Advancing Positive Medical Student Academic Learning Environments to Enhance Student Well-Being

by
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Abstract

Problem: Learner mistreatment is common in medical education and comes with an array of effects for learners and the profession. Mistreatment can truncate learning if a learner does not feel safe to speak up. This can limit learners in reporting patient safety issues, particularly if there are potential negative consequences to their careers. This study sought to understand what impedes speaking up culture by examining undergraduate medical students' perspectives on barriers to speaking up, and reporting hesitancy drawing on theories of power imbalances, implicit voice, fear of reprisal, and learners' social locations and identity.

Methods: This study employed a participatory research design. Stakeholders from the Max Rady College of Medicine (MRCM) provided feedback on the study design, implementation, and study results. Mixed-methods electronic semi-structured survey that captured both quantitative and qualitative data was administered. The study population was the undergraduate medical learners' years one to four who were enrolled as of 2018 at the MRCM. Analyses were performed using statistical and qualitative analysis programs.

Results: We identified the comfort level of learners speaking up to different power roles and learners' implicit voice theories, which acted as barriers to speaking up. We identified gendered differences in comfort with speaking up about mistreatment. We described the implicit theories students held about risks of reporting including impact on future career and harm to reputation. Themes of what learners wanted to contribute to a positive learning environment were identified, such as supporting one another.

Conclusions: We concluded that reporting processes must consider power, gender, third party and multi-party reporting in their processes. Institutions need to address speaking up and fear of reprisal by means of education on anti-racism, rights and responsibilities, implicit bias, and

gender and social orientation discrimination. This research could inform intervention studies by clarifying the sources of resistance to reporting and allow for the design of reporting mechanisms that specifically address these perceived risks. We attempted to identify who felt unsafe speaking up as it relates to intersectionality, however, given the relatively small sample size, we were not able to make conclusive statements in this regard. Further research is needed.

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Dedication

I would like to dedicate this thesis to a few people personally who have made this possible. First off to my partner Brian McKague, thank you for picking up the slack, for listening to me when I did not think I belonged in any of the classrooms, thank you for encouraging me to keep at it. See I did it! I dedicate this to Louie and Tucker, thank you for being patient with me when I was always in my room staring at the screen. You both knew just when it was time to interrupt me with a bark and so that we could go on walk and for being there to cuddle when I wanted to throw in the towel. To my parents, Hinda and David Gruber for their understanding, encouragement and support throughout my life.

Finally, I dedicate this to older students out there, may you know and realize that yes you do have the stamina to reach the end.

Contributions of Authors

Speaking up is hard to do: Gender, power, and learners' implicit theories about the risks of reporting mistreatment: A cross-sectional survey study

Jackie Gruber was primarily responsible for the study design, drafting of the original manuscript, data collection, and qualitative data analysis. Survey data analysis was conducted by Jackie Gruber, Brenda Elias, and Lukas Neville. All authors contributed to the design of the qualitative data analysis protocol, and to the editing and refinement of the submitted version of the paper. All authors agree to be accountable for all aspects of the study.

'We have to take the reins': Learners' perspectives on creating a safe learning environment

Jackie Gruber was primarily responsible for the study design, drafting of the original manuscript, data collection, and qualitative data analysis. All authors contributed to the design of the qualitative data analysis protocol, and to the editing and refinement of the submitted version of the paper. All authors agree to be accountable for all aspects of the study.

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Chapter 1 Introduction

Statement of the Problem

Local context:

Every Canadian school of medicine must be accredited by the Royal College of Physicians and Surgeons of Canada (RCPSC). The medical school must complete a data collection instrument (DCI) and compile supporting documents. A self-study task force and its subcommittees must then analyze data from an Independent Student Analysis (ISA), the most recent Association of Faculties of Medicine of Canada (AFMC) graduation questionnaires, and the DCI, including narrative responses and appendices. The task force develops self-study reports for each standard and compiles these updated reports into a final medical school self-study report. An ad hoc site visit team then visits the medical school and prepares a site visit report for review by the Committee on Accreditation of Canadian Medical Schools (CACMS). The medical school then acts on accreditation by the CACMS and Liaison Committee on Medical Education (CACMS, Guide to the Medical School Self-Study, 2017, p. 2).

