Understanding mental health policy implementation through lived experience of professors in the context of graduate student supervision

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Abstract

This thesis project was designed to explore two research questions that center around the critical issue of graduate student mental health in the context of the supervisory relationship between professors and graduate students in a Canadian university implementing a mental health policy framework. The current report was produced as a “thesis-by-article", an option available to graduate students in the Faculty of Education at the University of Ottawa. This means the report has a different structure than a monograph thesis. Chapter one focuses on the entire research project, and includes an introduction, literature review, theoretical concepts guiding the study and the methodology. Chapter two is the article, which focuses on the results related to the first research question. As a result, there is some overlap between the content of chapter one and the article in chapter two because the latter includes a condensed and focused version of some of the material in chapter one. The third chapter presents and discusses results related to the second research question that are not included in the article. It also includes a section on further opportunities for research and a reflection on my journey as a researcher and lessons learned.

Over the past decade, Canadian university administrations have been grappling with establishing their role in providing mental health support to students on their campuses. This article describes a case study that applies sense-making theory and a life story methodology to professors’ lived experiences to understand how their knowledge and beliefs impact their perception of their role in supporting graduate student mental health. Schemas developed from four professors’ life stories provide insight into the impact that lived experience as a graduate student has on how professors’ make sense of their role. Two types of professor experiences emerged: a positive supervisor experience that the supervisor seeks to replicate, or the negative experience that the supervisor tries to repair through distancing themselves from the practices of their own graduate supervisor. In the absence of consistent and clear training on supervision and professor’s role in supporting graduate student mental health, the life stories of these four professors signal that lived experience of being a graduate student guides subsequent practice as a supervisor.

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Table of Contents

List of Figures

List of Tables

Introduction section

INTRODUCTION SECTION

INTRODUCTION

The increased visibility of mental health issues, coupled with high-profile campus suicides and subsequent lawsuits (Washburn & Mandrusiak, 2010), has heightened the pressure on Canadian post-secondary institutions to address their role in supporting student mental health. A pivotal 2009 report by the Ontario College Health Association (OCHA) highlighted the crucial role that colleges and universities must play in developing a national comprehensive mental health strategy. In response, post-secondary institutions have been reassessing their roles and responsibilities in developing holistic mental health policies and frameworks to support student success and well-being (Washburn & Mandrusiak, 2010; OCHA, 2009; DiPlacito-DeRango, 2016; Holmes & Silvestri, 2016; Jaworska et al., 2016). This call to action led to the Mental Health Commission of Canada's release of the National Standard for Mental Health and Well-Being for Post-Secondary Students in October 2020, which provides "a set of voluntary, flexible guidelines to help Canada's post-secondary institutions promote and support the mental health, well-being, and success of their students" (Mental Health and Well-Being for Post-Secondary Students, 2020, p.10).

Graduate students face numerous personal and academic challenges throughout their studies that impact their mental health (Aguinis et al., 1996). As Hartnett and Katz (1977) observed, "Graduate students are not immune from emotional problems. Pain, anxiety, and pressure reach a point for many beyond any stress that might be justified as encouraging effort and productivity" (p. 657). Despite decades of research documenting these pressures, the stigma of accessing mental health care and support remains a significant barrier for graduate students (Rummell, 2015). The mentoring relationship between a supervisor and a graduate student can be fundamental to navigating these challenges. Given the intense expectations and pressures faced by graduate students, forging meaningful relationships with professors in their field is vital (Hartnett & Katz, 1977). This mentoring relationship significantly impacts both academic success and overall

well-being (Holdaway, Deblois & Winchester, 1995). On the other hand, an adversarial or unsupportive mentoring relationship can undermine motivation, interest, and self-efficacy (Martin, Goodboy, & Johnson, 2015).

From an educational perspective, this call to action for more coordinated approach to mental health aligns with the goal of most universities to create a healthy and safe learning environment. The OCHA (2009) report highlights that "the social interactions that promote academic learning also enhance mental health and self-esteem" (p. 13). Fostering an institutional culture that supports positive mental health is as critical to student success and inclusivity as ensuring that instructors have teaching resources and knowledge in the subject matter of instruction. As a population, university students face numerous risks to their mental health due to factors such as age, financial stresses, distance from support networks, peer pressures, and lofty expectations for success (OCHA, 2009; American College Health Association (ACHA), 2016).[1]

In the spring of 2019, the ACHA administered the National College Health Assessment II, surveying 55,284 students from 58 Canadian postsecondary institutions, with a 20% response rate. The survey revealed that 59.5% of respondents felt that academics had been traumatic or very difficult to handle in the previous twelve months (ACHA, 2019a). Major factors affecting academic performance included stress (42%), anxiety (34.7%), sleep difficulties (29%), and depression (24.2%) (ACHA, 2019a).[2] These findings are consistent with earlier research by Holmes and Silvestri (2016), which identified anxiety and depression as significant contributors to academic performance issues. The recognition of mental health as a barrier to academic success and thus as a community health issue, highlights the need for a coordinated university community approach.

A lack of clear roles and directives often presents challenges for post-secondary institutions; however, mutual support between health and education systems can foster positive outcomes in both areas. Early intervention is crucial for successful outcomes in mental health support. Most mental illnesses begin onset in young adults ages 18-26, therefore university students are a "critical population" for early intervention (OCHA, 2009). Universities are uniquely positioned to use their established infrastructure and early detection mechanisms to create safe environments that promote positive mental health,

especially for students living on campus (OCHA, 2009). These mechanisms have the potential to significantly impact students' long-term well-being and success (OCHA, 2009; Jed Foundation, 2006).

Despite calls for universities to play a more prominent role in addressing and supporting student mental health, transforming institutional culture, and potentially broadening the scope of universities' responsibilities, requires substantial resources, time, and strategic planning. Most institutions rely on policies and regulations to guide their practices, but due to the multi-faceted nature of student mental health, many institutions have adopted or are exploring frameworks that integrate research-based best practices from psychology, social work, and policy studies into their support systems. Evaluating the effectiveness of these interventions and frameworks, particularly concerning the impact on graduate students and professors, is essential for ensuring they reduce the negative effects of poor mental health on academic achievement.

The implementing of mental health frameworks in large public universities presents numerous barriers, including training deficits, inadequate funding, inconsistent policies, and conflicting regulations (DiPlacito-DeRange, 2016). A comprehensive national strategy is needed to address these gaps, as many institutions lack sufficient policies on risk management, crisis intervention, data sharing, and suicide prevention (DeSomma, Heck, MacQueen & Jaworska, 2017). The development of the National Standard for Mental Health and Well-Being for Post-Secondary Students in October 2020 marks a significant step toward a unified national approach.

In the absence of a comprehensive national strategy at the time of the development of this study, we are using the Consolidated Framework for Implementation Research (CFIR) to conduct a summative evaluation of mental health framework implementation at a large Canadian post-secondary education institution (Damschroder, et.al., 2009). This study focuses specifically on the supervisory relationship between professors and graduate students. Given that institutional size and geography can influence the availability of community resources, a structured implementation framework and evaluation are crucial for assessing the lasting impact on campus mental health. By examining how lived experiences of professors – who have navigated both graduate studies and academic supervision – affect the implementation of mental health frameworks, the study was

designed to highlight key factors influencing effective support and identify gaps in current practices. The research objectives are (1) to contribute to a growing body of work exploring how lived experience can impact mental health framework implementation, with specific focus on graduate student supervision and the role of professors; and (2) to promote the use of implementation science frameworks to translate evidence-based mental health research into effective policy and practice.

LITERATURE REVIEW

Access to education is widely recognized as a critical gateway to increased access to opportunities for societal and financial success. The role of education in determining social and human capital and future career prospects underscores the growing necessity for post-secondary education in many fields for both access and advancement opportunities (Ennals, Fossery, Harvery & Killackery, 2014; Biebel, Ryder-Burge, Alikhan, Ringeisen & Ellison, 2018). Unfortunately, mental health challenges can significantly disrupt access to and success in post-secondary education, often resulting in profound and lasting impacts if not adequately addressed (Ennals et al., 2014; OCHA, 2009). In response to the lack of a comprehensive national mental health framework in Canada and the lack of consensus among colleges and universities about appropriate strategy, the Jed Foundation's 2006 *Framework for developing institutional protocols for the acutely distressed or suicidal college student* aimed to outline essential components for institutional mental health protocols, advocating strongly for the integration of support systems within educational institutions.

Despite advancements in mental health awareness campaigns and the increase in resources devoted to mental health on campuses, stigma surrounding mental illness remains a significant barrier, often deterring students from seeking help (Washburn & Mandrusiak, 2010). This stigma can lead to under-reporting by faculty, who might feel unqualified to intervene or perceive struggles as a normal part of the educational experience (DiPlacito-DeRango, 2016; Savini, 2016). Graduate students, who often face heightened pressures due to their intensive academic focus, are particularly vulnerable to isolation and mental health issues (Wyatt and Oswalt, 2013). The emphasis on a balanced work-life approach is critical, as good work-life balance has been linked to better mental

health outcomes (Evans et al., 2018).

As mental health policies in post-secondary institutions evolve, there is a shift from solely crisis management to a more systematic approach that includes prevention, early identification, collaboration, and confidential information sharing (MacKean, 2011; Jaworska, DeSomma, Fonseka, Heck & MacQueen, 2016; Warwick, Maxwell, Stratham, Aggleton & Simon, 2008). Despite these efforts, many institutions still lack cohesive strategies and face difficulties in implementing effective mental health frameworks due to variations in policies and practices across institutions (Heck et al., 2014; Jaworska et al., 2016). The inconsistency highlights the need for a national strategy with common performance indicators to evaluate the effectiveness of mental health interventions in post-secondary settings (Biebel et al., 2018)

To address the stigma around mental illness, post-secondary institutions have increasingly incorporated health education practices to enhance mental health literacy, including gatekeeper programs that train staff and peers to identify and support at-risk students (Kelly, Jorm & Wright, 2007; Kutcher, Wei & Coniglio, 2016). Despite these efforts, graduate students often remain more isolated from campus activities and resources targeting the undergraduate population, which can further exacerbate their mental health challenges (Wyatt and Oswalt, 2013). Adopting a systems-level approach is necessary to integrate mental health considerations into academic policies, curricular design, and the roles of professors (Bekkouche et al., 2021). The competitive and individualistic learning culture prevalent in many institutions can worsen mental health issues, whereas collaborative learning approaches offer potential benefits (DeSomma et al., MacKean, 2011).

Current mental health policies are predominantly reactive, focusing on crisis intervention and accommodations rather than proactive and inclusive strategies (Olding & Yip, 2014; Washburn & Mandrusiak, 2010; Warwick et al., 2008). This reactive approach often places the responsibility on students to self-refer for mental health support, which can leave gaps in follow-up care and support, particularly for off-campus referrals (Jaworska et al., 2016; Holmes & Silvestri, 2016). Although self-referral is a supported education strategy that helps empower those with mental illness to achieve their educational goals (Ennals et al., 2014), effective coordination of campus and community resources is crucial

to prevent students from falling through the cracks. The development of external partnerships with community organizations is essential to help ease the transition for students to specialized community resources as well as to reduce the burden on post-secondary counselling centers (Holmes & Silvestri, 2016; MacKean, 2011).

The literature also highlights a need for early alert systems to identify students at risk of mental health issues and direct them to appropriate support (Tampke, 2013; Jaworska et al., 2016). For graduate students, supportive relationships with their supervisors are critical for early detection and intervention. Supportive communication from supervisors can foster a sense of community and mitigate isolation, while unsupportive or bullying behavior can negatively affect students' motivation and academic success (Martin et al., 2015; Wyatt & Oswalt, 2013). Ensuring that supervisors are well-trained and aware of their impact on student mental health issues is essential for creating a supportive academic environment (Jara, 2020; Seko et al., 2024; Alharbi & Jacobson, 2018).

Even when policies or frameworks are well-developed, the literature suggests that mental health strategies are not always cohesive or fully implemented, meaning that what is intended is not always practiced (MacKean, 2011; DiPlacito-DeRango, 2016). While clinical settings have some research supporting certain approaches to mental health, there is a gap in evaluating their effectiveness in post-secondary environments (Heck et al., 2014; Lipson et al., 2014). Proper evaluation of our mental health frameworks and strategies is crucial for ensuring resources are used effectively and for securing sustainable funding (Jed Foundation, 2011; Warwick et al., 2008; Washburn & Mandrusiak, 2010; Biebel et al., 2018). There is also a lack of research on the effectiveness of suicide prevention, gatekeeper training, and mental health literacy programs in reaching their intended audiences (Washburn & Mandrusiak, 2010; Kelly et al., 2007). Without a comprehensive strategy and standardized performance indicators, it is difficult to assess whether mental health policies in Canadian post-secondary institutions are effectively addressing the impact of mental health issues on academic success (Heck et al., 2014; Jaworska et al., 2016).

THEORETICAL CONCEPTS GUIDING THE STUDY

This study examines the role of professors in the implementation of a mental health framework in the context of graduate student supervision in a large Canadian university. Drawing inspiration from the use of life narrative and sense-making theory in existing policy implementation studies in education (Drake, 2006), this study explores professors past experiences with their own mental health as graduate students, as well as their understanding of and engagement with their university's mental health framework in the context of their subsequent supervision of graduate students. The aim of this study was to gain insight into the role of professors as supervisors of graduate students and how their beliefs, knowledge and lived experiences impact their supervision practices and involvement in implementing their university's mental health framework. It combined a life narrative approach with sense-making theory to explore the connections between past experiences and current practices, and to understand how these relationships influenced professors' perceptions of their role in supporting graduate student mental health.

The study sought to identify strengths and limitations in the development and implementation of mental health frameworks, with the goal of improving graduate student mental health. The literature indicated that mental health policies and frameworks often fell short in addressing the specific needs of graduate students, as resources frequently targeted undergraduate students and lacked clear guidance on the role of supervisors or resources intended specifically for graduate students. Additionally, the literature revealed a gap in research on the role of professors in implementing mental health policies and frameworks. This lack of clarity in role expectations and the general inadequacy of training and communication about supervisory responsibilities were reflected in the broader context of mental health framework implementation.

Many universities have recently implemented new measures to address mental health, but there is limited literature on the effects of those initiatives on communities and the experience of different stakeholders, including professors. With that in mind, rather than continue to analyze and investigate what practices could be added to universities to improve student mental health, this study sought to examine the process of framework implementation, in this case with respect to professors and graduate student supervision. A qualitative analysis of the role of professors through an in-depth look at the lived

experience and sense-making of professors provided deeper insights into the dynamics between professors and graduate students and how these relationships contribute to fostering a healthy academic environment. It also brought to light factors that facilitate or hinder the implementation of a mental health framework.

