suggest that employees experiencing burnout are less likely to partake in research because they do not have the energy or motivation (Alexander et al., 2021).

In summary, based on the findings of this study in relation to the available literature dating pre-pandemic, New Brunswick mental health RNs were experiencing lower levels of structural empowerment and higher levels of burnout. Further research

with a more representative sample is required to examine New Brunswick mental health nurses' perceptions of structural empowerment and burnout post-pandemic.

Correlation Findings

The study results showed positive correlations between age, years as an RN, years in mental health nursing, and years in current position. These relationships are not surprising, as nursing experience in your specialty of choice and age increase with time. Interestingly, years as an RN was also inversely related to interpersonal strain; this is to say that as years of working in nursing increased, interpersonal strain decreased. This could be reasonably explained by experience and is similarly supported by Hameideh (2014) who noted an inverse relationship between moral distress in mental health nurses and years of experience in nurses in Jordan. However, these findings are not consistent across general nursing studies, as Laschinger et al. (2015) noted cynicism and interpersonal strain tend to develop after emotional exhaustion has been present for some time, and therefore interpersonal strain is more likely in experienced nurses. A possible explanation for these findings may be that because of the importance of interpersonal skills in mental health; mental health nurses develop and strengthen advanced interpersonal skills through their years of experience compared to nurses of other specialty areas.

Overall empowerment and its subscales were positively correlated, as would be expected by the scale's internal consistency. In addition, access to opportunities to learn and grow and access to resources had a strong positive correlation (.66) while all other subscales were not significantly related. This is inconsistent with findings from a

previous study of experienced nurses by Laschinger et al. (2013), where all subscales were significantly correlated except for opportunities to learn and grow and access to resources. These opposing findings may indicate differences between mental health nurses and a general RN sample or could be due to the small sample size in the current study.

The components of burnout (emotional exhaustion, cynicism, interpersonal strain) were also positively correlated to each other in this study. This finding is consistent with the work of Laschinger et al. (2015, 2019) which showed positive correlations between emotional exhaustion, cynicism, and interpersonal strain among new graduate RNs in Canada. Hanrahan et al. (2010) found significant relationships between emotional exhaustion and nurse-doctor conflict, and Jenkins and Elliott (2004) showed significance between both emotional exhaustion and cynicism with relationships/conflicts with other professionals. Despite different tools for data collection, across several studies, interpersonal relationship conflicts have shown significant relationships with emotional exhaustion.

Between scales, emotional exhaustion and structural empowerment were not significantly correlated in this study. This finding is corroborated by Laschinger et al. (2013) who also found no significant association between access to opportunities to learn and grow and emotional exhaustion. These findings otherwise differ from several studies including Laschinger et al. (2013, 2019) who found total structural empowerment significantly correlated with emotional exhaustion. Structural empowerment subscales also showed positive correlations with emotional exhaustion in other studies including Hanrahan et al. (2010) (access to leadership support), Jenkins and Elliott (2004) (access

to coworker support), and Laschinger et al. (2013) (access to information, support, and resources). These inconsistencies with my study may be due to the small sample size and future research would benefit from continuing to explore these relationships in New Brunswick mental health nurses.

Cynicism, however, was found to have a moderate inverse relationship to total structural empowerment (-.48), opportunities to learn and grow (-.42), and access to support (-.41) in this study. Simply put, nurses are less likely to be irritable, contemptuous, or pessimistic about their work when they are empowered to do their jobs with adequate resources. In particular, mental health nurses who felt that they are supported and have opportunities for professional development and growth seemed to be less likely to feel cynical towards their job. Laschinger et al. (2019) found the same results between total structural empowerment and cynicism, and Abhichartibutra and Tungpunkom (2019) and Laschinger et al. (2013) between empowerment and depersonalization; Laschinger et al. (2013) also found significant relationships between all four subscales of structural empowerment and depersonalization. As Maslach and Leiter (2016) stated that cynicism may be more core to burnout than emotional exhaustion, it would be interesting to see other studies use the updated MBI general survey to allow for more direct comparisons.