At the University of Manitoba, an external review team evaluated the Rady Faculty of Health Sciences, Max Rady College of Medicine's Undergraduate Medical Education (UGME) Program during of the period of April 8–11th, 2018. The external review identified several areas in need of improvement pertaining to Standard 3, which concerns the academic learning environment particularly learner mistreatment (CACMS Standards and Elements, 2021, p. 5). By way of this standard, "a medical school ensures that its medical education program occurs in professional, respectful, and intellectually stimulating academic and clinical environments, recognizes the benefits of diversity, and promotes students' attainment of competencies required

of future physicians" (CACMS Standards and Elements, 2017, p. 5). Every medical college must achieve this standard, and to ensure that they continuously meet this benchmark, each school must undergo a process of accreditation. At the University of Manitoba, the major areas in need of improvement pertaining to Standard 3 are as follows:

> "corporate"/institution wide responsibility for creating and maintaining a positive environment needs to be recognized and promoted. Data on the learning environment should be included as the annual review of department heads and hospital leadership. By way of example – a student was screamed at by a surgeon. It is the responsibility of the entire team (nurses, anesthesiologist and others in the OR) to collectively address this incident after the procedure is over. In order for this to happen there has to be a positive culture that pervades all aspects of the organizations. (2018, p. 4)

In particular, unsatisfactory scores were received for:

> 3.5 Learning environment: the institutional focus has been on mistreatment events rather than on the culture of creating a positive working environment. This was previously cited in your review in 2011; and
>
> 3.6 Student mistreatment: the mechanism for reporting incidents of harassment/abuse are not understood by medical students [and they are] are fearful of reporting incidents for the fear of retaliation. (2018, p. 8)

Additionally, the "Standard 3 Element Evaluation Forms" identified the continuous quality improvement recommendations for this element as follows:

> 3.6.f+g. Earlier education for first and second year students to ensure awareness of the policies and procedures designed to eliminate student abuse, harassment and other

> mistreatment. There should be subsequent follow-up educational activities to reinforce the messages and thereby increase awareness about mistreatment.
>
> 3.6.j. The school is planning to survey medical students to identify if and why incidents of abuse and harassment are not being reported. (2018, p. 4)

This thesis is dedicated to addressing learner mistreatment and its underreporting.

Mistreatment and its underreporting

Learner mistreatment is highly prevalent in medical education. The AMFC's 2019 graduation questionnaire revealed that a majority of medical learners personally experienced at least one form of mistreatment during their medical education. The most common form of learner mistreatment is verbal abuse (66%) such as acts of public humiliation and belittlement (41%) and sexist remarks or names (25%). These Canadian data approximate rates reported in a meta-analytic review of harassment and discrimination in medical training programs offered in multiple countries (the United States, Canada, Pakistan, the United Kingdom, Israel, and Japan representing the majority). According to the Fnais et al. (2014) review, 63% of medical trainees experienced low-intensity mistreatment (e.g., verbal abuse), followed by high-intensity mistreatment (15%, e.g., physical harassment). A pooled analysis of studies from Canada and the United States showed the same rate of low intensity mistreatment. The majority of trainees experienced at least one form of harassment or discrimination. Discrimination due to race and gender was 4%-19%, and females were more likely to experience sexual harassment as opposed to their male counterparts.

Further research has shown that learner mistreatment comes with a range of consequences for learners and the profession. Learners who experience mistreatment, even when not severe, are more likely to experience lowered mental health and career satisfaction (Frank et

al., 2006) and close to half of female learners reported that their experience of mistreatment had some weight in their decision-making around speciality choice (Stratton et al., 2005). Even low-intensity forms of mistreatment like verbal mistreatment have pernicious effects. Research in occupational psychology shows that incivility (i.e., rudeness) can provoke job withdrawal and psychological distress (Cortina et al., 2001) and that the psychological effects of these forms of aggression are often indistinguishable from bullying and abusive supervision (Hershcovis, 2011). In one Israeli study, where teams were randomly exposed to incivility in a simulation, those that received the exposure made more diagnostic and treatment errors (Riskin et al., 2015). The authors concluded that rudeness interfered with the working memory and impacted collaboration.

In Canada, medical education programs as noted above have an obligation to act and address learner mistreatment. The AFMC, CACMS Standards and Elements (2021) have contended that the same behaviours that deteriorate the learning environment can undermine communication, coordination, and effective patient care (Rosenstein & O'Daniel, 2008; Riskin et al., 2015). The RCPS makes it clear that mistreatment, whether in a medical learning environment or any other work environment is "unacceptable in all of its forms" (2020). Consequently, accreditation standards of the CACMS Standards and Elements (2021, p. 6) require that medical colleges have written policies and effective reporting procedures for dealing with mistreatment (2017). The question is whether this is enough.

Students are aware of medical schools' policies governing mistreatment. They, however, may be reluctant to use them. The AFMC's data showed that 95% of medical students were cognizant of their school's policies regarding learner mistreatment, and 86% knew about the procedure to report mistreatment (2019). Nevertheless, recent research and media coverage clearly shows that mistreatment persists (CFMS, 2017; Colenbrander et al., 2020; Goldman,

2018; Holroyd-Leduc & Straus, 2018; LeFort 2018; Rihal et al., 2020; and Vogel, 2017). This persistence challenges the learning environment to address the root and off-shoots of mistreatment that ultimately can impact patient care. While institutions need to know about mistreatment in order to address it, there are barriers to students accessing the institutional reporting mechanisms due to their perceptions of what may occur if they were to use their institutions' policies and reporting mechanisms. Recent research from the United States suggests that fewer than half of those experiencing mistreatment will report it, in part because of concerns about the riskiness of speaking up about mistreatment and because of a perception that mistreatment is a fundamental part of medical culture (Chung et al., 2018).