Relationship Between Mental Health Life Stories and Knowledge and Beliefs

This study examined how a select group of professors' life stories and experiences with mental health during their graduate studies intersect with the implementation a mental health framework in the context of graduate student supervision. It highlighted how micro-level data on policy actors' lived experiences can enhance policy (re)development and (re)implementation. The majority of lived experience research regarding mental health policy focuses solely on the user or client experience within a mental health service setting with very little research focusing on the mental health life stories of service providers, or, in the education context, professors. By exploring the mental health experiences of professors both as graduate students and in their current roles, this study aims to contribute to the existing body of research.

I applied Drake's observations analogically to my study by using narratives from professors about their own graduate school experience, particularly focusing on experiences with mental health. This approach illuminated their beliefs about graduate student supervision, their knowledge about and interpretations of the mental health framework, and how they perceive the interconnectedness of their beliefs, knowledge, and experiences. The narrative methodology revealed professors' personal accounts of their lived experiences as graduate students, specifically in relation to mental health and supervision roles (both as supervisors and supervisees). To fully grasp how professors support graduate student mental health in their roles as supervisors, it was essential to first explore the experiences and events that have shaped their beliefs, knowledge, and interpretations of mental health support through their personal stories.

Mental Health Framework Response as Sense-making

Research on policy implementation and educational reform has brought to light the

importance of sense-making on the part of the range of actors involved in the process of transforming policy into action. The understanding that those involved need to comprehend the reason behind the policy and what purpose the policy serves has been highlighted as one of the key factors to successful policy implementation (März & Kelchtermans, 2013; Drake, 2006). Rather than simply putting a set of predetermined procedures into action, successful implementation processes take into consideration how individuals connect with the policy, much as they connect with their current practice and the world around them. Sense-making "occurs in an iterative cycle of interpretation and implementation in which the interpretation informs the implementation and vice versa" (Drake, 2006, p. 581). In understanding and connecting with the role prescribed to us within a policy, we are better able to play that role. The more familiar we become with playing that role, the more we understand what change we are being asked to enact via policy. The process of sense-making is a complex one because the collective understanding of a problem and how it should be addressed through policy (in this instance a mental health framework) is digested by individuals, who carry with them their own values, knowledge, beliefs, and understandings into the implementation process. In other words, each individual "makes sense" of policy problems and solutions differently, such that their interpretations and subsequent actions also vary. Moreover, some individuals may not even "notice" the problems others in their organizations "see," which affects their capacity to respond. Sense-making theory offers a micro-level view that helps explain why policy implementation is often "messy," non-linear, and frequently misaligned with policy intent (Datnow & Park, 2012).

In this study we analyzed how professors' sense-making about and interpretations of student mental health and related policies or frameworks - and, as a result, their policy implementation practices - are influenced by their beliefs and knowledge about graduate student mental health, their normative ideas about their roles as supervisors, and their understanding of their role in supporting graduate student mental health. We look at the data gathered in their life stories to have a better understanding of how their knowledge, beliefs and lived experience, both as a graduate student themselves and as a graduate student supervisor, have impacted what they "notice" and, therefore, pay attention to and make sense of with regards to graduate student mental health, the mental health framework

and their role in the implementation process. Figure 1 illustrates how the mental health framework interacts with professors, integrating their lived experiences and sense-making, with implementation occurring at their intersection. The size of the intersecting area will depend on the graduate student supervision experiences with mental health, their understanding of the mental health framework and their role in its implementation.

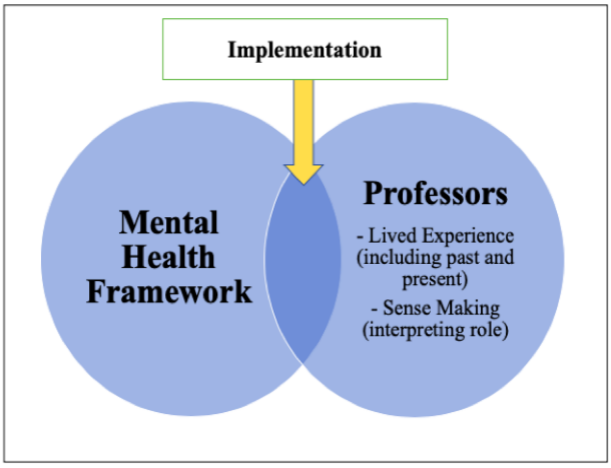

Figure 1: The intersection of the theoretical frameworks guiding the study

Mental Health Narrative and the Consolidated Framework for Implementation Research

An exploration of sense-making is a fundamental part of analyzing the individual and collective understanding of a policy and allows us to contextualize the interplay between lived experience, knowledge, beliefs, and policy implementation. As we looked at the role of professors in implementing a mental health framework in the context of graduate student supervision, we also need to understand that challenges can arise at many levels of policy and framework implementation during the process of translating mental health research into educational policy and practice. März & Kelchtermans (2013) concluded from their study of curriculum reform that even though their theoretical approach was "inspired by the sense-making approach, [their] findings also showed its limits as well as the need to acknowledge and address the important role of more structural factors in implementation processes" (p. 20-21). Therefore, to better contextualize the life stories and sense-making approach within the larger framework of policy implementation—which often has a more structural impact—this study also referenced the Consolidated Framework for Implementation Research (CFIR). The CFIR positions this

study's scope and findings within the larger body of components that influence mental health framework implementation that are beyond the direct focus of this study.

The CFIR is a tool that examines five major domains of policy implementation: intervention characteristics, outer setting, inner setting, characteristics of individuals, and process (see Figure 2) (Damschroder, et.al., 2009). The intent of this tool is to allow researchers and policy holders to establish a comprehensive understanding of the key aspects of the implementation process. The CFIR was conceptualized from a theory that promotes implementation across multiple contexts and is a tool used to examine these five domains (Damschroder, et.al., 2009). This framework is most often used in healthcare settings to support the implementation of evidence-based research into intervention practice (Kirk et al., 2016). For this study, however, we used the CFIR to contextualize the lived experience narratives and sense-making processes of policy implementers (i.e. professors). Since the concept of implementation involves a social process that is inextricably intertwined with the context in which it takes place (Damschroder, et.al., 2009), this study applied the structure of the CFIR, and more specifically the fourth domain of the framework (characteristics of individuals), to connect the life stories and sense-making of professors to the implementation of the university mental health framework as it pertains to their role as supervisors of graduate students.

Figure 2: The Consolidated Framework for Implementation Research (Nolan and Warner, 2017)

The fourth domain of the CFIR, the most micro-level of the domains, looks at the individuals involved in the policy and how their agency can impact implementation in

predictable and unpredictable ways (Damschroder, et.al., 2009). This domain, and the notion of agency associated with it, resonates within März & Kelchtermans' (2013) study, which highlights how teachers' sense-making and subsequent implementation of a curricular reform requires teachers to "rethink their professional self-understanding, more in particular their task perception and job motivation" (p. 20). Combining these perspectives on agency and policy implementation in an educational setting reveals the significant impact that an individual's knowledge, beliefs, and interpretations can have on their involvement in the implementation process. In this study, the level of self-awareness and agency directly influence the work that professors are willing and able to do to contextualize and situate (i.e. make sense of) the university mental health framework within their own knowledge, beliefs and lived experience. In Table 1, we funnel down the CFIR to a smaller component of the fourth domain and identify the equivalencies that are relevant in this study.

Aspects of Implementation Framework	**Aspects relevant to this study**
Consolidated Framework for Implementation Research	University Mental Health Framework
4th domain: Characteristics of Individuals	Professors
Part A: Knowledge and beliefs about the intervention	Lived Experience/Sense-making

Table 1: Equivalencies and links between CFIR and Mental Health Framework

While the fourth domain in Figure 2 outlines five subcategories, for the purpose of this study, we took a deep dive into understanding the individuals involved by focusing on part A: knowledge and beliefs (see Table 1). According to Damschroder et al. (2009), understanding and analyzing these characteristics helps increase insight into what factors at the level of individuals influence the ability of an organization to turn policy into practice. By examining professors' life stories and how these experiences shape their knowledge and beliefs about graduate student supervision and mental health, and then integrating this with their sense-making regarding their role in implementing their university's mental health framework, we positioned this study within the fourth domain of the CFIR.

As a result of this theoretical framing, two research questions guide this study:

(RQ1): In what ways do professors' beliefs and prior knowledge from their own graduate school experiences influence their perceptions of their contemporary role as a supervisor of graduate students and relationship with graduate student mental health?

(RQ2): How do their perceptions of their roles as graduate student supervisors influence their understanding and implementation of the mental health framework?

METHODOLOGY

Research design

This study employs a qualitative design using a narrative inquiry method to explore the role of professors in implementing a mental health framework at a large Canadian University (for University of Ottawa Research Ethics Approval, see Appendix C)[1]. To address the two research questions, we applied a life narrative technique alongside sense making theory, which relies on the idea that stories are "how we make sense of our experiences, how we communicate with others and through which we understand the world around us" (Merriam, 2009, p. 32) (see summary table of methodology in Appendix A). The study is framed by policy implementation theories, including narratives, sense-making and the CFIR, to provide a nuanced and contextualized understanding of professors' experiences, thus necessitating a qualitative approach (Patton, 2002). The interview protocol, outlined in Appendix B1 (initial pilot protocol) and B2 (final interview protocol), is based on Drake's (2006) life-stories methodology and integrates lived experience with sense-making theory to investigate professors' knowledge and beliefs (CFIR Domain 4, part A). This protocol and subsequent analysis offer insights into how professors perceive graduate students' mental health and interpret their role in implementing the mental health framework.

[1] Ethics approval was obtained from the research site university as well but was redacted for confidentiality.

Data Sources

The data sources for this study were gathered from several sources: publicly accessible institutional documents about the mental health framework from the university where the research was conducted, transcripts from semi-structured interviews with four professors who supervise graduate students, field and observation notes collected during and after the interviews, and a reflexive journal documenting my ongoing thoughts, concerns and insights throughout the research process.

Initially, we aimed to recruit 5-7 participants. To achieve this, we sent recruitment emails (see Appendix D) to 30 randomly selected professors using publicly available email addresses, targeting a 20% response rate. Four professors ultimately participated in interviews. Selection was on a first come, first serve basis until the desired number of participants was reached. Participants signed a consent form (Appendix E) prior to the interviews. Criteria for inclusion required that professors have supervisory responsibilities for graduate students and be tenured or tenure-track. These four interviews provided the primary data for the study.

Secondary data sources included research field notes and reflexivity journal. Field notes (see template, Appendix F) were recorded immediately after each interview to document concrete observations about the interview conditions, such as the events that occurred, the participant's attitude, the length of the interview, body language, room setup, and any external factors like interruptions or changing conditions (Merriam, 2009; Bogdan & Biklen, 1992). The research journal focused on the research process itself, serving as a tool for transparency (Ortlipp, 2008) and providing an opportunity to reflect on how the research was unfolding.

Instrumentation

Interview Protocol. Appendix B2 contains the protocol used to guide the semi-structured interviews with professors. A previous version, found in Appendix B1, was pilot tested and revised before its final implementation in data collection (see procedures below). This protocol was adapted from the one developed by Drake (2006), who successfully linked teachers' life stories to their implementation of mathematics reform. Drake's protocol design drew from established methods in psychology, known for their

reliability (McAdams, 1993).

The protocol for this study, found in Appendix B2, aligns with the research questions, and addresses the sensitive nature of the topic of mental health and participants' individual experiences and coping mechanisms. It is a standardized, open-ended interview format that facilitates analysis, optimizes participants' time, and ensures a safe and consistent environment (Patton, 2002, p. 346). All interviews were conducted via Zoom to ensure participant safety and convenience during COVID-19 pandemic.

*Pilot interviews. T*wo pilot interviews were initially conducted with professors from the University of Ottawa. Recruitment process for these interviews was carried out through personal connections and outreach. The original interview protocol was used as designed for these pilot interviews, although no official mental health framework existed at the University of Ottawa at the time. As a result, participants were asked to respond to framework and policy questions based on their general understanding of their roles and responsibilities as professors and supervisors supporting graduate student mental health.

These pilot interviews were conducted via Zoom, with both audio and video recorded, and transcripts were generated. The transcripts were then edited to align the audio recordings when necessary.

Following a review of the first two pilot interviews, revisions were made to the interview protocol. The original question order led to repetitive stories and did not produce the desired data progression. Appendix B1 details the protocol used in the first two pilot interviews. A third pilot interview was conducted using the revised protocol, as shown in Appendix B2, which was subsequently adopted as the main data collection tool for this study.

Field notes. A field note template was created to maintain consistency in recording key observations throughout each interview. According to Bogdan and Biklen (1992), field notes are "the written account of what the researcher hears, sees, experiences, and thinks in the course of collecting and reflecting on the data in a qualitative study" (p. 107). Although interviews were audio-recorded and transcribed, field notes provided additional context by capturing the visual and sensory aspects of the interview experience, enriching the data beyond what was captured through audio alone. These notes documented both descriptive and reflexive elements related to the observation process, covering the periods before,

during, and after the interviews.

Reflexive journal. This journal documents the researcher's firsthand experiences and reflections throughout the research process. Although Bogdan and Biklen (1992) include reflexive practice within the scope of field notes, I differentiate the reflexive journal by its timing and focus. While field notes were recorded immediately after the interviews to capture the immediate interview experience, the reflexive journal encompasses ongoing reflections throughout the entire research journey. This journal includes insights on data analysis, methodological considerations, ethical dilemmas, personal mindset, and any emerging biases or issues (Bogdan & Biklen, 1992).

Follow up with research participants. After conducting the interviews and producing transcriptions and summary documents, the data were sent to the participants for their review. Participants were asked to verify the transcription and summary for accuracy, provide feedback on the interview process, add any additional information they wished to include, and raise any questions they had. and encouraged to provide any feedback on the interview process, anything they wanted to add for consideration or any questions they had.

Data Collection procedures

Step 1: Selecting a research site. I initiated data collection by conducting an environmental scan of universities within a 100km radius of Ottawa (chosen for logistical ease of travel) that met the study's criteria. Initially, the criteria required that the university have a mental health framework with publicly accessible documents.