Between scales, interpersonal strain was shown to decrease as access to information increased in this study. Information sharing is defined as open communication of patient management goals in a timely manner and requires multidisciplinary interpersonal communication (Laschinger et al., 2019). Interpersonal strain was also the only component of burnout to have a moderate inverse correlation

with quality of patient care. This finding suggests that as interpersonal demands on the nurse increase, quality of patient care decreases. As the nature of mental health nursing involves a strong focus on therapeutic communication and interpersonal strain is particularly relevant for professions where interactions are imperative, such as mental health nursing (Borgogni et al., 2012; Edward et al., 2017; Laschinger et al., 2015), interpersonal strain could lead to avoiding patient interactions, leading to poor quality of care. As Borgogni's scale for interpersonal strain has yet to be widely used, this study is the first known to correlate interpersonal strain as a construct of burnout with quality of patient care.

Regression Analysis Findings

The results of the regression analysis were unable to provide support for nine of the ten hypotheses. This study did not find structural empowerment to decrease emotional exhaustion (hypothesis 1) or interpersonal strain (hypothesis 3). These findings are inconsistent to previous research, as in general, structural empowerment has been inversely associated with burnout across several studies (Boamah et al., 2017; Laschinger et al., 2010, 2013), although Hanrahan et al. (2010) found no significant relationship between burnout and work environment or burnout and nurse-physician relationships. Structural empowerment also had no significant direct association to quality of care in this study (hypothesis 10); however Laschinger et al. (2016) and Breau and Reaume (2014) found support for positive associations between these two variables, with Breau and Reaume noting 20% of variance in quality of care could be accounted for by structural empowerment.

This study also did not find emotional exhaustion, cynicism, or interpersonal strain to decrease the perceived quality of patient care being delivered by mental health nurses in New Brunswick (hypotheses 4-6). This is supported by Hanrahan et al. (2010) who also found no significance between burnout and quality of care, however the literature is inconsistent, as Boamah et al. (2017) found that burnout was inversely associated with quality of patient care.

Lastly, the mediation analyses did not find that structural empowerment could indirectly increase patient care quality when mediated through burnout (hypotheses 7-9). In previous studies with general samples of nurses, structural empowerment has been shown to have an indirect positive association with quality of care when mediated by burnout (Boamah et al., 2017), the practice environment (Laschinger, 2008), and short staffing (Laschinger et al., 2015).

One finding, however, provided support for the remaining hypothesis: structural empowerment has an inverse relationship with cynicism (hypothesis 2), meaning as structural empowerment increased, cynicism decreased in our sample of mental health nurses in New Brunswick. This finding is consistent with previous research showing inverse associations between structural empowerment and burnout in general (Boamah et al., 2017; Laschinger et al., 2010, 2013) and structural empowerment and depersonalization (Abhicharttibutra & Tungpunkom, 2019). Laschinger et al. (2019) also found structural empowerment to directly affect cynicism, and suggested addressing issues within the work environment, particularly decreasing workload and increasing nurse autonomy. This finding provides initial evidence that mental health nurses in New Brunswick are finding their organizations are not empowering them to do their jobs well,

which is related to increased cynicism among them; it is time for organizations to do their part in preventing burnout by providing nurses the means needed to do their jobs effectively.

Language of survey

Comparisons were made between those who responded to the survey in English and in French. In general, no significant differences were found based on language of response, which provides additional support for the use of the French versions of the CWEQ-II, MBI, and interpersonal strain questionnaires, and nurse-assessed quality of care question. However, further research on this is required, as this was a post-hoc analysis and there were uneven groups and small case counts across categories

Implications for Practice

Mental health nursing is a highly demanding and emotionally draining job (Edward et al., 2017; Sahraian et al., 2008). The findings of this study provide evidence that before the COVID-19 pandemic began in March 2020 some mental health nurses in New Brunswick were experiencing low levels of structural empowerment at work, accompanied by high levels of burnout, and perceived the quality of care on their units to be mediocre. It is important to note, however, that due to the significant sample size limitation in this study and the timing (pre-pandemic) implications for practice require corroboration with further research and support before any implementation would be recommended.

McVicar (2016) has suggested both organizational and individual changes that can improve the management of work stress. Organizations can offer resources to combat

the demands of mental health nursing to prevent burnout and support quality patient care delivery. In following Kanter's theory of structural empowerment (Kanter, 1977), for example, creating various mediums of communication for employees such as e-mails, websites, or newsletters, creates opportunities to access information; training leadership to coach staff through timely feedback and recognition offers access to support; adequate time, supplies, and obtaining funding for equipment provides access to physical resources; and encouraging professional development and advanced training allows for opportunities to learn and grow (Laschinger et al., 2014).