To address the key concerns identified by the site visit team at the University of Manitoba, the author of this thesis investigated several areas identified by the literature that may impact learners speaking up to mistreatment. Those areas relate to power imbalances, implicit voice issues, fear of reprisal, and intersectionality related to social location and identity such as overlapping and specific race, class, and gender-based discrimination or disadvantage. The aims of this research, detailed below, will help forge a clearer understanding of the barriers and perceived risks of speaking up to mistreatment by medical learners at the Rady Faculty of Health Sciences, Max Rady College of Medicine. The overarching intent of this research is to advance student perspectives on mistreatment and ways to advance a positive learning environment.

Study Aims

The aims of this study are as follows:

Aim 1: To better understand how learners themselves think about the barriers and perceived risks to speaking up about mistreatment.

Aim 2: To look beyond institutional policies to reconsider the role of learners by identifying ways in which learners can actively contribute to preventing mistreatment and fostering a positive learning environment.

Aim 3: To assist with informing potential interventions and opportunities to improve the academic and learning environment, whereby students are comfortable to speak up and faculty are receptive to promoting a positive environment.

Aim 4: To propose a reflective evaluation approach for the Rady Faculty of Health Sciences, Max Rady College of Medicine to continually improve and maintain a positive learning environment.

Research Questions

This study addressed the following research questions:

Research Question 1: Do the transgressor's power and victim's gender shape student learners' comfort with speaking up in response to mistreatment?

Research Question 2: What are the specific fears and risks (i.e., implicit voice theories) that students intuit to come along with reporting mistreatment during their medical education?

Research Question 3: What role should students have in ensuring and sustaining a respectful and safe work and learning environment?

Organization of the thesis

This thesis in organized in the following way to achieve the study objectives. Following Chapter 1 is Chapter 2 where we discussed the different reporting mechanisms in institutions and the differences between institutional policies and faculty/college specific policies. We reviewed

the literature focusing on power imbalances, implicit voice theory, fear of reprisal and social location and identity and the study conceptual framework is explained. In Chapter 3 we reviewed the study design and methodology. In Chapter 4, the first manuscript, “Speaking Up is Hard to Do: Gender, Power, and Learners’ Implicit Theories about the Risks of Reporting Mistreatment: A Cross-Sectional Survey Study” is reported on which examined learners’ implicit voice theories about speaking up in response to mistreatment and explored the role of power and gender in learners’ willingness to speak up. In Chapter 5, the second manuscript, “‘We Have to Take The Reins’: Learners’ Perspectives on Creating Safe Learning Environment”, we examined responses from learners themselves on what role they should play in contributing to a safe and respectful environment to contribute to lasting change. Finally, in Chapter 6, we discussed the journey of this research, the reflections and conclusions in hopes to move forward the findings.

Chapter 2 Literature Review

To start this review, we first describe the medical school learning environment. We then review studies that show how that environment may foster mistreatment, impede learner mistreatment reporting, and foster reporting hesitancy by learners.

In Canada, the medical learning environment consists of a four-year undergraduate program, with the first two years spent in lectures and group learning followed by a third and fourth year dedicated to clerkship rotations. After the rotations there is a matching process for residency area specialization. This learning environment is designed to stage learners' education and shape their performance, behaviour, and well-being. Only highly qualified students are admitted to medical education programs. These students tend to have strong academic standing and are committed, communicative, caring and dedicated to lifelong learning. According to Srivastava & Batra (2014), these students tend to be motivated, driven to succeed and overcome setbacks and frustrations. However, medical training generally can impact learner mental health such as academic demands, vast syllabus, frequent exams, inadequate feedback, lack of time, transitions from high school to first year medicine to preclinical to clinical, and a lack of communication skills. In light of this environment, it is not surprising that Wasson et al. (2016) found that undergraduate medical learners' well-being tends to decrease during their education, with the rate of depression and burnout being higher than that of other graduate students. While innovation in the medical curriculum is being sought to improve the mental health of learners, another major area to be addressed is mistreatment in medical education. The following review defines mistreatment, characterizes its prevalence by type and learner characteristics (e. g., gender, historically underrepresented group status), its consequences, theories of speaking up or

not speaking up to mistreatment, power imbalances, and the role of social location and identity that may impede speaking up.

Defining mistreatment

Critical to this thesis is defining mistreatment and what that captures. The definitions vary anywhere from lower-level behaviour to behaviour that requires a response and immediate action, and behaviour prohibited by law. Mistreatment has been referred to as conflict, incivility, intimidation, lack of professionalism, personal harassment, sexual harassment, and discrimination. This variability may add or contribute to the shadowy nature of the problem, illustrating the difficulty in defining mistreatment, like nailing jelly to the wall (Cambridge English Dictionary, n.d.).