Step 2: Institutional Documents. I collected publicly available documents from the university's website, including the mental health framework and related communications. These documents were reviewed prior to the interviews to pinpoint sections addressing graduate student mental health, the role of professors in supervising graduate students, and aspects of the mental health framework and its implementation.

Step 3: Interview preparation. To prepare for the interviews, I first finalized the interview protocol based on the mental health framework documents. I then tested this protocol through pilot interviews with three professors from my home institution. Merriam (2009) emphasizes the importance of pilot interviews for allowing the interviewer to

"quickly learn which questions are confusing, and need rewording, which questions yield useless data, and which questions, suggested by your respondents, you should have thought to include in the first place" (p. 95). The initial two pilot interviews revealed repetitive responses leading to adjustments in the protocol. A third pilot interview confirmed the revised question order.

Step 4: Conducting the interviews. After selecting the university, I compiled a list of all professors from the institution using faculty and departmental pages, noting their contact information. Once that inventory was created, the list was randomized in Excel, and 30 professors were randomly selected to receive a recruitment email. The email provided information about the study, and participants received more detailed information and a consent form ahead of time.

Step 5: Prepare transcripts and summary. Transcriptions and interview summaries were shared with participants after the interviews. All identifying information, including details about field of study, personal information, and institutional identifiers, were removed. The documents were sent as password-protected email attachments, with each participant receiving a unique password separately. Given the sensitive nature of the topics discussed, continuous consent was required from participants. Sharing the transcripts ensured validity, preserved ethical standards, and allowed participants to clarify or expand on their reflections (Mero-Jaffe, 2011).

Data Analysis

The analysis began with preparing the full interview transcripts and summary documents highlighting data relevant to the research questions. We employed an inductive coding approach to categorize data related to knowledge, beliefs and, lived experiences. Initial codes included knowledge, beliefs, turning points, and lived experiences both as graduate students and as supervisors. These were further broken down into sub-codes covering beliefs about graduate school, mental health, and supervision, as well as knowledge of the mental health framework and lived experiences. After coding, we identified emerging patterns and the tone of the data—positive or negative—to inform the development of the schemas (see Chapter 2 (article manuscript), Figure 1)). Drake (2006) proposes measuring tone "by comparing the number of statements containing expressions

of positive affect (words such as “like”, “love”, “excitement”, “revelation”, etc.) to the number of statements containing expressions of negative affect (words such as “hate”, “fear”, “dread”, “dislike”, etc.)” (p.585). Comparing life stories helped us distinguish the beliefs and knowledge about graduate student mental health and the role in policy implementation as reflected in each participant’s experience.

MANUSCRIPT SECTION

Repeating or rewriting history?
A life narratives approach to understanding professors' interactions with graduate student mental health in a Canadian university

INTRODUCTION

The rise in mental health visibility, as well as the occurrence of some prominent and tragic campus suicide cases and subsequent lawsuits (Washburn & Mandrusiak, 2010), adds pressure to universities in Canada to address student mental health. For example, following an influential report by the Ontario College Health Association [OCHA] (2009) that highlighted the important role colleges and universities need to play in a comprehensive mental health strategy for the sector, many post-secondary institutions in Ontario started examining their roles and responsibilities and began developing mental health policies and frameworks to support student well-being and success (Washburn & Mandrusiak, 2010; OCHA, 2009; DiPlacito-DeRango, 2016; Holmes & Silvestri, 2016; Jaworska et al., 2016). Such calls to action contributed to the release in 2020 of the *National Standard for Mental Health and Well-Being for Post-Secondary Students*, which provides "specific requirements for post-secondary institutions for the development and implementation of a framework to safeguard, promote and continually improve the mental health and well-being of students" (*Mental Health and Well-Being for Post-Secondary Students*, 2020, p. 10).

Many graduate students face personal and academic challenges during their studies that can negatively affect their mental health (Aguinis et al., 1996), with some researchers finding rates of anxiety and depression amongst graduate students to be six times higher than those in the general population (Evans, et.al., 2018, p. 282). The link between the pressures and demands of graduate school and graduate student mental health issues has been known for a long time. For example, Hartnett and Katz (1977) reported, "Graduate students are not immune from emotional problems. Pain, anxiety, and pressure reach a point for many beyond any stress that might be justified as encouraging effort and productivity" (p. 657). This pattern continues in the present where "the chronic stress

imposed by the systems of the graduate school are an important place to look when trying to understand the causes of mental health problems in graduate students" (Bekkouche et al., 2022, p. 548). Even though the pressures of graduate studies on student mental health have been documented for the last half a century, the stigma of accessing care and support continues to act as a barrier for graduate students (Rummell, 2015). Importantly, mental health issues are also prevalent in the professoriate that has responsibility for supervising graduate students. However, it is only recently that professors have "spoken out about their own mental illness and the stigma they faced within the academic community" (Evans et al., 2018, p. 283). The systemic pressures of academia, including high expectations and competing demands, affect graduate students and supervising professors alike. This suggests that focusing research and intervention efforts on supervisory relationships can help to understand issues regarding student progress, outcomes and mental health (Bekkouche et al., 2022), as well as their emotional resilience and persistence (Sverdlik, et al., 2018). For example, an adversarial or unsupportive mentoring relationship can negatively affect graduate students' motivation, interest and self-efficacy (Martin, Goodboy, & Johnson, 2015), with poor graduate supervision being a commonly cited reason for dropping out (Sverdlik, et al., 2018). Whereas the OCHA (2009) highlights the shared benefit of actors in post-secondary institutions taking an active role in supporting student mental health by observing that "the social interactions that promote academic learning also enhance mental health and self-esteem" (p. 13).

University students face numerous risks to their mental health due to factors such as age, financial stress, distance from support networks, peer pressure, and elevated expectations for success (OCHA, 2009; American College Health Association [ACHA], 2016).[2] In 2019, the ACHA (2019a) surveyed students from 58 Canadian postsecondary institutions. When asked about their experience over the last 12 months, 51 % of respondents felt that their academic programs had been traumatic or very difficult to handle (ACHA, 2019a). Among the factors affecting academic performance, stress (42%), anxiety (34.7%), sleep difficulties (29%) and depression (24.2%) were identified by

[2] The data related to graduate students was only disaggregated for schools in the United States and data for Canadian schools is combined between undergraduate and graduate students but provides an overall sense of the scale of mental health challenges and what areas of academics they are affecting.

participants (ACHA, 2019a).[3] The results of that survey aligns with what Holmes and Silvestri (2016) reported in their earlier study of Ontario college students where anxiety and depression were the most frequent contributors to academic performance issues. The prevalence of mental health issues has more recently been recognized as a community health issue, particularly affecting the main age demographic of university students, acting as a barrier to academic success and requiring coordinated efforts throughout the university community to tackle (Holmes & Silvestri, 2016).

Early intervention is known to be a key to successful outcomes in mental health support and university students are a "critical population" to address the systemic mental health issues in Canada (OCHA, 2009). The established infrastructure of the university community has the potential to be a prominent place for creating a safe environment for mental health promotion and integrated support and care (OCHA, 2009; Jed Foundation, 2006). There are often several early detection mechanisms already in place in universities, especially for students living in residence, that could help and have long-term positive implications for the health and success of individuals outside of the postsecondary environment (OCHA, 2009). Identifying gaps in the structured support of student mental health can help position educational institutions to provide appropriate solutions. Understanding the roles that different members of institutional communities must play is also key in promoting a healthier situation.

This study looks at a particular site of potential early intervention, which is the relationship between professors and the graduate students they supervise. More specifically, it explores how the life stories of professors, who of necessity have lived experiences as both graduate students and supervisors, can provide insights about factors that may influence the mental health of graduate students. The study uses a life stories methodology to contribute to a growing body of work exploring how professors perceive their role as supervisors and the influence their relationships with graduate students have on the latter's mental health.

[3] The 2019 data on graduate and professional students in the US (ACHA, 2019b) was the result of 11,561 surveys completed at 82 schools. The survey reported that 51.2% of respondents felt that academics had been traumatic or very difficult to handle in the previous twelve months (ACHA, 2019b). Moreover, amongst the major factors affecting academic performance, anxiety (20.2%) (33.8% reported that they experienced it, but didn't think their academics were affected), depression (14.1%), sleep difficulties (13.8%) and stress (23.9%) were identified by participants (ACHA, 2019b).

LITERATURE REVIEW

Despite the increase in mental health awareness campaigns and the prevalence in mental health resources on campuses, a great deal of stigma around mental illness remains, which can cause students to be hesitant in seeking assistance (Washburn & Mandrusiak, 2010). In the classroom, the stigma surrounding mental health struggles can cause professors to under-report issues if they feel it is not their place to intervene or to minimize issues if they believe heightened stress and anxiety are always a normal experience of educational processes (DiPlacito-DeRango, 2016; Savini, 2016). Because graduate students concentrate independently for extended periods on specific content, research questions, and academic methods, they often "lack healthy balance in their personal lives, with many focusing the majority of their attention on academic work to the exclusion of hobbies, interests, and others in their lives" (Wyatt and Oswalt, 2013, p. 97). Evans, et al showed that "good work-life balance is significantly correlated with better mental health outcomes" (2018, p. 283), despite it being hard to attain within a culture of heightened pressures to perform and produce.

In recognizing the impact that stigma can be an impediment to accessing mental health support, postsecondary institutions have begun to incorporate health education practices into their frameworks, using them to amplify mental health literacy (Kelly, Jorm & Wright, 2007; Kutcher, Wei & Coniglio, 2016). Unfortunately, as Wyatt and Oswalt (2013) observe, "graduate students are detached from the social and cultural activities that are often targeted to the undergraduate population on college campuses" (p. 97), making graduate students more prone to isolation from the campus communities and resources designed to support student mental health. Gatekeeper programs have also become popular in postsecondary frameworks to provide training to frontline staff or peers who have a likelihood of encountering students at risk of serious mental health situations, offering mental health support and advising students about when and where to seek additional help (Kelly, Jorm & Wright, 2007).[4]

As various groups of actors in postsecondary institutions continue to examine their

[4] Gatekeeper programs draw on attachment theory that people are more likely to seek help from peers or acquaintances (Lipson et al, 2014).

responsibility in supporting student mental health, “interventions should adopt a systems-level approach that can save universities time and money in addressing the [mental health] crisis” (Bekkouche et al, 2021, p. 568), including revisiting the implications of current and future academic policies and practices, curricular design and the role of professors, as well as accommodations and educational support using a mental health lens. For example, there exists a sub-culture of individualistic, competitive learning with a “weeding out” ideology that can aggravate student mental health issues despite a growing body of research supporting the positive impact of collaborative learning (DeSomma et al., 2017; MacKean, 2011). Educators who believe their primary roles are to sift-and-sort, deliver content, and focus on “learning only” may miss indicators of student mental health problems or opportunities to adjust their practices to benefit student wellbeing (DiPlacito-DeRango, 2016; Jaworska et al., 2016; MacKean, 2011). While graduate student well-being tends to be at its highest during coursework, according to a study by Sverdlik & Hall (2019), the unfamiliar and “simmering pressure” of the comprehensive examinations and dissertation-writing, result in graduate student well-being at its lowest (Sverdlik & Hall, 2019; Bekkouche et al, 2021).

Although there is much research highlighting the proactive role of supported education strategies on student academic success (Ennals et al., 2014; Warwick et al., 2008), policies surrounding mental health focus heavily on a reactive approach to crisis (Olding & Yip, 2014). As such, university policies and frameworks have trouble promoting an environment where positive mental health is seen as a prerequappisite for effective learning (Washburn & Mandrusiak, 2010). Most postsecondary institutions have counselling centres and academic accommodations services that put the onus on individual students to self-refer to gain access (Jaworska et al., 2016; Warwick et al., 2008). These approaches help empower students with mental health issues to achieve their educational goals (Ennals et al., 2014). However, the literature suggests that when institutions refer students to off-campus resources and services, formal follow-up procedures are frequently missing, which leaves vulnerable students without support if off-site referrals are unsuccessful, which is often the case (Jaworska et al., 2016). Research suggests the importance of providing students up-to-date information about mental health resources available off-campus (Washburn & Mandrusiak, 2010), as well as developing partnerships

with community organizations to help ease transition for students leaving campus and reduce the burden on counselling centers on campus (Holmes & Silvestri, 2016; MacKean, 2011), allowing universities to play an active role in coordinating these community referrals to ensure students do not fall through the cracks of the system when they are at a critical juncture in their need for help.

The literature also indicates that many universities are lacking early alert programs aimed at identifying students at risk of developing problems with their mental health (Tampke, 2013; Jaworska et al., 2016). For example, an outreach system that directs students who are experiencing academic difficulties to support resources can help provide for early identification and intervention with respect to potential mental health concerns (DeSomma et al., 2017; Jaworska et al., 2016). For graduate students, a particularly important avenue for prevention, early detection and intervention exists in the relationships they have with their supervising professors (Holdaway, Deblois & Winchester, 1995). For instance, Martin et. al. (2015) report that "when graduate students receive supportive communication from faculty members, they are more likely to socialize within their departments and their discipline" (p. 439), which in turn promotes a sense of community and positive interpersonal relationships, two protective factors of mental health. In contrast, isolation and loneliness are detrimental struggles that can negatively impact graduate students' mental health (Wyatt & Oswalt, 2013). Importantly, unsupportive or bullying behaviour on the part of supervisors can have serious, negative impacts on students' motivation, interest, and efficacy (Martin et. al., 2015). Adequate oversight, regulations and training are encouraged for supervisors to help them play a productive and healthy role in the academic journeys of graduate students (Jara, 2021; Seko et al., 2024; Alharbi & Jacobsen, 2018).

THEORETICAL BACKGROUND AND FRAMEWORK

The present study focuses on the important relationship that exists between professors and the graduate students[5] whose thesis research they supervise as that relationship pertains to the students' mental health. It explores how professors' past

[5] For the scope of this study, graduate students refer to part-time or full-time students in a research-focused master's or PhD-level program with a direct supervisor.

experiences with mental health needs and issues during their graduate studies influence their subsequent supervision of graduate students. The study combines a life narrative approach with concepts from sense-making theory to draw connections and understand how past experiences influence current beliefs. Mental health policies and frameworks tend to target undergraduate students and thus do not adequately account for the unique experiences and needs of graduate students in thesis-based programs of study. Moreover, policies and frameworks tend to lack clear guidance on the role of supervisors or available resources intended for graduate students. An analysis of the life stories and sense-making of professors is a way to gain insight into the supervisory relationship as one site for supporting mental health needs in graduate programs.