Organizations can also provide support to ensure nurses are equipped with personal resources to prevent burnout, such as positive coping skills, psychological capital, and routine self-care practices (Bakker & Demerouti, 2014). Coping skills could include high emotional intelligence, such as self-awareness, which is considered a protective factor against burnout (Bakker & Demerouti, 2014; López-López et al., 2019). Psychological capital refers to the self-efficacy, optimism, hope, and resiliency of the individual nurse to protect their own health (Laschinger et al., 2019). Finally, self-care techniques such as relaxation, exercise, or counseling (Bakker & Demerouti, 2014) are thought to be beneficial for nurses mental health and wellbeing. However, even nurses with great personal resources cannot constantly withstand continuous exposure to harsh working conditions (Hanrahan et al., 2010). Positive work environments are more important in preventing burnout than personal characteristics (Konstantinou et al., 2018) and organizations need to take responsibility to make changes to prevent burnout (López-López et al., 2019).

Previous research has shown the influence of structural empowerment on burnout, and this study further supports that structural empowerment can reduce cynicism at work. Nurses who are empowered are more likely to follow a path of job motivation versus health impairment and actively engage in their role (Demerouti et al., 2000). In mental health practice, for example, engaged and empowered community mental health nurses could prevent a relapse for a patient with a proper assessment. This could benefit the patient, by keeping them out of hospital, provide the community nurse satisfaction of a job well done. Structurally empowering mental health nurses could have a myriad of positive effects with proper resource allocation.

Strengths

One strength of this study is its focus specifically on the mental health nurse population in relation to burnout, structural empowerment, and quality of patient care. Research focusing on mental health nurses is sparse as most studies do not differentiate between specialty areas in their samples (Laschinger & Fida, 2015; López-López et al., 2019; Maslach & Leiter, 2016). To my knowledge this is the first study to examine these relationships among mental health nurses.

Another strength of this study was the percentage of participants who responded in French. Although the total sample size was not sufficient for subgroup analysis by language, further studies with a larger sample would have potential for significant comparison findings. This study was also able to provide initial evidence to help further the validation of the measurement tools in French, including the newly translated scale for interpersonal strain.

Finally, the greatest strength of this study is its timing. Despite the limited significant findings due to small sample size, mental health care in New Brunswick is being heavily discussed in the media and public concerns are growing (Brown, 2021). Executive leadership and government are taking the time to analyze current practices and resources, and it is hoped this study can act as a pilot project for further research that could lead to increased funding and practice changes. As data collection was completed prior to the declaration of the COVID-19 pandemic, it can also be utilized as pre-pandemic comparison data.

Limitations

A significant and unanticipated limitation of this study was the small sample size. Of the 38 participants included, 27 responded to the initial recruitment e-mail and submitted results before March 9th. Of the remaining 11 participants, 10 responded after the reminder e-mail on March 10th and 11th. It was on March 11th, 2020, that the World Health Organization declared COVID-19 a global pandemic, and healthcare work changed quickly and dramatically. Unsurprisingly, only one further survey was collected in the following two weeks. The limited sample size altered the initial analysis plan from SEM to multiple linear regression and limited the statistical power of the study, as it was unable to meet the G-power sample size calculation of 59. The population was not adequately sampled, therefore result interpretations must be interpreted with caution and not generalized to the greater population.

Another limitation to this study is the cross-sectional survey design. Cross-sectional designs are a weaker method of quantitative research according to the hierarchy

of evidence, however, this observational design is appropriate to the descriptive research question and the under-studied mental health nurse population as experimental research would not be ethical in assigning a nurse to suffer from burnout (Polit & Beck, 2017).

Implications for Future Research

There are many avenues that could be taken for future research to expand on this study or further explore its findings. Future studies should include robust participant recruitment strategies in order to obtain an adequate sample size for data analysis. As the initial analysis plan intended, presentations to units would have been a logical next step; social media was also discussed as a possibility for recruitment awareness. However, if further research were to be done, it could be of benefit to try recruitment through the health authorities versus the nursing association. It is likely that work e-mails are monitored more closely, or that paper copies could be distributed amongst unit staff while on shift. To further expand this study, it would be interesting to repeat it to measure burnout post-pandemic for comparison to this study, where data was collected immediately pre-pandemic.