In Post-secondary institutions several policies have evolved to address mistreatment, and these policies range from overarching institutional policies (respectful work and learning environment) to faculty/college policies (disruption of all forms of racism, prevention of learner mistreatment). These policies levels may add more confusion in terms of what system to access and how to report mistreatment. For instance, some institutional-level policies may have more rigid reporting structures whereby you cannot report mistreatment anonymously, whereas faculty and colleges may permit anonymous reporting.

Another consideration pertains to policy effectiveness. Are they window dressing for legislation or standards for accrediting bodies? Ahmed (2007) has contended that post-secondary institutional policies are pieces, “of institutional performance” (p. 594), whereby we are engaged in a checking off the box exercise and left wondering if there will be follow up and action. One barrier to effectiveness is avoidance. Some administrators may choose to avoid handling conflict.

Barsky and Wood (2005) suggest that avoidance has become the most common tactic for not dealing with conflict within universities. For instance, policy vagueness, where the threshold to warrant an investigation is not clear, can contribute to administrators avoiding the situation.

Despite definitional variability, policy confusion and administration avoidance issues, post-secondary institutions have made efforts to document and address mistreatment. The following section discusses mistreatment prevalence by type and learner characteristics in medical schools.

Mistreatment by type and learner characteristics

In medical school, the power roles that learners interact with range from faculty, nurses, residents, other learners, patients, and administrators. Faculty, nurses, and administrators have structural, referent power, which is a form of leadership power (Saxena et al., 2019). Residents, much like students, experience power imbalances because of the hierarchical nature of medicine. They also hold a position of power over learners. Those holding the least power are fellow learners and patients. In these different power roles, we must consider different intersections of power and privilege, such as race and gender.

A study of medical learners' experiences of mistreatment found a gendered difference with women learners reporting more sexual harassment and humiliation then their male counterparts (Siller et al., 2017). This finding is supported by Ridgeway (2001), who found that women were reluctant to speak up if the transgressor was a white male. Cortina et al. (2013) has shown that the experiences of women were worsened when they were members of a racial minority group. Indeed, mistreatment has characterized learners from historically underrepresented groups (Fnais et al., 2014; Alexis et al., 2020).

In a recent United States study of medical learners, females, underrepresented minorities, Asian, multiracial and lesbian, gay and bisexual learners were disproportionality impacted by mistreatment (Hill et al., 2020). In these studies, we find evidence of learner mistreatment in medical schools and the reluctance to report it.

Consequences of Speaking Up

Medical schools, by way of accreditation standards, are obligated to address the learning environment and to have policies and processes that address mistreatment, harassment, discrimination, and sexual violence. However, one can question the efficacy of such policies and processes if a learner does not feel safe using them. The hierarchical nature of medicine unfortunately has become a barrier to fostering that environment. DiPalma (2004) described the field of medicine as consisting of hierarchical structures, whereby hierarchy is viewed as a structure and a process. In medicine, a hierarchical top-down approach influences activity and how the actors engage with each other within the structure. Such a hierarchical structure can be challenging for learners as it "fosters arrogance, condescension, inequality and limits potential" (DiPalma, 2004, p. 299). In such environments, learning can be truncated if a learner does not feel safe to speak up during a rotation or if they are fearful of being humiliated by a faculty member. This learning behaviour could subsequently limit learners in reporting patient safety issues, particularly if there are potential negative consequences that may impact their careers (Hooper et al., 2015).

Embedded within the hierarchy of medicine is the hidden curriculum which involves interpersonal factors. A study conducted by Gaufberg et al. (2010) identified four defining concepts of the hidden curriculum. They are medicine as culture, haphazard interactions, role

modelling, and tension between the reality of medicine and idealized notions. Another risk is related to power and hierarchies. Indeed, medical students have described feeling an intense pressure to know their place in the medical hierarchy and to endorse the dominant culture of that learning environment (Gaufberg et al., 2010). Gaufberg and colleagues (2010) found that medical learners often depicted feeling disempowered and disrespected. Residents for instance, were fearful of addressing concerns with a faculty member due to a fear of reprisal. Students were concerned that a faculty member would submit a negative evaluation against them. Such issues were compounded further when there was racism and discrimination of any kind (Fnais et al., 2014). Kim et al. (2016) further examined power differentials in a hospital setting. Residents participating in this study reported that they were fearful of addressing concerns with an attending faculty member because of fear of reprisal, (e.g., negative evaluation) and chose instead to avoid addressing the matter. This study magnified the impact of such power differentials by illustrating how learners will not want to speak up when an individual has power over them.

Another contributing element is the taken for granted culture of medicine, whereby learners refer to being "educated by humiliation" (Leape et al. 2012, part 1). Indeed, medicine is known for teaching by humiliation (Mavis et al., 2014; Scott et al., 2015) in particular at the bedside during rounds, which ultimately can affect learning and impact mental health. This approach has become an embedded rite of passage of how learners are treated. Such a culture impedes learners from speaking up because the learner is fearful of being humiliated. Leape et al. (2012) grouped this disrespectful conduct by physicians as: (1) disruptive behavior; (2) humiliating, demeaning treatment of nurses, residents, and students; (3) passive-aggressive behavior; (4) passive disrespect; (5) dismissive treatment of patients; and (6) systemic disrespect.