The life story approach used here builds on the work of Drake (2006) who drew from the work of Clandinin and Connelly (1998) and Craig (2001). The latter authors used teachers' life stories to understand how they experienced their roles in relation to the implementation of educational reforms. In Drake's (2006) case, the approach linked teachers' life stories of being students with how they make sense of and enact their roles in implementing a mathematics curriculum reform in their classrooms. Drake (2006) explains that "the use of teacher narratives allows us to understand teachers' beliefs, knowledge, and experiences as interconnected and interrelated systems" (p. 583). In so doing, her study foregrounds how teachers' personal, lived-experience – both past and present – influences their implementation of policy at micro levels. Her study illustrates idiosyncrasies in how local actors (i.e., teachers) pay attention to, make sense of, and interpret policies through the lenses of their personal knowledge and beliefs drawn from self-understandings of their lived experiences.

The present study adapts Drake's approach to the context of mental health policy reform in universities. It does so by using professors' narratives of their own experiences as graduate students, including with respect to mental health, to shed light on how those lived experiences influence their beliefs about graduate student supervision, their perceptions of the mental health needs of graduate students, and how to support students in the supervisory relationship. Drake (2006), citing Conle, Li and Tan (2002) and Dewey (1964), argues that "prior experiences are the primary source of the knowledge teachers draw on in the midst of practice - and that this experiential knowledge is best elicited

through stories" (p. 583). Following this logic, the study elicits and analyzes professors' life stories to explore how they draw on beliefs and knowledge from past experiences to inform and make sense of their contemporary practices as graduate supervisors. This sense-making perspective emphasizes how their cognitive schemas of beliefs, prior knowledge and lived experience influence what professors pay attention to with respect to graduate student mental health and how they interpret and respond to what they perceive (Dulude & Milley, 2020).

Based on this theoretical framing, this article presents and discusses findings to the following research question:

- In what ways do professors' beliefs and prior knowledge from their own graduate school experiences influence their perceptions of their contemporary role as a supervisor of graduate students and relationship with graduate student mental health?

METHODOLOGY

A qualitative research design (Patton, 2002) using narrative inquiry method supports this study, which combines the life story technique with sense making theory. This combination draws on Merriam's (2009) observation that that stories are "how we make sense of our experiences, how we communicate with others and through which we understand the world around us" (p. 32). The interview protocol developed for the study incorporated the life stories technique used by Drake (2006) to explore the knowledge, beliefs and perceptions of professors with respect to graduate student mental health in universities.[6] This protocol aimed to generate data that would provide insight about the schemas that professors draw on from their prior life experiences, which subsequently influences what they pay attention to with respect to graduate students' mental health. The protocol was tested with three pilot interviews at the researcher's home institution, with changes to question order taking place between the second and third pilot interviews to better support the flow of dialogue and avoid redundancy and repetition. The protocol linked to the guiding research question took into consideration the sensitive nature of the

[6] Drake (2006) drew guidance on protocol design from studies in psychology, where similar protocols have a strong record of accomplishment (McAdams, 1993).

topic of mental health and participants' own experiences and coping mechanisms.[7]

Given the aims and in-depth nature of the interviews, the sample was limited to four professors. These participants were recruited from different faculties at a comprehensive university in Eastern Canada that was in the process of implementing an official mental health framework.[8] Selection criteria for professors included that they needed to have tenure or be in tenure-track positions and have supervisory responsibilities of graduate students. All interviews were conducted in Spring 2022 over Zoom to facilitate ease and safety for the participants during the Covid-19 pandemic. The interviews lasted between 60-110 minutes and were audio and video recorded. Verbatim transcriptions were produced, which were condensed into narrative summaries reflecting data that was responsive to the study's guiding research question. These summaries were shared with participants for their review in terms of rendering an accurate portrayal of their life stories. The production of the life story summaries represented the first step of data analysis. To produce them, an iterative, inductive coding process was used on the verbatim transcripts that focused on identifying knowledge, beliefs, turning points and lived experience as both a graduate student and supervisor of graduate students. Various subcodes were developed to identify specific data about, for example, mental health and supervision, knowledge about mental health and the university's mental health framework and lived experience with mental health in the context of supervision. Following the coding of the interviews, we looked for any emerging patterns as well as the tone of the data, whether positive or negative, to guide the development of the schemas (see Figure 1 Chapter 2, Findings section).

FINDINGS

[7] I tested the interview protocol with pilot interviews with three participants professors from my home institution. Merriam (2009) highlights the value of pilot interviews for helping the interviewer to "quickly learn which questions are confusing, and need rewording, which questions yield useless data, and which questions, suggested by your respondents, you should have thought to include in the first place" (p. 95). The first two interviews yielded a lot of repetition in stories shared by the participants, so I made necessary adjustments to the protocol and conducted a third pilot interview to confirm the new order of questions in the interview protocol.

[8] I created an inventory of all professors at the institution, who were listed on the various faculty or departmental pages with available contact information. Once that inventory was created, I used Excel to randomize the list and then randomly select 30 professors to receive a recruitment email.

This section presents the professors' life stories, which describe their journeys through academia while highlighting their knowledge, beliefs and lived experiences first as graduate students and then as supervisors of graduate students and providing insights about how they make sense of their role as supervisors and support graduate student mental health.

RITA[9]

Rita began her graduate school journey with a plan to complete an applied master's degree and work in her field of study. After gaining some practical work experience and realizing that she wanted to pursue more research in her field, Rita returned to the same graduate school to pursue a PhD with the same supervisor. Overall, Rita had a supportive, friendly and positive relationship with her supervisor, noting, "the first part of my PhD was amazing, we worked on stuff, we laughed, I was really close with her." Having submitted her dissertation and while starting a post-doctoral program, Rita's plans took an unexpected turn when her external evaluator determined that her dissertation was not passable, and thus, her planned final oral defense was cancelled. With two kids and having already moved to a new city, Rita was forced to change her research topic, collect new data, and write, submit and defend a new doctoral thesis. She had little guidance in how to handle this seemingly impossible situation, which left her wondering if she was "good enough". At the same time, this setback allowed her to realize how much she wanted to keep going to complete her degree. In looking back, she observed:

> *I had a choice at that point to make, am I going to stay in academia and finish my PhD, show everybody I can do it and that this is what I really want to do, or am I going to ... walk away? I decided to stay, so I think ultimately that had a positive impact on how I felt about myself and my abilities.*

About this stressful time, Rita explained that "no one talked about mental health explicitly" and her supervisor and thesis committee members did not check on how she was handling the setback and if she had anyone to support her. Nonetheless, Rita maintained empathy for her supervisor, given such an unprecedented situation, and despite the added challenge of navigating the situation on her own. In the next two years, Rita had another child, collected

[9]All names used are pseudonyms chosen to protect the anonymity of the participants.

and analyzed more data, and wrote up and defended another dissertation. She found strength and support from her family and felt fortunate to have non-judgmental understanding from her peers in academia who understood the "daunting prospect of doing another thesis."

Rita went on to successfully defend her dissertation and become a tenure-track professor. When she began working with graduate students, her supervision style closely mirrored that of the supervision she had received, for example, by providing many comments and writing suggestions on draft theses. Rita's style has evolved over time, which she attributes to "reflecting on [her] own experiences [and the fact that] it's not totally [her] responsibility to get the student out the door; they have to put in the work as well." She also recognizes that different students need different things. Some require hands-on guidance, while others are self-directive. She thus believes that part of being a good supervisor is trying to understand and respond to those needs. Rita also feels her role is to have consistent presence for her students that fosters trust and openness. By ensuring that she is "not just supportive during the crises, [but] supportive all the way along", she is able to notice when a student is struggling and to have necessary, if difficult, conversations.

Over the years, Rita has developed a personal interest in the impact of supervision on graduate student mental health. She has seen numerous challenging supervisory relationships and dynamics during her years in academia. She notes in her experience there are no explicit parameters for graduate student supervision and that the lack of clear accountability for professors in the supervisory relationship can have an enormous impact on a graduate student's experience, including with respect to their mental health. Because Rita has held various roles in senior administration, she is aware of a centralized early alert system to identify students at risk of mental health problems. But, despite having for decades of university experience, she still does not feel confident that she knows what resources are available to support graduate student mental health. Rita's own experience as a graduate student did not include open discussions about mental health issues and resources, and she suspects that "historically, we might have thought, grad students are older, they can kind of sort themselves out" and that those attitudes and beliefs persist despite evidence to the contrary. As a result, Rita reports making a conscious effort to

allow her graduate students to be open about their struggles. Rita also reports sharing her own lived experience to help foster a sense of reciprocity.

INGRID

Shortly after Ingrid began graduate studies, she realized that she had entered a system with its own language and set of rules, which left her feeling out of place. For example, when she received a B+ grade in one of her master's-level seminars, it only impacted her negatively when she was talking to her supervisor and realized the grade "was coded language for 'this student does not have potential to move to the next phase'." While Ingrid ultimately completed her master's degree, she realized she had been influenced by others to select a certain academic program and had come to believe it was likely not the best choice for her. So, following her master's degree, Ingrid took a break from studies for several years to work before entering a PhD program. Ingrid's years away from school allowed her time to reflect on and better understand the importance of making decisions for herself regarding the direction of her research and choice of program.

Despite the fact that Ingrid was financially stable at the start of her PhD program, having worked for seven years and received full SSHRC funding, she still found the process of submitting funding applications immediately upon entering the PhD program "quite stressful" and "not great for building a sense of community, of solidarity, [because] that competitive element was there from the beginning". She recalled how this type of pressure had a hugely negative impact on one classmate who "was probably the smartest person in the program", but who did not receive SSHRC funding and experienced significant financial struggle throughout his program, which negatively impacted his mental health and overall experience. Ingrid, on the other hand, had a positive PhD experience, which she attributes to a "wonderful" cohort and supervisor, and to the time she took off from academia following her master's degree program. That time away allowed her to gain clarity about how she wanted to approach her PhD differently than her master's. Throughout the five years of doctoral studies, Ingrid experienced periods of self-doubt, questioning, stress, personal struggle and soul-searching, noting a particularly challenging time when she rushed into her dissertation proposal after completing her comprehensive exams, not taking a break to process or pause before forging ahead. Still,

Ingrid remembers more positive than negative experiences as a doctoral student recognizes that her “competitive drive” helped her to become a better scholar. Following a positive dissertation defence, which felt more like a celebration rather than anything contentious, Ingrid concluded her studies surrounded by friendly peers graduating alongside her.

Ingrid has worked at two universities as a professor. As a supervisor she finds fulfillment and joy “anytime [her] students accomplish something, whether it's a conference presentation or a publication.” Ingrid has had challenges in the role, like when she agreed to step in and supervise a student who had never really found their footing, and eventually left the PhD program. While that was disappointing for Ingrid and the student, she wonders whether, by agreeing to step in, she prolonged the inevitable, which was that the program was not a good fit for this student, rather than helping him make the difficult decision to step away sooner. According to Ingrid, at both institutions where she has worked, professors do not get trained on being supervisors, so how she acts as a supervisor is based on reflections about her own experience of being supervised as a graduate student, “for better or for worse”. Ingrid had supervisors during her graduate studies, who were “consistently sort of very hands off, would sort of reappear, check in, fix things, if necessary, but were generally quite removed.” As a supervisor, she has had to learn that this “removed” approach does not work for all students, some of whom require structured goals, consistent attention, and a “hands-on approach” through regular check ins to continue to make progress in their studies.

As a supervisor, Ingrid sees her role as "counselling, providing feedback and facilitating opportunities” and doing what she can to make “the graduate school experience a positive and a supportive one”. As a woman in academia, Ingrid knows “the studies and the stats are out there in terms of women being more approachable when students have difficulties that go beyond the basic academic experience” and that this socio-emotional load of supporting students with their personal problems can often fall on women professor. Ingrid tries to be clear about her boundaries and limitations and does not specifically go out of her way to be an “approachable professor” but finds students do confide in her simply because of her “way of being in the world”. At times she struggles with how to know what emotional or personal distance best supports a positive supervisory relationship. As she continues to gain experience, Ingrid foresees continued evolution in

her approach and how much she will invite her students into her life.

Since being a graduate student, Ingrid finds the climate related to talking about mental health in academic institutions has changed, such that many students are aware of and comfortable with discussing mental health issues; however, she recognizes that universities continue to be "harsh places" for students who feel they don't belong. Her recent involvement projects related to the experiences of Indigenous students gave her new understandings about of the weight and impact of systemic issues on particular individuals and groups.

When it comes to supporting graduate student mental health, Ingrid is aware of some of the resources available to students, such as counselling services. But in the department where she teaches, Ingrid observes "conversations are about admissions and funding and getting people through the program, and so mental health is not an explicit part of the conversation." Ingrid recognizes that her own experience as a graduate student influences her approach to graduate student supervision, and, as a result, her "default" is to assume a positive graduate school experience for her students and her "ideal is to be a supportive, attentive supervisor, who doesn't do the therapy work." In reflecting on her faith in the university in which she works, Ingrid pointed out the institution does things that can exacerbate students' mental health issues, for example, by not "clearly communicate deadlines about when you have to submit applications to graduate, [which] raises the stress level, the anxiety of students enormously." As a result, she believes the university doesn't recognize that the mental health challenges do not always come with the individual student to university, and that the institution can create or aggravate mental health problems. Ingrid thus views her work to be about "humanizing these programs, in terms of interactions with the students", while empowering students to recognize their own role as "young adults" in the university community.

MEGAN

Megan described her academic performance in undergraduate studies as "average", a factor that did not stop her from entering graduate studies but did prevent her from getting a scholarship during her master's degree program and early on in her doctoral program. As the first member of her family to go to graduate school, and starting off her

academic journey without funding, Megan often felt out of place and wondered if she "belonged" in graduate studies. She struggled when confronted with the challenging politics that can arise in academia like when one of her thesis committee members tried to recruit Megan away from her supervisor Megan declined the offer, but observed the effect was that "this person kind of continued to punish [her] throughout the rest of the dissertation process." In response, Megan's actual supervisor helped navigate the situation by encouraging her to ensure the "work [was] so bulletproof that there's nothing they can do to stop [her] from going to defence." Megan's insecurities persisted; however, during the third year of her PhD program, external validation arrived in the form of a scholarship, which helped assuage her "impostor syndrome."