Multi-level comparison studies of mental health units with differing work environments could be another option for a cross-sectional survey or an intervention study - for example, units with low levels of structural empowerment could partake in a longitudinal study with the implementation of added access to resources, support, information, and opportunities between data collection periods. It would also be interesting to compare standards of care and employee engagement in New Brunswick to United States Magnet® hospitals, as structural empowerment is one of five components

within their accredited model of nursing excellence and they are known to have better patient outcomes (Stimpfel, 2014).

Related research ideas would include expanding the model tested in this study to look at psychological empowerment, self-care, and resiliency among mental health nurses as personal resources are also an important aspect to consider (Bakker & Demerouti, 2014); studies such as this may benefit from qualitative or mixed-method approaches to understand the experiences and hear the voices of nurses working in this specialty area. It would also be interesting to explore if organizations are empowering their managers to, in turn, empower their staff by assessing fiscal resources, workload, and leadership style. Lastly, it would be beneficial to further validate Borgogni's scale for interpersonal strain in French, as this study showed strong internal consistency at .94 and no significant differences from English results.

Conclusions

In conclusion, this pilot study can act as a launching point for further research on empowerment, burnout, and quality of care in mental health nurses. The purpose of this study was to examine the relationships between structurally empowering work environments, burnout, and quality of patient care among registered nurses working in mental health in New Brunswick, Canada. A significant relationship was found between cynicism and structural empowerment; this finding alone has implications for the healthcare system, the demands of the organization, the practice of mental health nurses, the health of mental health nurses, and ultimately, the health of the public.

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<https://doi.org/10.1177/0011000006286345>

Appendix A

Letter of Information (English/French)

Study Title: The Effect of Structural Empowerment on Burnout and Subsequent Quality of Patient Care in Mental Health Nurses in New Brunswick

Principal Investigator: Dr. Emily A. Read, RN, CPT, PhD; University of New Brunswick

Principal Student Investigator: Rebecca E. Agnew, BN, RN, CPMHN(C); University of New Brunswick

Invitation to Participate: You are invited to participate in this research study examining empowering work environments, burnout, and quality of patient care delivery in mental health nursing.

Purpose of the Letter: The purpose of this letter is to give you the information needed to decide if you want to take part in this study.

Purpose of the Study: The purpose of this research is to examine the effects of empowering work environments on burnout and subsequent quality of patient care among registered nurses working in mental health care in New Brunswick.

Study Eligibility: To be in the study you must be a registered nurse currently working as a direct care nurse, charge nurse, or nurse educator primarily in psychiatry/mental health and addictions. Nurse managers/directors are not eligible.

Study Actions: If you agree to participate, please complete the following survey. You will be asked questions about patient care, working conditions, and work-related feelings. It will take **5-10 minutes** of your time.

Possible Risks: There are no expected risks from participation in this survey.

Possible Benefits: Results from this study may be used to encourage change to working conditions and resource allocation for the benefit of nurse and patient health.

Compensation: Participants will have the opportunity to submit their names for a draw for a one-hundred-dollar Amazon gift card upon completion of the survey.

Voluntary Participation: Participation in this study is voluntary. You may decide not to participate, refuse to answer any questions, or withdraw from the study at any time.

Confidentiality and Privacy: It is our intention that all collected data will remain confidential and will only be accessed by the principal investigator through password-

protected files. Data for the study will only be analyzed once as it pertains to this model. However, participants should be aware that the online survey host, Qualtrics, does record and store IP addresses of computers being used to complete the survey. While Qualtrics makes every effort to keep its site secure, it is possible that the ownership and location of the computer used in this survey could be determined by third parties.

Contacts for Study Questions or Problems: If you require any further information about this research project or about taking part in the study please contact Rebecca Agnew by telephone: (506)636-2281 or email: rebecca.woods@unb.ca. If you have any questions about your rights as a research participant or how this study is being done, please contact study supervisor Dr. Emily Read by telephone: (506)451-6846 or email: eread@unb.ca or the Research Ethics Board by telephone: (506)453-5189 or email: ethics@unb.ca. Results of the group study will be shared through email by the Nurses Association of New Brunswick upon completion of the research.