What this research suggests is that a respectful environment is not only essential for ideal learning but also for patient safety (Lucey et al., 2016). To counter workplace mistreatment, Leape et al. (2012) identified the importance of promoting professionalism competencies, and, when accreditations are based on professionalism, there is a continual investment in realizing and sustaining a respectful work and educational environment. While investments in professional competencies can be made, avoidance can continue by means of working around the individual. Unfortunately, this kind of action is another cyclical product of a culture of disrespectful behaviour. Furthermore, the definition of professionalism can be problematic. It is an umbrella term encompassing many aspects of conduct; but what does it mean and how is it applied? In medical school, a learner is taught professionalism. Yet they may still not call out the attending physician because of a fear of reprisal. This inaction could have deleterious effects in a health care setting and may extend to patient safety concerns. Additionally, it can be confusing for learners to be taught one thing and observe attending faculty display the very behaviour they are told not to do (Spiwak et al., 2007). To understand these dynamics, it is important to understand the causes. As Leape et al. (2012) has argued, in health care systems, like other systems, the causes are the individual (disruptive physicians) and environmental hierarchical relations that cause dysfunctional stressful environments which are perpetuated through inaction and disrespectful conduct.

Another aspect to consider in relation to these causes is the health of learners. While such studies have identified aspects of and responses to mistreatment, there has been little attention given to the impacts of such environments on the health of learners. For instance, such environments could create external and internal conflict that could cause stress that negatively impacts learner health and well-being. Studies that have examined the effects of such

environments on medical learners and residents found that conflict can produce stress for the individual experiencing it, affecting their well-being, and thereby having a negative health impact (Friedman et al., 2000; De Dreu et al., 2004). Research has also shown that conflict avoidance can increase negative emotions (Leon-Perez et al., 2015) and that lower power is connected to depression and anxiety (Keltner et al., 2003).

What we have learned thus far is the ideal reality for all learners is to have a safe learning environment where one feels psychologically safe to ask questions without fear of being wrong. However, research has shown that there is reluctance and silence around speaking up to mistreatment. What further contributes to silence are the implicit theories of speaking up or not speaking up to mistreatment.

Implicit theories of speaking up

Studies on organization behaviour have shown the impacts of social hierarchy, learning, and psychological safety (Edmondson & Lei 2014). If an environment is psychologically unsafe, then, to address it, the organization would need to know this. Unfortunately, research has shown that employees are more often, than not, reluctant to voice concerns with supervisors (Milliken et al., 2003; Detert & Edmondson, 2011). What was identified was voice issues and the need for an institutional shift towards understanding why individuals are reluctant to speak up. When applied to learning environments, we also need to ask if students' have taken-for-granted beliefs about when and why speaking up in a work or academic setting is risky or inappropriate (Detert & Edmondson, 2011). While research has focused primarily on employees of organizations, the findings suggest that, to address implicit voice issues, it is critical to examine the capabilities of individuals to speak up and address power differential issues with individuals in higher positions

and thereby help address mistreatment and highlight problems and opportunities for improvements (Detert & Edmondson, 2011). The question this approach addresses is why many individuals often choose silence. For instance, is it because of hierarchies and fear of offending the person in a power role? Although this has been examined in the employment context, it is also appropriate and necessary to examine the learning context as well. Of relevance is Detert and Edmondson (2011) research on silence and the way individuals choose silence because of "socially acquired beliefs, or implicit theories, about what makes voice risky in social hierarchies" (p. 462).

One way to understand why medical learners are apprehensive to report mistreatment is by understanding their implicit voice theories. This set of ideas describes the taken-for-granted assumptions that people have about the consequences of speaking up. These beliefs are often socially acquired, rather than developed through firsthand experience or specific knowledge (Detert & Edmondson, 2011). Previous work shows that these implicit theories influence employee silence, even when organizations and leaders are seemingly open to feedback (Knoll et al., 2020). In other words, to understand why medical learners might be reluctant to speak up about mistreatment, we must understand not what actually happens to students who speak up, but instead, understand what students expect or assume will happen. As stated elsewhere, power-hierarchy issues are a common occurrence for medical learners (Angoff et al., 2016). For instance, Angoff et al. (2016) reported that medical learners felt bewildered and silenced in medical school with one learner stating, "I regretted my silence and attributed it to being at the bottom of a powerful hierarchy" (p. 207). Additionally, the reason medical learners did not speak up was for fear of reprisal and receiving a poor evaluation. So, how do students acquire the beliefs that they have? Are they developed prior to admittance to medical school, or do they hear

from other students' experiences about speaking up? Or is it a combination of factors and history that also drives a fear of reprisal? We next consider a source of hesitancy in speaking up by examining the role of power imbalances in the medical education context.