Megan had taken time away from academia after her undergraduate studies to work before entering her master's and then PhD back-to-back. She believes that was advantageous to start graduate studies a bit later in life; it allowed her to put things into perspective and focus on the work that she wanted to do, rather than producing the work she felt she had to do. In having ties, connections and "life experience" outside of academia, Megan felt like the risk of potential failure was not really a concern because she had already proven to herself that she could be okay outside of academia. She found that realization, that turning point in her perspective, to be "pretty transformative". Megan felt fortunate to have received solid mentorship from her two graduate supervisors, who, for example, validated the challenges and anxiety surrounding steps in the process and offered constructive feedback to help navigate difficult situations like interpersonal conflicts, struggles with anxiety and impostor syndrome. These positive experiences with supervisors allowed her space to explore her strengths and continue to persevere in her research and career.

As a supervisor of graduate students, Megan has found fulfillment in supporting students who, like herself when she first entered graduate school, had less than stellar academic results and writing skills, and who, by the end of their studies, all successfully defended their theses without revisions. For Megan, this demonstrates "the possibilities of the kind of work that [students] can create when they're supported in a way that doesn't make them feel like they're constantly being examined and undermined." As a supervisor, Megan focuses on building solid and trusting relationships with her students and

colleagues. She tries to be "intentional" in her approach, focusing on the needs of each student, like whether a situation requires that a co-supervisor be brought in to help move the research along, or that a student be supported in their choice to leave a program due to mental health challenges or other external life circumstances. Megan aims to be invested in the well-being and success of her students during their graduate studies and in attaining their professional objectives following graduation. She reports that students have expressed their appreciation for her approach which does not include micro-management and offers independence and flexibility. Megan observed that her approach relies on mirroring her own experience of having had good mentorship and supervision. She uses examples and guidance from those past experiences to try to meet the individual needs of her students. Megan also draws on memories of her own struggles as a graduate student to be aware of the insecurities, fears and challenges that her students may be experiencing.

With respect to graduate student mental health, Megan finds that the university has policies, such as time limits, that can cause unnecessary stress and hardship on students. In her experience, professors are not trained to be mentors and supervisors and do not necessarily have the skills or resources to appropriately support the mental health or relational challenges that may arise while supervising graduate students. For her part, Megan has been involved in some collaborative projects at her university to map out mental health and well-being supports and services on campus for students to help improve access. She came to learn about the challenges graduate students face in accessing these services, making her more interested in figuring out how to better support her own students. Megan recognizes that there are distinctive organizational challenges in "telling professors what to do" and finds that the administration relies more on making "suggestions" as to the role professors should take to support students' mental health.

DAVE

Dave did his graduate studies at a "prestigious" institution outside of Canada in a competitive program that, in his experience, relied on a culture of tradition and connections, and on "weeding-out" students who could not "hack it." As a graduate student, Dave felt the expectations for success were not clear and it was often hard to know if he was doing well or failing. The experience was marked by "volume and rigour", and

the unspoken expectation to keep "pushing through" to produce. Dave said he received very little feedback but noted that an offhand comment from his academic supervisor in his graduating year allowed him to feel validated from someone who he "really admired". The supervisor's comment was "oh, that's not bad, you know."

As an international student, Dave felt there were "rules to the game" that he never quite understood. The so the goal seemed to be "survive the system", and that doing so was a key measure of success. Dave also reported that achievement in the program seemed to rely on connections – in other words, who you knew was more central than what was produced and evaluated by clear and equitable criteria. The stressful impacts of a competitive environment coupled with little feedback and opacity around measures of success, left Dave feeling like he was "failing the whole time until, all of a sudden, [he] didn't fail".

Dave encountered mental health challenges throughout his graduate studies that extended beyond the classroom and impacted people close to him. As Dave embarked on his prestigious program, his spouse was having a "miserable time" finding a job while struggling to adapt in a new cultural environment. At the same time, the academic pressures were high. For example, Dave said the "sheer weight that the program" led to the "full-on breakdown" of a classmate and he had to finish their group project on his own, without accommodations. Dave saw firsthand how graduate school can affect people's mental health. While Dave felt pressure and stress, he relied on the collegial support of classmates, observing how the "shared traumatic experience" meant they "might as well just get along" despite the competitive culture.

Dave found the relationship with his professors to be "enmeshed" and, at times, confusing: "When we went out to a bar and had drinks, they were there; when we went out to a restaurant and had meals, they were there.*"* The graduate school experience for Dave was all-consuming and the lines between success and failure, professor and student, colleague and competitor were constantly blurred and elusive. After graduation, Dave's supervisor advised him to accept that the other people in his program would always get things first and easier because they grew up in the system in that country, understood the nuance of the culture, and had a "leg up". The supervisor told Dave would still have options but would be "better off if he accepted this" if he decided to remain in that country.

Dave said this candid advice felt oddly supportive and prompted his return to Canada.

Upon his return, Dave began a career working as a professor who, among other responsibilities, supervises graduate students. Recently, Dave experienced a career highlight working with a cohort of "truly gifted" students who had excellent work to show him during scheduled meetings, had interesting things to discuss, and who progressed in their research in a consistent manner. On the other hand, Dave explains that "a low experience [with supervision] is when I can't get someone to do anything, no matter how hard I try and I just push and push and push, and it doesn't work." Through the highs and lows, he feels he does best as a supervisor when he can coach students as they submit work, but if they submit little or nothing before meetings and if they exhibit no initiative or drive, Dave struggles to know how to effectively supervise. One experience that marked Dave was with a student who struggled through her first year while doing the mandatory coursework and most professors in the program thought she was an "admissions mistake." Dave agreed to supervise the student because she had no other options to continue. He found that once the student was free to work on a project in her area of interest, the student thrived and successfully completed, to the surprise of many. Dave said this experience was "a higher peak than just having good students" because it demonstrated the capacity of most students to excel when they are given opportunities, freedom and support to explore their passions.

Achieving tenure and promotion was an important moment of validation in Dave's career to counteract his longstanding experience of "impostor syndrome." This turning point provided him with a sense of security, allowing him to explore pedagogically, which led to opportunities to work on interesting projects and to offer better support to his graduate students. Dave said he tends to compare his skills and accomplishments to others, scrutinizing himself in relation to those of his family, other professors, and colleagues in his field. Despite numerous accolades, he still struggles with feeling "out of his depth" in academia, an insecurity that persists, despite the validation of tenure and promotion. Both personally and professionally, Dave struggles to balance the financial responsibilities towards his family with the challenges he faces to get grants and other funding to support his research and his graduate students, but his responsibility to those who rely on him continues to drive him.

As a supervisor, Dave said he focuses on doing the “polar opposite” of the supervisor he had during his own graduate program. This means having no “enmeshed” relationships with his graduate students, but, at the same time, being intentional, direct, and clear about the way he supports his students, and providing ample feedback and opportunities for validation.

When trying to make sense of his own role in supporting graduate student mental health, Dave acknowledges the challenges that both professors and students face in the current academic and social climate. In Dave's experience, fewer graduate students are coming in and only doing graduate school. He finds that many of them are working full-time and are parents or caretakers, a reality much different than his own as a graduate student. Dave found that the Covid-19 pandemic complicated his role in supporting graduate student mental health. At times he was keenly aware that an online meeting he would have with a student might be their only interaction with a faculty or staff member as all activity had moved online, often asynchronously. The isolation created by the pandemic and the switch to virtual meetings and courses added increased pressure and responsibility to an already challenging situation for graduate student supervisors. Dave said that, while there are lots of smart and caring people at the university and he has faith in the institution “on paper”, he recognizes the negative impact of the pandemic on mental health and well-being and doesn’t believe that having a group of smart and caring people at the university is enough to figure out how to solve the structural and systemic challenges we as a society are facing at present.

Schemas

We were interested in identifying how the participants’ schemas – understood as the knowledge, beliefs and attitudes derived from past experiences – influenced their perceptions of their roles and actions relative to the mental health and supervision of graduate students. Our analysis of the findings allowed us to identify five dimensions that were shared across the schemas of the participants. By mapping the findings onto these dimensions, we can present and compare the schemas of each participant.

The first dimension consists of their level of personal connection to and interpersonal involvement with their students. More precisely, this pertains to how involved their supervisor was in their personal life and how personally connected they

strive to be with graduate students they supervise in their current roles as professors. The findings reveal that these interpersonal connections can be understood to vary in terms of their level of self-disclosure, socializing outside of the academic environment, and the frequency of these outside interactions. The second dimension concerns the level and type of guidance that supervisors provide to their students. Guidance can be understood as "help and advice about how to do something or about how to deal with problems connected with your work, education, or personal relationships" (Cambridge Dictionary, n.d.). The findings suggest that some professors provide explicit, directive or feedback-heavy guidance as a supervisor, others take a "hands-off" approach featuring little guidance, and some fall in between these poles. The third dimension consists of the experiences that professors have with mental health issues, interventions and supports, including during their experiences as graduate students and with graduate student mental health as a supervisor. The degree to which they have had exposure to or experience with graduate student mental health issues seems to influence how they see and reportedly enact their supervisory role in terms of graduate student mental health. The fourth dimension speaks to the culture of academia and how professors make sense of their role and existence within it. In particular, the way in which participants in this study understood and experienced academic culture as a graduate student and now as a professor supervising graduate students tends to influence their experience of impostor syndrome or sense of belonging. With respect to the fifth dimension, participants discussed the system of academia and how knowledgeable they felt about this system both as a graduate student and then as a professor with supervisory responsibilities. Understanding the instruments and mechanisms of the system, where to go for help, what resources exist, and how to work within the system to support their needs or the needs of other students, influences the professors' feelings of self-efficacy in interactive with graduate student mental health. The identification of these dimensions makes it possible to analyze the schemas of each professor in terms of how they see their role as supervisors in relation to their perceptions of their experiences as graduate students. This allows for a comparison of their perceptions with respect to these distinctive experiences, and how this influences their view of supervision. These figures are complemented with some explanation drawn from the findings.

As the experiences emerged, we developed a visual display of these schemas (Miles, Huberman & Saldana, 2014) for ease of reference, as seen in Figure 1 (chapter 2). As Drake (2006) demonstrated, combining a sense-making theory with a narrative approach allows us to develop professors' life-stories, which ultimately "frame and guide the way in which individuals understand and act on new information" (Drake, 2006, p.581).

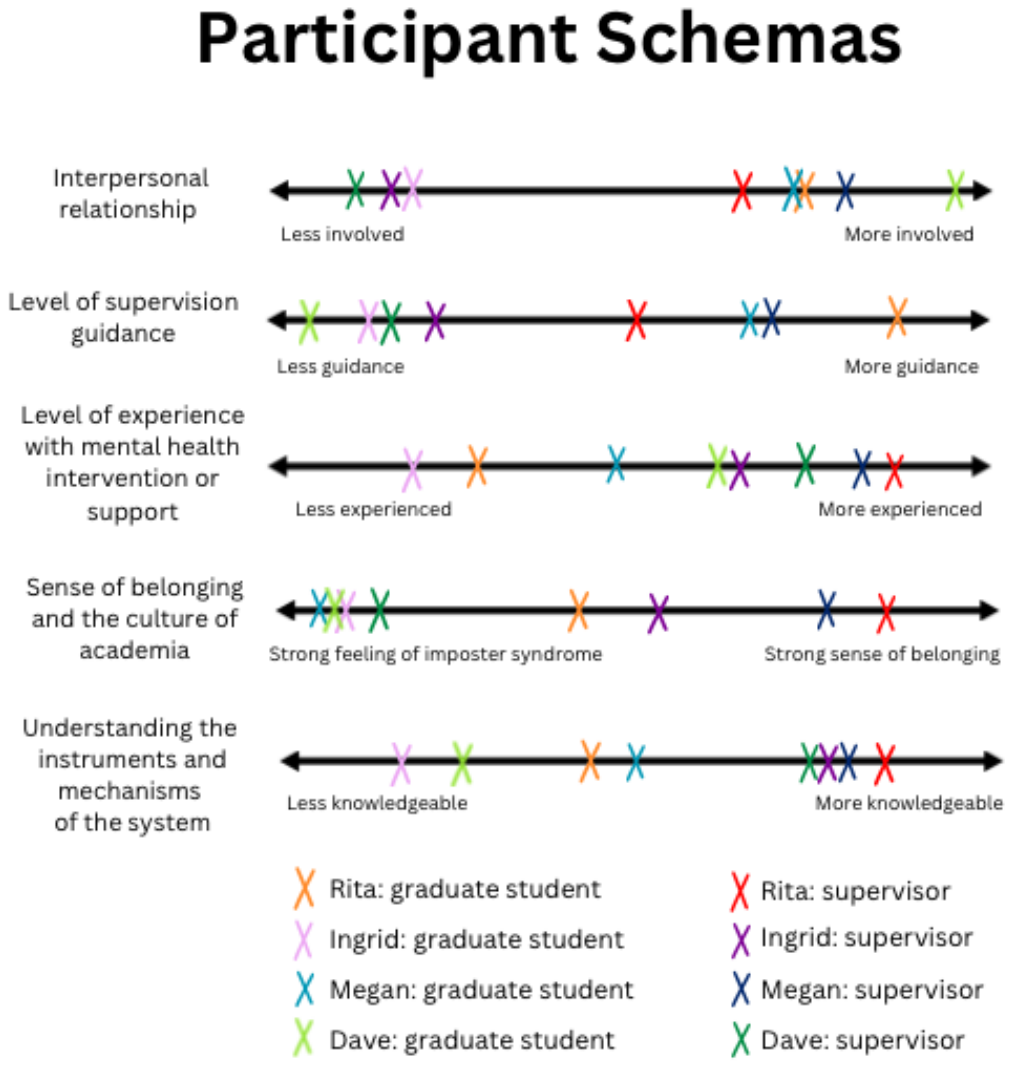

Figure 1: Participant schemas as graduate students and as supervisors

In looking across these cases, we see two types of supervisor experiences emerge: 1) professors who had supportive graduate supervisors that led to a positive graduate

school experience who then strive to emulate that level of connection and mentorship; and 2) those who had a negative or unsupportive supervisor experience who are motivated by this lack of support to do things differently for their own students.

DISCUSSION

This study allows us to better understand the beliefs and knowledge emanating from professors' lived experience as graduate students through the sharing of their life stories, and how those beliefs and knowledge inform professors' cognitive schemas about their subsequent supervision of graduate students, including with respect to mental health issues and needs. As we gain understanding of the significance of certain experiences and moments in the life stories, we also begin to see how the professors' perceptions of their role influence their interactions with graduate student mental health.