This project has been reviewed by the University of New Brunswick Research Ethics Board and is on file as REB2020-003.

Results: The Nurses Association of New Brunswick will be contacted to send group-level results of the study through e-mail to the same participants that were originally sampled.

Consent: Completion of this survey indicates that you consent to take part in this study.

Sincerely,

Rebecca E. Agnew, BN, RN, CPMHN(C), MN (student)
University of New Brunswick

Lettre d'information:

Titre de l'étude: L'effet de l'autonomisation structurelle des environnements de travail sur l'épuisement professionnel et la qualité antérieure des soins aux patients chez les infirmières en santé mentale au Nouveau-Brunswick

Chercheuse principale: Dre Emily A. Read, RN, CPT, PhD; Université du Nouveau-Brunswick

Chercheuse principale - étudiante: Rebecca E. Agnew, BN, RN, CPMHN(C); Université du Nouveau-Brunswick

Invitation à participer: Vous êtes invitée à participer à cette étude sur l'autonomisation des environnements de travail, l'épuisement professionnel et la qualité de soins aux patients dans le domaine des soins infirmiers en santé mentale.

Objet de la lettre: L'objectif de cette lettre est de vous donner les informations nécessaires pour décider si vous souhaitez participer à cette étude.

Objectif de l'étude: Le but de cette recherche est d'examiner les effets d'un environnement de travail, l'épuisement professionnel et la qualité de soins aux patients chez les infirmières autorisées travaillant dans le domaine des soins de santé mentale au Nouveau-Brunswick.

Admissibilité à l'étude: Pour participer à l'étude, vous devez être une infirmière autorisée travaillant actuellement comme infirmière de soins directs, infirmière responsable ou infirmière éducatrice dans le domaine de la psychiatrie, santé mentale, et/ou des dépendances. Les infirmières gestionnaires/directrices ne sont pas admissibles.

Actions de l'étude: Si vous acceptez de participer, veuillez remplir le sondage qui suit. On vous posera des questions sur les soins aux patients, les conditions de travail et les sentiments liés au travail. Il vous faudra 5 à 10 minutes de votre temps.

Risques possibles: Le participation à ce sondage ne comporte aucun risque prévisible.

Avantages possibles: Les résultats de cette étude peuvent être utilisés pour encourager des changements dans les conditions de travail et l'allocation des ressources au profit de la santé des infirmières et des patients.

Compensation: Les participants auront la possibilité de soumettre leur nom pour un tirage au sort d'une carte-cadeau Amazon d'une valeur de 100\$ à la fin de l'enquête.

Participation volontaire: La participation à cette étude est volontaire. Vous pouvez décider de ne pas y participer, refuser de répondre à des questions, ou vous retirer de l'étude à tout moment.

Confidentialité et vie privée: Notre intention est que toutes les données collectées restent confidentielles et que seule les chercheuses principales y aient accès par le biais de fichiers protégés par un mot de passe. Les données de l'étude ne seront analysées qu'une seule fois. Toutefois, les participants doivent savoir que l'hôte de l'enquête en ligne, Qualtrics, enregistre et stocke les adresses IP des ordinateurs utilisés pour répondre au sondage. Bien que Qualtrics fasse tout son possible pour assurer la sécurité de son site, il est possible que la propriété et l'emplacement de l'ordinateur utilisé dans cette enquête soient déterminés par des tiers partis.

Contacts pour les questions ou problèmes liés à l'étude: Si vous souhaitez obtenir plus d'informations à ce sujet ou sur la participation à l'étude, veuillez contacter Rebecca Agnew par téléphone: (506)636-2281 ou par courriel: rebecca.woods@unb.ca. Si vous avez des questions sur vos droits en tant que participant à la recherche ou sur le déroulement de l'étude, veuillez contacter par téléphone la directrice de l'étude, Dre Emily Read: (506)451-6846 ou par courriel: eread@unb.ca ou le comité d'éthique de la recherche par téléphone: (506)453-5189 ou par courriel: ethics@unb.ca.

Ce projet a été examiné par le comité d'éthique de la recherche de l'Université du Nouveau-Brunswick et figure dans le dossier REB2020-003.