Power Imbalances

Research has shown that individuals in lower power roles within workplace settings are unlikely to speak up about concerns they have (Salin et al., 2014). Furthermore, individuals in lower power roles are often silent due to fear of retribution (Barsky & Wood, 2005). In the past, interventions for handling concerns have focused on advising an individual to speak up. This approach, however, rarely considers the power imbalances within the relationship. Unfortunately, organizational research on how power differences affect addressing concerns is limited (Tjosvold & Wisse, 2009).

What is known is that unequal power relationships will tend to result in more dominating (higher power role) or avoiding strategies (lower power role) (Davidson et al., 2004). How these issues manifest in the health sciences' learning environment is not yet known. A major aspect of unequal power conditions to consider in the health sciences field is conflict. How conflict is addressed in relation to power imbalances and hierarchical structures in health sciences areas is a relatively new area of attention. Generally, under unequal power conditions, conflict will be viewed and experienced differently (Coleman et al., 2013). Conflict is known to affect organizational behaviour and potentially contribute to a learning-working culture that is unsafe. This occurs when there is intimidation by an individual in power, which "creates an environment in which people are afraid to speak up, even when they witness potentially serious safety or quality issues" (Lucey et al., 2016, p. 2263). For example, Friedman and colleagues (2000)

claimed that conflict management behaviours can be both dispositional and situational. They found that individuals who do not speak up experience more conflict due to their inability to speak up for themselves. For example, individuals who avoid conflict experience more task conflict which increases relationship conflict and stress in their environment. This research considered the impact of conflicts with others and individuals' response to that and the stress experience internally as a result. However, they did not consider the impact that culture has on power dynamics.

Power, in this instance, is "an individual's relative capacity to modify others' states by providing or withholding resources or administering punishments" (Keltner et al., 2003, p. 265). According to O'Reilly and Aquino (2011), low power relates to an "avoidance goal orientation because those without power may lack access to resources and are more subject to social threats and punishments. Consequently, they are more sensitive to the evaluation of, and potential constraints imposed by others" (p. 534). However, there are negative connotations for those in low power roles. Negative implications act as an inhibitor (Keltner et al., 2003), equating it to a threat system; that is, "the behavioral inhibition system involves affective states such as anxiety, heightened vigilance and inspection of punishment contingencies, and avoidance and response inhibition" (p. 268). The approach/inhibition system, as discussed in Keltner et al. (2003), surmises that the inhibition would be similar to an avoidance response. Smith and Bargh (2008), on the other hand, suggest that there is a difference between avoidance and inhibition and claim the difference is that, with avoidance, the target actively moves away from the perpetrator. If we apply this thinking to the medical learning environment, we need to consider whether a medical learner necessarily has the ability to actively move away, as in the case of when a power role has an evaluative capacity.

One supposition of power approach theory is that the powerful will feel comfortable approaching and that the less powerful will feel inhibited. According to Keltner et al. (2003), role power in a learning context is a source of control over resources within organizations. In a study on conflict styles of residents, administrators and physicians were found to have a higher use of aggressive behaviour and a competing style of conflict management that was attributed to a power role that is "more likely to be used by those in higher authority to resolve conflicts" (Ogunyemi et al., 2011, p. 181).

Brown et al. (2011) found the following barriers to resolving conflict: workload and time, people in less powerful positions, and confrontation avoidance for fear of causing emotional discomfort. They also found that individuals in positions of less power were less likely to address conflict in the workplace. Individual strategies to address these imbalances, as suggested by Brown et al. (2011), include communication, respect, and humility. Turning to those in power/leadership roles, they were perceived as a hinderance to resolution, when those in lower power roles felt silenced, which was experienced as a "failing to hear and respond to the conflict" (p.7). However, it was noted that those in less powerful roles who experience conflict may not actually access the informal mechanisms that address the conflict. To this end, mechanisms are only effective if people are able to access them and feel safe to do so. Put another way, simply encouraging a learner to speak up or to access informal/formal processes does not necessarily assist the learner with addressing their concerns. Interprofessional education (IPE) also does not address these issues. Paradis and Whitehead (2015) conducted a review of interprofessional education in health education and found that it did not address the interplay of power and conflict in health environments. They concluded that IPE tends to be misused as a 'solution to structural, organisational and institutional issues" and does not confront broader

issues such as mistreatment, including discrimination related to social location and individual identity.