Participants all reported that they did not have any formal training on how to supervise graduate students. One professor mentioned receiving a workshop specific to supporting student mental health, others had some familiarity with the resources and supports available through the university counselling service or early alert system, and three reported that their knowledge on these matters and their understanding of their university's mental health framework focused more on the undergraduate student experience and did not factor in unique aspects of the graduate student experience. In the relative absence of training for graduate student supervision, professors were inclined to rely on beliefs and knowledge about supervision and graduate student mental health drawn from their lived experiences as graduate students and, later, from their supervision roles. Regardless of whether their experiences with supervisors and the supervision process as graduate students were positive or negative, all participants mentioned the significance of those experiences as guiding factor in helping them understand their own roles as supervisors. These findings are consistent with other studies that have found that professors/supervisors typically receive no specific training on supervising and mentoring graduate students (Berdahl, Malloy & Young, 2022) and that there is a need for professional development programs to increase the number of prepared and confident

graduate supervisors (Jara, 2021; Seko et al., 2024; Alharbi & Jacobsen, 2018). The life narrative methodology provided insight into the reproduction process by which, in the absence of formalized expectations and training, professors may tend to replicate certain beliefs and knowledge developed during their own graduate studies experiences in their subsequent roles as supervisors.

Studies about graduate student mental health have found that graduate students desire empathy and personalized interest from supervisors, highlighting the significance to student wellbeing of some human qualities in the relationships between professors and graduate students (Ryan et al., 2022). The professors who participated in this study expressed a variety of beliefs about how personally connected they felt – or believed they needed to be – to their graduate students, and how 'involved' they were in the interpersonal relationships with students. Their type and level of engagement with students seemed to be influenced by how they felt about and related to their own graduate supervisors. Rita and Megan enjoyed close personal connections to their supervisors and reported trying to replicate these dynamics with their students, whereas Ingrid reported benefiting from an intellectual and professional relationship with her supervisor, which influenced how she tried to mirror these relational characteristics in her supervisory role. In contrast, Dave observed that having close interpersonal contact with a supervisor in the context of a highly competitive graduate program generated contradictions that were difficult to reconcile. As a result, he said he tries to strike a balance between the interpersonal and academic dimensions of the supervision role, focusing on clarity in feedback and interactions. Ives and Rowley (2005) demonstrate the overlap between thesis progress and satisfaction with supervisor, and Holdaway et al (1995) caution against choosing supervisors for personal reasons, rather than intellectual ones. The life narrative allows us to see how professors may see their role in fostering personal connections or maintaining strong personal boundaries with their graduate students despite the fact that "students who talk to faculty that care about their success and care about them as a person have better mental health than students who do not (Bolotnyy, Basilico & Barrera, 2022, p. 1216)."

Participants also touched on the additional challenges experienced by international graduate students or those belonging to historically marginalized groups. When it comes to mental health help-seeking behaviors of international students, studies found that "various

cultural values and beliefs are often in conflict with the concept of mental health in their destination country" (Baghoori, Roberts & Chen, 2022, p. 1). Dave's experience completing his graduate studies as an international student illustrated some of the potential challenges of feeling like an outsider in a new educational system. Although Dave was studying in his native language, he felt that the domestic students had the advantage of understanding how to navigate the system and how to access support in a way that he lacked. A recent study by Clarke (2023) found that a significantly lower number of international students reported that they accessed mental health-related resources or would seek mental health support. When participants reflected on their role in supporting graduate student mental health, most identified resources at their institutions to refer students to, but all participants were unclear of anything specific to graduate student needs, and none explicitly identified culturally responsive resources that would best serve the needs of international students.

As each participant reflected on their experience as a graduate student and present experience as a professor supervising graduate students, their sense of belonging in, and connection to, the culture of academia emerged as an area of significance. Participants observed that as graduate students they felt a keen sense of impostor syndrome, which can be understood as "the feeling that your achievements are not real or that you do not deserve praise or success" (Cambridge Dictionary, n.d.). The presence of impostor feelings among graduate and professional students has been linked to indicators of diminished mental health and well-being (Ménard & Chittle, 2023), and there is some evidence of this in the life stories of Ingrid, Megan and Dave. Interestingly, this experience has followed Dave throughout his career as a professor, where he continues to struggle with a "massive impostor syndrome", which leads him to continue questioning the validity and merit of any of his perceived successes. To varying degrees, Rita, Ingrid and Megan identified a positive supervision experiences and strong personal supports as factors that helped support their wellbeing and success in graduate studies, which is supported by findings from Cohen and McConnell (2019) that a strong social network and high-quality mentorship can help to alleviate the negative impact of impostor syndrome on graduate students.

CONCLUSION

Participants in this study demonstrate how internal, interpersonal and systemic experiences interact with their lived experiences as graduate students and as supervisors of graduate students, and ultimately impact their understanding of their role in supporting graduate student mental health. In the absence of role clarity, supervisory and mental health specific training, and access to adequate support resources, professors tend to rely more heavily on their own graduate supervisor experience to guide their practice. While this finding may not be surprising to those working in academia, the stories shared by these four professors highlight some of the impacts that a lack of training and clear guidelines can have on both professor and graduate student mental health. One of the limitations of the study is the self-reported nature of the findings. While a professor may see themselves as providing high guidance and having close and positive interpersonal relationships with their students, the study does not corroborate this information with reports from the graduate students themselves.

Further research into the impact of the Covid-19 pandemic as well as the effects of prolonged austerity measures and the subsequent impact on professor mental health and wellbeing would help to shed light on factors that may be impacting institutional efforts and frameworks designed to support student mental health. The increasing demands on the professors both academically and administratively require simple and clear procedures that augment their innate desire to support their students' wellbeing by facilitating a direct path to mental health resources. As frameworks are being developed, implemented and evaluated, they need to identify unique touch points or gate keeping moments that can help graduate students receive early intervention and connection to resources. Most notably during the research and writing portion of their programs, graduate students may experience heightened isolation, leaving the supervisory relationship as an even more significant opportunity for early intervention and fostering a student's sense of belonging.

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CONCLUSION SECTION

This chapter presents additional results. These include findings not included in the article because, in analyzing the data, we found that participants were either slightly or not at all aware of their university's mental health framework and its implications for graduate student supervision. They were thus largely unable to respond to some elements of the interview protocol designed to address the study's second research question, which focused on how their perceptions as graduate student supervisors influenced their understanding and implementation of the mental health framework. Because these data were not wholly responsive to that research question, and for reasons of feasibility in producing a concise article length manuscript in chapter, they were saved for presentation in the current chapter.

ADDITIONAL FINDINGS

RITA

Over the years, Rita has developed a deep interest in how supervision affects graduate student mental health. Her extensive experience in academia and administration has exposed her to many challenging supervisory dynamics. She observes that the absence of specific guidelines for graduate student supervision and the lack of clear accountability for professors can significantly impact a graduate student's experience. Despite her long tenure as a professor and supervisor, Rita still feels uncertain about the specific resources available to support graduate student mental health, even though her administrative roles have given her some insight into the centralized early alert system. She believes the university has made greater strides in supporting undergraduate students compared to graduate students, causing her to feel less certain about her role in the implementation of the university's mental health framework.

Reflecting on her own graduate school experience, Rita notes a lack of open discussions about mental health, which she suspects was due to outdated beliefs that older graduate students should be able to manage their own issues and challenges. To counter this, Rita consciously creates space for her own graduate students to discuss their struggles

openly and shares her individual experiences to foster a supportive environment.

In her final reflections, Rita shared a deeply personal concern about how supervision impacts graduate student mental health. Over her extensive career in academia and administration, she has witnessed numerous challenging supervisory dynamics. According to Rita, the absence of specific guidelines for supervising graduate students and the lack of clear accountability for professors can profoundly affect a graduate student's experience. Although she has faith in her institution's mental health goals, she feels that the implementation of these initiatives has been slow and that there is a pressing need for increased financial and human resource investments.

INGRID

Ingrid's interaction with her university's mental health framework was primarily marked by a sense of uncertainty, especially about what, if any, resources, or aspects of the framework are oriented toward graduate students. Although she felt she had some knowledge of the available resources, like counseling services, the specifics of the framework or her role in implementing the framework eluded her. Ingrid expressed that "like many frameworks, there [can be] really good intentions", but even for someone like Ingrid, who sees herself as "very invested in the well-being of students", she does not have a sense of how the work that she does in supervising graduate students and promoting a positive graduate student experience connects to the larger institutional mental health framework.

In her department, "conversations are about admissions and funding and getting people through the program, and mental health is not an explicit part of the conversation." Ingrid's own experiences as a graduate student deeply shaped her approach to supervision, and her subsequent interactions with graduate student mental health. She finds that she often defaults to the assumption that her students will have a happy graduate experience for her students. Her goal is "to be a supportive, attentive supervisor, who doesn't do the therapy work," and who ensures that her boundaries align with her beliefs about the role of a supervisor as a facilitator, where both she and the graduate student need to participate in building a healthy and collaborative relationship.

While Ingrid has some faith in her university's desire to promote positive mental

health, her belief is tempered by the reality that institutions sometimes exacerbate mental health issues for students with cumbersome processes or inadequate communications about deadlines or regulations. At times, Ingrid does not always trust the university to remember that mental health challenges and struggles do not always come with the individual student to university, but mental health challenges or crises can be created or aggravated by the institutional practices. Ingrid feels that her work is about "humanizing" interactions within the program and empowering students to see themselves as integral members of the university community.

MEGAN

Megan has always been a firm believer in the power of mentorship. As a graduate student, she had been fortunate enough to have mentors who guided her not only academically, but also personally, fostering a sense of belonging and support. Now, as a supervisor herself, she has been determined to replicate that experience for her own students.

Drawing from her own journey, Megan has tailored her approach to each unique student's needs. She understands the challenges they face, having grappled with imposter syndrome, self-doubt, and the pressures of academia. Her personal triumphs, like securing funding, have helped to reaffirm her sense of belonging in academia; however, these experiences continue to fuel her empathy for the insecurities and fears her graduate students may be facing that can negatively affect their mental health.

Despite her university's commitment to mental health, Megan awareness of her institution's mental health framework comes primarily from initiative she took to invite the university's student services to present on the mental health framework in her department. Megan and her colleagues "found the framework unusually complex and really difficult to follow...with like 17 different offices or phone numbers that you can get in touch with depending on what your mental health issue was". The complicated nature of the framework can inevitably lead to students feeling unsupported and isolated. The fact that even someone motivated, like herself, was left to rely on her own experience and desire to help rather than a clear pathway to support graduate students left her feeling discouraged.

While Megan feels pride and gratitude that her university has made it clear that mental health matters, she finds that the university has policies, such as time limits, that can undermine their own efforts. Processes and procedures that cause unnecessary stress and hardship on students ultimately deteriorates her trust in the institution to authentically implement a mental health framework. In her experience, professors, though experts in their fields, are not trained to be mentors and supervisors and do not necessarily have the skills, pedagogical training, or resources to appropriately support the mental health or relational challenges that may arise while supervising graduate students. The gap between the framework and practice needs to be filled, she believes, if the university wants to create a truly supportive environment.

DAVE

Despite many accolades in his career, Dave tends to compare himself, his skills, and his accomplishments to others, constantly scrutinizing his own achievements in relation to those of his family, other university professors, and colleagues in his field. Dave questions the homogeneity of his field of study and his own privilege and identity that made access to and advancement in his field more feasible and attainable; however, he still struggles with feeling "out of his depth" in academia, an insecurity that persists, despite the validation that tenure and promotion offered him. Both personally and professionally, Dave struggles to balance the financial responsibilities towards his family with the challenges he faces to get grants and other funding to support his research and his graduate students, but his responsibility to those who rely on him continues to drive him.

Dave's awareness of his institution's mental health framework stems from interactions with the university publicizing it or touting their commitment to mental health as an accolade. In acknowledging some of the positive steps the university has taken to provide more specialized mental health resources for marginalized student populations, Dave wonders about the impact of those services, as anecdotally he has heard a mix of experiences reported. Despite some familiarity with the resources on campus, Dave does not feel clear about his specific role as a professor supervising students nor is he able to articulate his specific responsibilities within the institutional mental health framework. He has a general sense of faith in the institution, that "there's a lot of smart people who work

here and who care," but he also fears that the COVID-19 pandemic complicated role clarity, aggravated societal and systemic challenges impacting mental health further, and ultimately increased the isolation that both professors and graduate students experience.

DISCUSSION OF ADDITIONAL FINDINGS

The CFIR, in practice, gives a multi-level, multidimensional perspective of policy implementation and the interconnected factors that impact implementation success on various levels (Damshcroder, et.al., 2009).

The four participants come from different departments at the university. Some have spent their entire careers at the university while others have experience at other universities. The participants represent a diversity of gender, age, discipline and experience. Those who recently held administrative roles in the university observed that those experiences helped give them access to policies or initiatives around student mental health. The participants without administration experience had very limited or no familiarity with the university's mental health framework; however, none of them felt confident that they understood their role in implementing their university's mental health framework and in supporting graduate student mental health.

While no formal training on how to be a supervisor or even a professor is provided with structure and intention, it is also doing a disservice to believe that no training happens. The training is the years and years that students spend in graduate school with their own professors and supervisors. As a result, new professors spend many years learning how to supervise graduate students largely through trial and error, and as this study shows, by drawing on and adapting what they "took away" informally by their past experiences being supervised by a professor. While we tend to look at this as lived experience, it is also the training, a sort of apprenticeship, but with little to no oversight and little formal opportunities to unlearn unhealthy ways of supervising and replace them with healthier ones.

As universities look to understand how to put theoretical "best practices" into actual practice, we can gain insight about challenges to implementation by looking at other domains of the CFIR. The life stories methodology primarily allows us to look closely at the fourth domain; however, the participant data also shed some light on elements of third

domain, the inner setting, more specifically around the readiness for implementation (access to knowledge and information), and networks and communication. When we look at the participant schema (chapter 2, figure 1), we can see that most participants felt experienced supporting graduate mental health and knowledgeable of the mechanisms of the system, but all felt the framework was overly complex, or unclear about graduate student-specific support. This concern about a top-down approach to policy implementation and change at a university is supported by a study by Higgens & Thomas (2016) around curriculum change, which highlights the need to work on the interpretations and meaning systems, which requires a different approach than, say, a private business would.