Résultats: Si vous êtes intéressé par les résultats de l'étude, veuillez contacter Rebecca Agnew par courriel à rebecca.woods@unb.ca

Consentement: Le fait de remplir ce questionnaire indique que vous consentez à participer à cette étude.

Sincèrement,

Rebecca E. Agnew, BN, RN, CPMHN (C), MN (étudiante)
Université du Nouveau-Brunswick

Appendix B

Questionnaire (English/French)

PATIENT CARE QUALITY

**In general, how would you describe the quality of nursing care delivered
to patients on your unit?**

1-Excellent _____ 2-Good _____ 3-Fair _____ 4-Poor _____

**En général, comment décririez-vous la qualité des soins infirmiers fournis aux
patients de votre unité ?**

1-Excellent _____ 2-Bon _____ 3-Acceptable _____ 4-Pauvres _____

CONDITIONS OF WORK EFFECTIVENESS QUESTIONNAIRE (CWEQ-II)

Please rate the EXTENT to which the following is present in your current job:

	1=None	2-3=Some	4-5=A lot
1. Opportunity for challenging work.	1	2	3 4 5
2. The chance to gain new skills and knowledge on the job.	1	2	3 4 5
3. Tasks that use all of your own skills and knowledge.	1	2	3 4 5
4. Information about the current state of the hospital.	1	2	3 4 5
5. Information about the values of top management.	1	2	3 4 5
6. Information about the goals of top management.	1	2	3 4 5
7. Specific information about things you do well.	1	2	3 4 5
8. Specific comments about things you could improve.	1	2	3 4 5
9. Helpful hints or problem solving advice.	1	2	3 4 5
10. Time available to do necessary paperwork.	1	2	3 4 5
11. Time available to accomplish job requirements.	1	2	3 4 5
12. Acquiring temporary help when needed.	1	2	3 4 5

Évaluez la présence des éléments suivants dans votre emploi actuel:

1. Possibilité de travail stimulant et riche en défis.
2. La chance d'acquérir de nouvelles compétences et connaissances sur le travail.
3. Des tâches qui utilisent toutes vos propres compétences et connaissances.
4. Informations sur l'état actuel de l'hôpital.
5. Informations sur les valeurs de la gestion supérieure.
6. Informations sur les objectifs de la gestion supérieure.
7. Des informations spécifiques sur les choses que vous faites bien.
8. Commentaires spécifiques sur les choses que vous pourriez améliorer.
9. Conseils utiles ou conseils pour résoudre les problèmes.
10. Temps disponible pour faire la paperasse nécessaire.
11. Temps disponible pour accomplir les exigences du travail.
12. Obtenir de l'aide temporaire en cas de besoin.

MASLACH BURNOUT INVENTORY

Please indicate how often you have experienced these work-related feelings:

0=Never	1=A Few Times a Year or Less	2=Once a Month or Less	3=A Few Times a Month	4=Once a Week	5=A Few Times a Week	6=Daily
---------	------------------------------------	------------------------------	-----------------------------	------------------	----------------------------	---------

Emotional Exhaustion

- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| 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 |

Cynicism

- | | | | | | | | |
|--|---|---|---|---|---|---|---|
| 6. I have become less interested in my work since I started this job. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 7. I have become less enthusiastic about my work. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 8. I just want to do my job and not be bothered. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 9. I doubt the significance of my work. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 10. I have become more cynical about whether my work contributes anything. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

S'il vous plaît indiquez à quelle fréquence vous avez ressenti ces sentiments liés au travail:

1. Je me sens émotionnellement vidée de mon travail.
2. Je me sens épuisée à la fin de la journée de travail.
3. Je me sens fatiguée lorsque je me lève le matin et que je dois faire face à une autre journée de travail.
4. Travailler toute la journée est vraiment une épreuve pour moi.
5. Je me sens épuisée par mon travail.
6. Je suis devenu moins intéressée par mon travail depuis que j'ai commencé ce travail.
7. Je suis devenue moins enthousiaste à propos de mon travail.
8. Je veux juste faire mon travail et ne pas être dérangée.
9. Je doute de l'importance de mon travail.
10. Je suis devenue plus cynique quant à savoir si mon travail apporte quelque chose.