Role of Social location and identity

In medicine, the focus on professionalism and resilience training has still failed to address concerns due to the hierarchical nature of medicine and how power differentials, implicit voice, and fear of reprisal are experienced by learners, including by their multiple identities and historical treatment in society (Eckstrand et al., 2016). To understand the role of social location and identity, Kimberlé Crenshaw created the term "intersectionality" based on her work in critical race theory (Runyan, 2018). According to intersectionality theory, individuals are shaped by "interacting social locations and identities, such as race, Indigeneity, sexuality, gender expression, migration status, age, ability, and religion, and these interactions occur within a context of connected systems and structures of power" (Hunting et al., 2015, p.103). Eckstrand et al. (2016) highlighted the need to consider "1. Cultural patterns of discrimination, and subsequent inequities, are interlocking and cannot be separated on the basis of only one aspect of identity or experience; 2. Interrelationships between identities must be understood in the context of social institutions and their inherent power dynamics; and 3. Despite originally being created to analyze and address health disparities, use of an intersectional lens can also reveal unique strengths and resiliency in different communities which, when properly understood and appreciated, may be employed to enhance public health outcomes" (p. 904). Applying this lens therefore has merit to realize the RCPS Accreditation Standard 3 that a medical school should provide an education program in "professional, respectful, and intellectually stimulating academic and clinical environments" (CACMS Standards and Elements, 2017, p. 5). Furthermore, by doing so, we work towards "the benefits of diversity when promoting students'

attainment of competencies required of future physicians" (CACMS Standards and Elements, 2017, p. 5). Such a lens can support the operationalization of Standard 3.3 Diversity/Pipeline Programs and Partnerships whereby a school missions is to provide "appropriate diversity outcomes for students, faculty, senior academic and educational leadership" (2017, p. 5).

Indeed, while research has shown the nuances of power imbalances, implicit voice theory, and fear of reprisal, we also need to consider that there is a dynamic relationship between how the individual arrives at the institution, what they "show up with," what they know about themselves and their identity, how this is understood in the learning environment, and how safe they feel. For instance, Fnais et al., (2014) conducted a systematic review and meta-analysis to ascertain the prevalence, risk factors, and sources of harassment and discrimination among medical trainees. They found that little more than half of medical trainees had experienced one form of discrimination and harassment, and many of the human rights violations were related to their gender and race/ethnicity. Little research has been conducted on whether or how students' action their institutional human rights processes to address the harassment and discrimination they experienced. At the University of Manitoba, a review of the Independent Study Analysis 2018 of undergraduate medical learners showed that medical students in years one and two noted limited knowledge of policies and experiences of mistreatment[1] . It is not until years three and four that there was a jump in reporting mistreatment. A further question is whether increased reporting is due to professionalism taught for preparation for pre-clerkship in year three or whether it is due to students feeling more confident to report?

[1] Since the Independent Study Analysis there has been an insertion of information on the Max Rady College of Medicine's Prevention of Learner Mistreatment Policy at the beginning of years 1 and 2 tutorials, which did make a difference in knowledge translation, as reflected in this study survey results.

In summary, this literature review informed relevant thematic areas to explore further in this research such as power differentials, implicit voice, fear of reprisal, and social location and identity. In the next section, we will situate these thematic areas conceptually into a framework that delineates the way power influences the custom of speaking up behaviour to mistreatment.

Towards a Framework

There are multiple perspectives of the way power establishes and perpetuates mistreatment and ways to combat it. As we noted earlier, medical schools have a responsibility to provide a safe environment for learning. As our review has shown, learner mistreatment unfortunately persists for various groups thus requiring change.

Change is a journey, and for larger organizations it can be challenging. In these settings, it may be difficult to change existing and future behaviour and to always know where the focus should be. For instance, should change be targeted at the environment, the individual, or both? When we consider changing behaviour, including unconscious bias, Marcelin et al., (2019) contended that we need to advance mitigation strategies at an individual level, an organizational level, and both levels combined, for lasting change to occur.

To understand where change is required, we therefore need to investigate the heuristics and habits of learners in the medical college environment. According to Kawachi (2014) a persons' heuristics are the strategies that they have derived from previous experience to similar problems, which is reflected in the way they "behave most of the time in automatic ways basing their judgements and decisions on mental shortcuts" (p. 484). For example, after time, a person develops mental shortcuts whereby they behave in an automated way and lose their judgements and decision-making. These behaviours may also reflect power imbalances in society such as social, political, and economic institutional structures (Kawachi, 2014). In our review of implicit

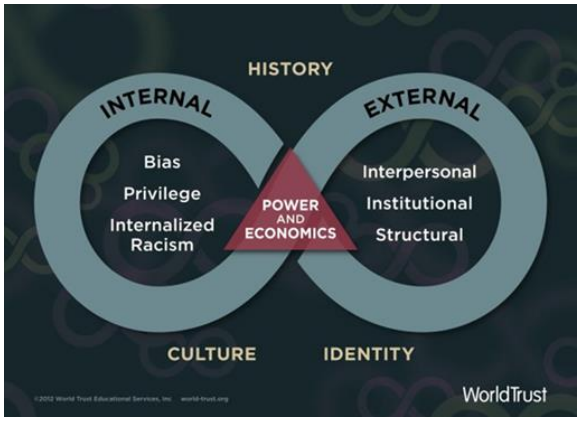
voice theory, we saw such evidence in the way student behaviours or mental shortcuts normalized their fear to speaking up to power, which is a normalized behaviour in the hierarchical structure of medicine. To understand this dynamic further, we next considered Zimmerman's (2013) multi-level theoretical paradigmatic approach, which addresses not only the heuristics and habits of behaviour but also the impact of power imbalances on structures that ultimately effect individual behaviour.