REFLECTION AS A RESEARCHER

The process of conducting research, particularly qualitative research, has been an experience of learning, questioning, growth, and reflection. As an undergraduate student, I was primarily immersed in quantitative data, scientific studies filled with hypotheses, sampling, observations, findings, and conclusions that either supported or did not support the initial hypothesis. Entering the world of open-ended questions that could lead to any number of possible outcomes, exploring what could be learned through the research journey and allowing that to shape and inform the findings, felt daunting and unfamiliar. As a new qualitative researcher, I read a variety of articles, exploring the ins and outs, pros, and cons of different methodologies—phenomenology, grounded theory, ethnography—trying to situate myself in something that resonated with the way I wanted to explore the complex subject of graduate student mental health.

At the heart of my research, I wanted to hear the stories that people told themselves, their understanding of their place and existence in the world and how they engage with their environment. So much of the mental health research I have read about regarding post-secondary students involved anonymous surveys conducted on large swaths of the student population, and then typically would produce quite ominous results about the rise in levels of depression and anxiety among students. While these statistics are important and highlight the growing and devastating impacts of these increasing instances of mental health challenges, I craved more depth and nuance; I wanted to understand how we help

and what opportunities exist to improve the overall mental health of post-secondary students. This desire to dive deep into understanding individuals and how they experience and make sense of the world led me to a narrative approach and a life stories methodology, which was brought to life by Drake (2006).

I have returned to my reflexive journal many times throughout the research and writing process, to capture ideas, work out pieces of the research process, and to take a step back and reflect on the entire experience of researching. I wanted to share an entry that I still feel so thankful that I wrote, and that beautifully captures much of my exceedingly long and slow process of producing this thesis.

Friday, September 23, 2022

The parallel process. It has been so interesting to research this topic while living it. I am currently being supervised, living through a pandemic, and working in my professional life in a role at my university that has a direct participation in student mental health strategy and support. I have a supervisor who is living through the same pandemic, supervising me and other students (and having been supervised himself throughout his own graduate studies). In many ways we are our own experts on the topic because we are living it at the same time, and in other ways, we are fully limited by our own experience because of the relationship and rapport that we have crafted and the ways in which we have lived the experience. Each of these interviews gifted me with a window into alternate realities, alternate possibilities of this supervisory relationship. What shines through for me is passion, empathy, care, and support. Why, in this strange world of academia are we sometimes afraid to express our care about the humans behind research? In this collective shared experience, why do so many feel so alone? I am left with so many interesting questions about the human experience.

With my own supervisor, I knew that it was up to me to produce the work. My supervisor had already proven himself as an academic and a researcher and now it was my turn to take the lead. But I was not alone. I was never alone. The most important thing my supervisor did for me as a researcher and academic was to care about me as a person. To understand my reality and help me set expectations for myself and for my work that honored that reality. The second most important thing he did for me was that he never

wavered in his resolve that we would complete this project together. No matter how many times I doubted myself, questioned my ability to manage full-time work, health challenges amidst a global pandemic, and researching and writing a thesis, he never faltered. He helped me adapt the plan many times, but he never doubted that I would one day finish this project (or at least I never knew if he did and that was honestly enough to carry me through). The power of someone believing you and accompanying you on a challenging journey cannot be underestimated.

As I spent months and months transcribing, summarizing and then analyzing the interviews of these four professors, pouring over the details of their lives that they chose to share with me, I was immersed in the beautiful privilege of hearing someone's story and the power of qualitative research. At times, I felt the weight of producing a piece of writing and research that paid adequate respect to the vulnerability, insight, and truth that my research participants entrusted to me. One of the biggest challenges for me as a researcher was to try and communicate effectively, through consistent and rigorous methods, results that felt very obvious to me because of how much collective time I had spent immersed in the stories of my participants. I thankfully would get validation and encouragement from my supervisor, who would reassure me that I was not just "stating the obvious" and remind me that my findings only felt "obvious" to me because I knew all the ins and outs of my data.

Limitations and considerations

One of the main limitations of this study was that it was designed prior to the COVID-19 pandemic, but the data collection occurred virtually once the impacts of the pandemic on mental health was beginning to become increasingly apparent. The knowledge and understanding participants had about their university's framework and the resources available to graduate students felt outdated and less adequate to the professors, given the increased isolation and anxiety experienced by their graduate students.

Another limitation to consider is that this type of recruitment tends to draw participants who have an interest in the subject matter and who likely already have some

general interest in their university's framework. All participants felt investment in better understanding mental health support for graduate students and thus did not necessarily represent the attitudes of professors at their institution. The small sample size allowed us to engage in an in-depth look at what factors seemed most significant in shaping the knowledge and beliefs of professors as supervisors of graduate students.

Another limitation of the study was participants' lack of awareness of details of the university's mental health framework. Recruitment did not indicate that a strong understanding of the mental health framework was necessary, which ultimately had an impact on our ability to fully answer the second research question. Participants all identified that they had a general idea of mental health resources on campus, but no true understanding of their role in the implementation of the mental health framework.

Finally, there are some limitations to the life narrative method. Firstly, the use of one data source for each participant's narrative (the interview) does not allow us to verify the validity of the claims each participant is making. While they are primarily sharing lived experiences and their own perspectives, gaps in training, framework communications and mental health interactions only provide us a singular perspective. Other data sources (e.g. interviews with current or past graduate students) could help to confirm or refute claims about their supervisory approaches. Additional data sources that would allow us to triangulate claims made in the interview would enhance trustworthiness of the narratives. Another limitation of the life story method is the validity or accuracy of their recollection of past experiences, with time and perspective likely altering and shedding a different light on their past experiences as a graduate student. Participants may see actions that negatively impacted them in the past through a different lens now that they are supervisors themselves and have experience from an alternative perspective.

FURTHER OPPORTUNITIES FOR ANALYSIS/RESEARCH

The life stories methodology elicited data that demonstrated how impactful the lived experience of professors is on their supervisory practice. While the focus of this study was primarily on graduate student mental health, the protocol holds promise for

broader application. Expanding the interview protocol could allow researchers to explore additional dimensions of the supervisor-student relationship. Understanding in greater depth elements that positively or negatively impact graduate student supervision could contribute valuable insight into the development of more targeted strategies for enhancing supervisory practices.

One of the study's main objectives was to contribute to a growing body of literature on implementation science by examining the application of the Consolidated Framework for Implementation (CFIR) within an educational context. By utilizing the CFIR, we aimed to shed light on how this framework can be effectively applied to educational settings, specifically in the context of implementing a mental health framework at a post-secondary institution. Despite the valuable insights gained, our study faced certain limitations, including a relatively small number of participants, all of whom had limited familiarity with the mental health framework. These limitations impeded our ability to fully explore the CFIR's use to assess implementation.

Nevertheless, the findings from our study do provide a foundational basis for future research. Expanding the sample size to include a broader and more diverse group of participants could offer a more comprehensive understanding of how the CFIR operates in different educational environments. Additionally, a larger pool of participants could reveal more insight into trends or themes that might impact the successful implementation of the mental health framework. Further expanded research could build on this work to develop more robust and generalizable findings, ultimately helping to direct more targeted resources or attention to factors that negatively affect graduate student mental health.

Finally, conducting a longitudinal study could provide valuable insights into how participants' understanding of their roles in implementing their university's mental health framework evolves over time. By examining this dimension, we could assess whether their engagement with the framework improves, diminishes, or remains stable as the years progress. Professors, who gain experience and refine their supervisory skills as they continue in their roles, may demonstrate changes in their approach to implementing the framework. That said, it is also important to consider that institutional initiatives might experience shifts in focus or momentum over time. By revisiting the same professors across multiple years, we can gain a deeper understanding of the dynamic factors that

influence the evolution of their supervisory practices. By taking a longitudinal approach to the life stories methodology, we can see how and if their schemas and sense-making shifts over time in relation to graduate student mental health. The approach would also allow us to identify specific elements that have the most significant impact on their effectiveness and adaptability in integrating the mental health framework into their professional practices.

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APPENDICES

Appendix A: Summary table of methodology

Method/Tool	**Data Sources/Sample**	**Instrument(s)**	**Data Analysis**
RQ 1: In what ways do professors' beliefs, knowledge and lived experiences influence their implementation of the mental health framework in the context of graduate student supervision?	1- Publicly accessible institutional documents (mental health framework-related) 2- Professors <u>Secondary sources</u> 3- Reflexive journal 4- Field notes	2- Interview protocol (Appendix B) 3- List of prompting questions for reflection 4- Field note template (Appendix F)	1- Deductively code documents for professorial role 2 - Life story coding & analytic approach (adapted from Drake, 2006) and inductive emergent coding for data collected via questions not directly related to life story.
RQ 2: How do professors interpret their roles in implementing mental health framework to support graduate students' mental health during the program and thesis supervision process?	1- Publicly accessible institutional documents (mental health framework-related) 2- Professors <u>Secondary sources</u> 3- Reflexive journal 4- Field notes	2a- Interview protocol (Appendix B) 2b- Follow up questionnaire 3- List of prompting questions for reflection 4- Field note template (Appendix F)	1- Deductively code documents for professorial role 2a- Life story coding & analytic approach (adapted from Drake, 2006) and inductive emergent coding for data collected via questions not directly related to life story.2b - Compare deductive and inductively coded data for fidelity with coded data from mental health framework

Appendix B1: Pilot Interview Protocol

Sections of interview	Interview Protocol Questions
Introduction	Hello, professor. I am now going to begin the recording. As a reminder, I am interested in learning about your lived experience with regards to graduate student mental health as well understanding more about your role in the implementation of any mental health frameworks or policies at your university. As a point of importance, this study was designed before the Covid-19 pandemic and aims to explore mental health in the broader and on-going context. While you may have some very pertinent current examples to share, we also encourage you to reflect on any of your experiences as a professor and as a graduate student yourself.
Reviewing Consent	Do you have any questions regarding the consent form that you read and agreed to prior to the start of this interview? I just want to remind you that should you wish to pause or stop the interview at any time, you may do so.
Warm-up and introductory questions	When you learned about this study, what made you want to participate? Tell me briefly about your academic career: Where did you do your graduate studies? When? In what area? When did you become a professor? What drew you to the profession? What are your current interests? Tell me briefly about your supervision of graduate students: When did you start supervising? How many students have you or do you supervise? At what level? As you know, this study is about graduate student supervision and mental health. What is your understanding of the mental health challenges facing graduate students today and more specifically what are you noticing at your own university, department, and in the supervision process? Are you aware of any mental health framework at your university? If so, how did you learn about it? What do you know about the framework, and how it pertains to the work of professors? In particular, what is your view on how professors are expected to participate in its implementation?

(RQ1): In what ways do professors' beliefs, knowledge and lived experiences influence their implementation of the mental health framework in the context of graduate student supervision?	For this interview, I am going to ask you about several specific events and would like you to respond with as much detail as possible, including what happened, where you were, who was involved, what you did, and what you were thinking and feeling. In your response, please try and convey the impact of the event and how it relates to mental health. I will prompt you to think about what each even says about who you were as a graduate student yourself or who you are now as a professor supervising graduate students. *Peak Experience* What was a peak experience (high point) in graduate school for you? This would be a moment in your graduate studies where you felt a lot of positive emotions (joy, excitement, great happiness, a sense of accomplishment, etc.). Tell me about that event. *Low Point Experience* What was an event that you would qualify as the low point in your graduate studies (opposite of a peak experience)? Thinking back over your time as a graduate student, try to remember a specific experience in which you felt extremely negative emotions. Now, tell me about that event. *Turning Point Event* I am interested to hear about a turning point (episode where you underwent substantial change) during your graduate studies. Do you remember experiencing a turning point or major point of change? Tell me about an event that you think qualifies or comes close to qualifying as a turning point. *Mental Health Event* Describe an event where you were aware of either your own mental health or the mental health of someone around you. How did this event make you feel, what did you experience, and looking back on the event, how do you feel it impacted you? *Graduate Student Supervisor Event* Describe a time when you felt most supported by your graduate studies supervisor. What happened during this event? How did your supervisor support you? How did this make you feel and impact you? Provide as much specific detail as possible about the event. *Personal Struggle Experience* Think of a time when you were personally having a hard time or struggling. This event could be related to school or not at all, but should be a time when you felt overwhelmed, lonely, scared, hurt or in pain. Tell me about your experience of struggling and what that felt like for you? *Resilience Experience* Tell me about a time when you overcame a challenge or an experience of failure. What support or personal strengths helped you to overcome the challenging event? How has this event impacted you?

RQ 2: How do professors interpret their roles in implementing mental health framework to support graduate students' mental health during the program and thesis supervision process?	For the second part of this interview, I am going to focus more on your current role as a professor and graduate student supervisor and some of the experiences you have had in that role. Again, please respond with as much detail as possible, including what happened, where you were, who was involved, what you did and what you were thinking and feeling. *Peak Experience* What was a peak experience (high point) for you as a graduate student supervisor? Again, this would be a moment where you felt a lot of positive emotions (job, excitement, great happiness, a sense of accomplishment, etc.). Tell me about that event. *Low Point Experience* What was an event that you would qualify as the low point in your role supervising graduate students (opposite of a peak experience)? Thinking over your experience with supervision, try to remember a specific experience in which you felt extremely negative emotions. Now, tell me about that event. *Turning Point Event* I am interested to hear about a turning point (episode where you underwent substantial change) during your time as a graduate student supervisor. Do you remember experiencing a turning point or major point of change? Tell me about an event that you think qualifies or comes close to qualifying as a turning point. *Mental Health Event* Describe an event where you were aware of either your own mental health or the mental health of someone around you in your time working as a graduate student supervisor. How did this event make you feel, what did you experience, and looking back on the event, how do you feel it impacted you? *Graduate Supervisor Event- Positive* Describe a time when you felt most effective and supportive as a graduate studies supervisor. What happened during this event? In what ways did you offer support? How did this make you feel and impact you? Provide as much specific detail as possible about the event. *Graduate Supervisor Event- Negative* Describe a time when you felt least effective as a graduate studies supervisor. What happened during this event? How did this make you feel and impact you? Provide as much specific detail as possible about the event.

Closing questions	Based on our conversation about your experiences as a graduate student and supervisor of graduate students: - How have those experiences influenced how you understand and relate to graduate students, in particular those who may be facing emotional or psychological struggles? - How have those experiences influenced how you "see" your role in supporting graduate student mental health in the context of supervision? Thank you for your time and generosity. Do you have any questions for me about the interview or study?

Appendix B2: Final Interview Protocol

Pre-interview questions:

1. Where and when did you complete your graduate studies?
2. In what field did you do your graduate studies?
3. What is your current area of research and academic interests?
4. When did you become a professor?
5. What drew you to this profession?
6. When did you begin supervising graduate students?
7. How many students do you currently supervise and at what level?