INTERPERSONAL STRAIN AT WORK SCALE

In the past 6 months, how OFTEN have you experienced these feelings at work:

0=Never	1=A Few Times a Year or Less	2=Once a Month or Less	3=A Few Times a Month	4=Once a Week	5=A Few Times a Week	6=Daily
---------	------------------------------------	------------------------------	-----------------------------	------------------	----------------------------	---------

- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| 11. I feel more comfortable keeping distance from others. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 12. I find myself to be insensitive to other people's problems. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 13. I treat others in a cold and detached manner. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 14. I'm not particularly interested in what happens to others. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 15. I may sometimes mistreat someone. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 16. I feel irritated by other people. | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

Au cours des 6 derniers mois, à quelle fréquence avez-vous ressenti ces sentiments

au travail:

11. Je me sens plus à l'aise en gardant la distance des autres.
12. Je me trouve insensible aux problèmes des autres.
13. Je traite les autres d'une façon froide et détachée.
14. Je ne suis pas particulièrement intéressée par ce qui arrive aux autres.
15. Je peux parfois maltraiter quelqu'un.
16. Je me sens irritée par les autres.

DEMOGRAPHICS

1. Gender: Male _____ Female _____ Non-binary _____
- 2 Age: _____
3. Employer: Horizon Health Network _____ Vitalité Health Network _____ Other _____
explain other: _____
4. Level of Education: Diploma _____ Bachelor's Degree _____ Master's Degree _____
PhD _____
5. Nursing Position: Staff nurse _____ Charge nurse _____ Nurse Educator _____
Other _____ explain other: _____
6. Employment Status: Full time _____ Part time _____ Casual _____
7. Care setting: Inpatient _____ Community _____ Forensics _____ Addictions _____
Other _____ explain other: _____
8. Years as a Registered Nurse: _____
9. Years in Mental Health/Psychiatric Nursing: _____
10. Years in Current Mental Health/Psychiatric Nursing Position: _____

1. Masculin _____ Femme _____ Non binaire _____
2. Âge: _____
3. Employeur: Réseau de santé Horizon _____ Réseau de santé Vitalité _____ Autre _____
4. Niveau d'éducation: Diplôme _____ Baccalauréat _____ Une maîtrise _____
Doctorat _____
5. Poste d'infirmière: Le personnel infirmier _____ Infirmière responsable _____
Infirmière éducatrice _____ Autre _____
6. Statu d'emploi: À plein temps _____ À temps partiel _____ Occasionnel _____
7. Cadre de soins: Hôpital _____ Communauté _____ Médecine légale _____
Dépendances _____ Autre _____
8. Années comme infirmière autorisée: _____
9. Années en santé mentale / soins infirmiers psychiatriques: _____
10. Années dans le poste actuel en santé mentale / soins infirmiers psychiatriques: _____

Appendix C

Recruitment e-mail (English/French)

The Nurses Association of New Brunswick supports health related research by facilitating the recruitment of individuals potentially interested in participating in these research projects.

To maintain confidentiality for our members, we act as the mediator by sending the invitation to participate to the research project attached to this message. The researcher will not have access to your contact information.

The title of this project is The Effect of Structural Empowerment on Burnout and Subsequent Quality of Patient Care in Mental Health Nurses in New Brunswick. This project has been reviewed by the University of New Brunswick Research Ethics Board and is on file as REB#2020-003.

Members of NANB will be acknowledged as the data source in any publication or report of these findings.

Disclaimer: The views expressed herein do not necessarily represent the views of the Nurses Association of New Brunswick.

L'Association des infirmières et infirmiers du Nouveau-Brunswick soutient la recherche liée à la santé en facilitant le recrutement de personnes intéressées à participer à ces projets de recherche.

Afin de maintenir la confidentialité de nos membres, nous agissons en tant que médiateur en envoyant l'invitation à participer au projet de recherche joint à ce message. Les chercheuses n'auront pas accès à vos coordonnées.

Le titre de ce projet est « L'effet de l'autonomisation structurelle des environnements de travail sur l'épuisement professionnel et la qualité antérieure des soins aux patients chez les infirmières en santé mentale au Nouveau-Brunswick ». Ce projet a été examiné par le comité d'éthique de la recherche de l'Université du Nouveau-Brunswick et figure dans le dossier REB2020-003.

Les membres de l'AIINB seront reconnus comme la source de données dans toute publication ou rapport de ces résultats. Veuillez noter que cette enquête est disponible en français et en anglais, avec une option de langue déroulante sur la première page.

Avis de non-responsabilité: Les opinions exprimées ici ne représentent pas nécessairement les vues de l'Association des infirmières et infirmiers du Nouveau-Brunswick.

Curriculum Vitae

Name: Rebecca E. Agnew

Education: UNB
Fredericton, New Brunswick
Master of Nursing
Current Student
Cumulative G.P.A of 4.1

UNB
Saint John, New Brunswick
Bachelor of Nursing
G.P.A of 3.8 (Dean's List)
Graduated: May 30, 2014, First Division

UNB
Saint John, New Brunswick
Bachelor of Arts
2008-2010 (incomplete; nursing transfer)

Conferences: American Psychological Association: Work, Stress and Health
Philadelphia, PA, Nov 7-9, 2019
Poster Presentation

Association for Leadership Science in Nursing: Disruptive Innovation
Los Angeles, CA, Nov 7-9, 2019
Poster Presentation- accepted, declined due to date conflict

Graduate Student Association: Graduate Research Conference
Fredericton, NB, March 21-22, 2019
Poster Presentation

Sigma Theta Tau International: Creating Healthy Work Environments
New Orleans, LA, Feb 22-24, 2019
Poster Presentation and Rapid Discussion Oral Presentation

Scholarships: 2019-2020 Julianna K. MacLeod Scholarship \$500
2019-2020 Travel Funding \$500
2018-2019 Graduate Research Assistantship \$5175
2018-2019 Cutler Nursing Scholarship \$8500

2018-2019 Travel Funding \$2000
2017-2018 Graduate Research Assistantship \$6250
2017-2018 Jane Stikeman Ekers Scholarship \$2000
2013-2014 Dr. Colin B. Mackay Scholarship \$600
2013-2014 Irving Scholarship- Pulp & Paper Division \$1000
2012-2013 Francis Hugh Scovil
Scholarship in Nursing \$1200
2008-2009 UNB Saint John Campus
Scholarship \$250
2008-2009 Ward Chipman Founder's Scholarship \$500

Work Experience:

February 2022-present
Horizon Health Network- New Brunswick
Heart Centre
Position: Registered Nurse- Coronary Care
Unit
Responsibilities: Patient care for New
Brunswick and Prince Edward Island
residents requiring intensive coronary care
for severe cardiac dysfunction.

February 2019-February 2022
Horizon Health Network- Ridgewood
Addiction Services
Position: Nurse Manager
Responsibilities: To manage over 40
employees of differing disciplines at three
respective addiction programs including
detoxification, rehabilitation, and early
recovery services. Duties include
performance reviews, attendance
management, hiring, education, policy
development, facility management, quality
improvement reviews, program changes, etc.

July 2015-February 2019
Horizon Health Network- Saint John
Regional Hospital
Position: Registered Nurse– 4DN Acute
Inpatient Psychiatric Unit
Responsibilities: To work as a member of
the multidisciplinary healthcare team to suit
the individual needs of the psychiatric
inpatient population. To provide care
through therapeutic conversation that
encourages the use of coping skills.
When required, to administer medications
and take the Charge Nurse role.

September-October 2017
New Brunswick Community College
Position: Clinical Instructor
Responsibilities: To guide the clinical
rotation of Licensed Practical Nursing
students on an acute psychiatric ward.
Duties included assigning patients,
overseeing care, educating on psychiatric
practices and student evaluations.

Certifications:

Canadian Nurses Association: Certified Psychiatric and
Mental Health Nurse in Canada [CPMHN(C)]
Issued: December 2018

Joana Briggs Institute: Systematic Reviewer
Issued: August 2018

Tri-Council Policy Statement: Course on Research Ethics
Certification
Issued: November 2017

Applied Suicide Intervention Skills Training: LivingWorks
Education
Issued: February 2016

Nonviolent Crisis Intervention: Saint John Regional Hospital
Completed: October 2015

Additional Skills:

Crystal Meth Training with Dr. Bill MacEwan
Completed: February 2020

Advanced Code White Training: Saint John Regional
Hospital
Completed: December 2015

Bilingual Certificate (French) 'Intermediate' recipient 2015