Sections of interview	**Interview Protocol Questions**
Reviewing Consent	Do you have any questions regarding the consent form that you read and agreed to prior to the start of this interview? I just want to remind you that should you wish to pause or stop the interview at any time, you may do so.
Introduction	As a reminder, I am interested in learning about your lived experience with regards to graduate student mental health as well understanding more about your role in the implementation of any mental health frameworks or policies at your university. As a point of importance, this study was designed before the Covid-19 pandemic and aims to explore mental health in a broader and on-going context. While you may have some current examples to share, I would also encourage you to reflect on experiences as a professor and as a graduate student yourself prior to Covid-19. This case study will apply a sense-making theory and a life story methodology to professors' lived experiences as graduate students and as supervisors to understand how their knowledge and beliefs impact mental health framework implementation.

(RQ1): In what ways do professors' beliefs, knowledge and lived experiences influence their implementation of the mental health framework in the context of graduate student supervision?	For this interview, I am going to ask you about several specific events and would like you to respond with as much detail as possible, including what happened, where you were, who was involved, what you did, and what you were thinking and feeling. In your response, please try and convey the impact of the event and how it relates to mental health. I will prompt you to think about what each event says about who you were as a graduate student yourself or who you are now as a professor supervising graduate students. *Peak Experience* What was a peak experience (high point) in graduate school for you? This would be a moment in your graduate studies where you felt a lot of positive emotions (joy, excitement, great happiness, a sense of accomplishment, etc.). Tell me about that event. *Low Point Experience* What was an event that you would qualify as the low point in your graduate studies (opposite of a peak experience)? Thinking back over your time as a graduate student, try to remember a specific experience in which you felt extremely negative emotions. Now, tell me about that event. *Turning Point Event* I am interested to hear about a turning point (episode where you underwent substantial change) during your graduate studies. Do you remember experiencing a turning point or major point of change? Tell me about an event that you think qualifies or comes close to qualifying as a turning point. *Mental Health Event* Describe an event where you were aware of either your own mental health or the mental health of someone around you. How did this event make you feel, what did you experience, and looking back on the event, how do you feel it impacted you? *Graduate Student Supervisor Event* Describe a time when you felt most supported by your graduate studies supervisor. What happened during this event? How did your supervisor support you? How did this make you feel and impact you? Provide as much specific detail as possible about the event. *Personal Struggle Experience* Think of a time when you were personally having a hard time or struggling. This event could be related to school or not at all, but should be a time when you felt overwhelmed, lonely, scared, hurt or in pain. Tell me about your experience of struggling and what that felt like for you? *Resilience Experience* Tell me about a time when you overcame a challenge or an experience of failure. What support or personal strengths helped you to overcome the challenging event? How has this event impacted you?

RQ 2: How do professors interpret their roles in implementing mental health framework to support graduate students' mental health during the program and thesis supervision process?	For the second part of this interview, I am going to focus more on your current role as a professor and graduate student supervisor and some of the experiences you have had in that role. Again, please respond with as much detail as possible, including what happened, where you were, who was involved, what you did and what you were thinking and feeling. *Peak Experience* What was a peak experience (high point) for you as a graduate student supervisor? Again, this would be a moment where you felt a lot of positive emotions (job, excitement, great happiness, a sense of accomplishment, etc.). Tell me about that event. *Low Point Experience* What was an event that you would qualify as the low point in your role supervising graduate students (opposite of a peak experience)? Thinking over your experience with supervision, try to remember a specific experience in which you felt extremely negative emotions. Now, tell me about that event. *Turning Point Event* I am interested to hear about a turning point (episode where you underwent substantial change) during your time as a graduate student supervisor. Do you remember experiencing a turning point or major point of change? Tell me about an event that you think qualifies or comes close to qualifying as a turning point. *Mental Health Event* Describe an event where you were aware of either your own mental health or the mental health of someone around you in your time working as a graduate student supervisor. How did this event make you feel, what did you experience, and looking back on the event, how do you feel it impacted you? *Graduate Supervisor Event- Positive* Describe a time when you felt most effective and supportive as a graduate studies supervisor. What happened during this event? In what ways did you offer support? How did this make you feel and impact you? Provide as much specific detail as possible about the event. *Graduate Supervisor Event- Negative* Describe a time when you felt least effective as a graduate studies supervisor. What happened during this event? How did this make you feel and impact you? Provide as much specific detail as possible about the event.

Closing questions	When you learned about this study, what made you want to participate? Are you aware of your university's mental health framework? If so, how did you learn about it? What do you know about the framework, and how it pertains to the work of professors? In particular, what is your view on how professors are expected to participate in its implementation? Based on our conversation about your experiences as a graduate student and supervisor of graduate students: • How have those experiences influenced how you understand and relate to graduate students, in particular those who may be facing emotional or psychological struggles? • How have those experiences influenced how you "see" your role in supporting graduate student mental health in the context of supervision? Thank you for your time and generosity. Do you have any questions for me about the interview or study? Other potential prompts: 1. How does your faith/trust in your organization impact how you understand your role in supporting graduate student mental health? 2. To what extend are the communications or messaging within the department/ organization impacting your willingness to implement any policy at the university? 3. How does this messaging impact your understanding of your role in supporting graduate student mental health?

Appendix C: Ethics Approval

25/06/2020

Université d'Ottawa
Bureau d'éthique et d'intégrité de la recherche

University of Ottawa
Office of Research Ethics and Integrity

CERTIFICAT D'APPROBATION ÉTHIQUE | CERTIFICATE OF ETHICS APPROVAL

Numéro du dossier / Ethics File Number	S-04-20-5666
Titre du projet / Project Title	Understanding mental health policy implementation through lived experience of professors in the context of graduate student supervision
Type de projet / Project Type	Thèse de maîtrise / Master's thesis
Statut du projet / Project Status	Approuvé / Approved
Date d'approbation (jj/mm/aaaa) / Approval Date (dd/mm/yyyy)	25/06/2020
Date d'expiration (jj/mm/aaaa) / Expiry Date (dd/mm/yyyy)	24/06/2021

Équipe de recherche / Research Team

Chercheur / Researcher	Affiliation	Role
Jaclyne MOONEY	Faculté d'éducation / Faculty of Education	Chercheur Principal / Principal Investigator
Peter MILLEY	Faculté d'éducation / Faculty of Education	Superviseur / Supervisor

Conditions spéciales ou commentaires / Special conditions or comments

Appendix D: Participant Recruitment Text

Email Subject: seeking professor participation for study on graduate student supervision & mental health
Dear Professor,
I am writing to request your participation in an interview as part of an MA in Education thesis project regarding your role as a graduate student supervisor. I am interested in learning about your lived experience with regards to graduate student mental health as well understanding more about your role in the implementation of the mental health framework at your university.

About me: My name is Jaclyne Mooney, and I am working on my MA in Education at the University of Ottawa with a focus on policy studies. I also work full-time at uOttawa as the Manager, Student Support (case management). Previously, I have worked in the Faculty of Health Sciences and Residence Life at uOttawa, in Residence Life at McGill University and before that, I worked with adolescents with developmental childhood trauma at a residential treatment facility. I am passionate about mental health advocacy and support and have spent the past few years working in suicide prevention as an ASIST (Applied Suicide Intervention Skills Training) and safeTALK (suicide awareness for everyone) trainer.

Project title: Understanding mental health policy implementation through lived experience of professors in the context of graduate student supervision

Purpose of the study: To explore professors' lived experiences, first, as graduate students and, later, as supervisors of graduate students to understand how these experiences are connected to mental health policy implementation at the participant's university.

Project supervision: This research project is being supervised by Dr. Peter Milley, Associate Professor at University of Ottawa.

What content and topics will be discussed in the interview?
The interview will primarily cover the topics of graduate student supervision and mental health. Participants will be asked questions about their own experience being supervised in their graduate studies, their experience as a professor supervising graduate students and about their experiences with mental health and, in particular, the mental health of graduate students.

What would participation entail?
Participation will consist of an audio-recorded interview that will last 60-70 minutes over Zoom. I will provide you with some information about the study and interview that you will be asked to read. A summary of the interview and the full transcript will be sent to you a few weeks after the interview. At this time, I will ask you to review the transcript and summary and provide feedback on those documents, should you so desire. In addition, I will ask you to complete a brief questionnaire following the interview seeking : i) further reflections on your lived experiences as represented in the summary document and/or transcript, and ii) elaborations on responses to challenges and opportunities you experienced in the mental health framework implementation.

If you are interested in participating in the study or in getting more information on the research, please respond to this email. Participants will be selected on a first come, first served basis. If you prefer to communicate by phone or Zoom (or other platform), please let me know and I would be happy to arrange a time for us to discuss your potential participation further.

This research has been cleared by University of Ottawa Research Ethics Board S-04-20-5666 as well as the research board at your university. (redacted to maintain confidentiality)

Thank you for your consideration,

Appendix E: Participant Consent Form

Université d'Ottawa
Faculté d'éducation

University of Ottawa
Faculty of Education

145 Jean-Jacques Lussier
Ottawa ON K1N 6N5
Canada
www.uOttawa.ca

University of Ottawa
Consent Form for MA in Education Thesis

Project title: Understanding mental health policy implementation through lived experience of professors in the context of graduate student supervision

Names of researchers and contact information

Ms. Jaclyne Mooney
Master's student
Faculty of Education
University of Ottawa
Tel : redacted
Email : redacted

Peter Milley, Ph.D.
Associate Professor
Faculty of Education
University of Ottawa
tel: redacted
Email: redacted
Office: LMX 487

Invitation to Participate: I have been invited to participate in a MA thesis research project conducted by Ms. Jaclyne Mooney under the supervision of Professor Peter Milley as a part of Ms. Mooney's MA thesis at the University of Ottawa.

Purpose of the Study: The purpose of the study is to collect information on professors' lived experiences as graduate students and as supervisors of graduate students to understand how these experiences are connected to mental health policy implementation at the participant's university.

Participation: My participation will consist of an audio-recorded interview that will last 60-70 minutes at a time convenient to me, over Zoom. The audio-recorded data will be kept on the researcher's password-protected computer and not stored on the Zoom server once the transcript has been completed. I will be provided in advance with information that I will be encouraged to read prior to the interview. This is to ensure that I understand the scope of the interview and the content that will be covered. A summary of the interview and the full transcript will be sent to me a few weeks after the interview. At this time, I will be asked to review and provide feedback on those documents, should I so desire. In addition, I will be asked to complete a brief questionnaire seeking: i) further reflections on my lived experiences as represented in the summary document and/or transcript, and ii) elaborations on responses to challenges and opportunities I experienced in the mental health framework implementation.

Should I prefer, the questionnaire could be completed verbally over Zoom in the form of a short follow up interview.

Assessment of risks: Given the nature of the topic (mental health), my participation in this project is likely to lead to some emotional discomfort, depending on my experience level with conversations around mental health. I understand that it is likely that the nature of the topic will bring up past experiences or emotions that will likely include feelings of stress, anxiety, sadness, loss, or other uncomfortable emotions related to the topic of mental health. The conversation throughout the interview will ask questions about my own personal experiences with mental health (positive or negative), which may be uncomfortable at some moments. If I experience any discomfort, Ms. Mooney, who has training in mental health support and intervention, has assured me that she will make every effort to minimize this discomfort by taking a break, changing topics and moving on to other questions, debriefing the content outside the context of the interview or pausing the interview so that other supports can be implemented. I also understand that I can stop the interview at any time. Ms. Mooney will also provide a list of mental health resources at my university and in my community as additional support and help connect me with these resources, should that be necessary at any point in time.

Benefits: By participating in this research study, I will learn more about the Mental Health Framework at my university and be able to reflect on my role as a graduate student supervisor through the interview process. In responding to questions about my own experience as a graduate student, the challenges I faced and the support I received, I will potentially benefit from connecting my own lived experiences to the experience of the graduate students I supervise. I will also receive information about mental health resources in my community, which I may not have known about prior to the interview. This may be useful to me personally or in my role in supporting and supervising graduate students throughout their program. I will also contribute to findings that will inform future iterations of mental health policies and practices and offer a concrete way, with the use of sense making and lived experience within the structure of the Consolidated Framework for Implementation Research, to understand and guide its implementation.

Privacy of participants: I have received assurance from Ms. Mooney that the information I share will remain strictly confidential. My identity will be protected through the use of a pseudonym in any publications. In addition, the actual name of my university and faculty/school/department will never be used and will be kept confidential through the use of pseudonyms. If I disclose any specific information about others during the interview, their personal information and identities will also be kept confidential through the use of pseudonyms or the omission of identifying characteristics.

Confidentiality and conservation of data: The data will be used for the purpose of this research study will be kept for seven years following the end of the MA

program, anticipated to be in December 2022. I have been assured that the audio recording will be kept in a secure manner at the researcher's home during the research, and, upon completion of the thesis, will remain stored on Ms. Mooney's password protected computer. Data will be securely destroyed at the seven-year period. While all data collected during the interview will be stored locally on the researcher's computer or voice note application, operational metadata will be stored and protected by the University of Ottawa (per Zoom licensing for the uOttawa) on servers located in Ottawa, ON, but may be disclosed via a court order or data breach.

Voluntary Participation: I am under no obligation to participate and if I choose to participate, I can withdraw from the study at any time and/or refuse to answer any questions, without suffering any negative consequences. If I choose to withdraw, all data gathered until the time of withdrawal will be destroyed.

Acceptance: I, _____[*Name of participant*], agree to participate in the above research study conducted by Ms. Jaclyne Mooney as part of her MA thesis project, at the Faculty of Education, University of Ottawa under the supervision of Professor Peter Milley.

If I have any ethical concerns regarding my participation in this study, I may contact the Protocol Officer for Ethics in Research, University of Ottawa, 550 Cumberland Street, Room 154, (613) 562-5387 or ethics@uottawa.ca. *(Information about participant university redacted for confidentiality)*

There are two copies of the consent form, one of which is mine to keep.

Participant's name	Signature:	Date:
Jaclyne Mooney		
Researcher's name	Signature:	Date:

Appendix F: Field Note template

Interviewer:	
Date/Time of Interview:	
Participant:	
Interview Observations	
Describe the setting:	
Describe sensory impressions (sights, sounds,smells, etc.):	
Participant attitude:	
Participant body language:	
Participant reaction to questions/interviewer:	
Other observations about participant:	
Other notes:	