Earlier, we discussed the medical education environment, the impact on learning if a learner does not feel safe speaking up and the impact of the hidden curriculum. Learners often choose silence due to fear of reprisal, based on implicit theory of what may happen if one were to speak up. Zimmerman's (2013) approach reveals the influence that power has on cognitive habits. In other words, the theory is focused on understanding patterns of behaviour and explains how our choices are shaped by the social environment in which we live. This approach can be understood further through a multitude of interactions between internal and external factors. For instance, medical learners, administrators, and faculty members are shaped by cognitive habits that are formed early, and it takes time to unlearn habits that are based on previous experiences. For learners, they are vulnerable to influence particularly by those in power (e.g., faculty and administrators). While medical colleges have policies to address mistreatment, it is unclear if learners will do so given the hierarchy of medicine and the hidden curriculum. The intrinsic value of Zimmerman's (2013) multi-level theoretical paradigm is that it recognizes the dynamic between power and cognitive habits. Power shapes "the evolution of cognitive habits, and [how] cognitive habits shape the ethical and legal structures that give rise to power" (2013, p. 51). Applying this theory to medical learners may reveal that their action to speak up or not to speak up could be due to habits and assumptions about power imbalances, which unfortunately gets

passed down through generations of learners as they transition from a learner to a resident to a practitioner and then perhaps as an educator.

As discussed, medicine is a perpetuated hierarchy of unequal positions (learner, resident, practitioner, administrator, academic faculty), whereby learners are in the most disadvantage position. Ng and Muntaner (2014), who engaged social realism and incorporated social conflict aspects in the study of unequal positions, contended that such disadvantage is created through unequal positions of power. Studying how adverse environments affect individuals in different ways (e.g., thrive or suffer) is therefore a critical step to affect change. Imagine a learner from a historically excluded group experiencing mistreatment. A faculty attending member yells at them. Everyone around them does nothing. They do nothing. They freeze, assume the worse and say nothing. In this scenario, they default to cognitive habits and mental shortcuts. Examining the structures that support this dynamic, the under-reporting, and bystander nonreaction is therefore important to interrupt this pattern for lasting change to occur (Marcelin, 2019). In short, we need to consider internal (individual) and external (structural) factors.

Figure 1: Interactions between Internal and External Factors (Source: World Trust Social Justice & Equity Movement Building (2020)



In Figure 1, reproduced from the World Trust Social Justice & Equity Movement Building (2020), we see those interactions via culture, identity, and history, whereby power and economics is influenced by continuous interactions between internal factors such as individual bias, privilege, and internalized racism and by external factors occurring at the

interpersonal, organizational structure and institutional levels. For lasting change to occur, the components of this loop need to be transformed to advance justice and equity in the learner environment. Therefore, if medical colleges can work with what learners need to speak up while, at the same time, addressing how the college institutionally and through its actors perpetuates mistreatment, we may be able to take a step forward in the right direction.

In summary, Zimmerman's multi-level theoretical paradigm (2013) reveals the way power generates or reinforces habits and traditions. In other words, it explains learner's perceptions and choices are shaped by the social environment in which they live and the environment in which they learn. As discussed, mistreatment is elevated in the medical learner environment, and to address this challenge, this study aimed to better understand how learners themselves think about the barriers and perceived risks to speaking up about mistreatment and how they look beyond institutional policies and reconsider their role whereby they may actively contribute to reinventing mistreatment and fostering a positive learning environment. As a guide, Zimmerman's model (2013) outlines the way power influences how learners react to mistreatment and how they may interrupt this cycle in a medical learning environment. Combined with intersectional theory (Hunting et al., 2015), we are then able to examine whether transgressor's power (administrator, academic faculty) and the learner's gender shape the learners' comfort with speaking up in response to mistreatment. When we add implicit voice theory (Detert & Edmondson, 2011), (learner) to this theoretical mix, we are able to examine the specific fears and risks they may have about reporting mistreatment during their medical education. In addition, we are able to examine what voice they may have about securing and sustaining a respectful and safe work and learning environment.

A further rationale for examining these challenges and potential solutions to disrupt negative medical training impacts on the learners' mental well being. While this is not a topic of this research, it is also important to understand the outcome of mistreatment and/or not speaking up has had on the learner. During training, medical students are exposed to various forms of psychosocial stress, which, according to Srivastava and Batra (2014), can lead to biological, psychological, and physiological pathologies. Consequently, not speaking up or speaking up can produce stress that negatively impacts the health of learners. For instance, the outcome of underreporting and/or hesitancy to report, can have downstream consequences perpetuating a negative environment, creating a toxic culture, and generating inequity and exclusion. As we saw earlier, learners who are from historically excluded groups experience more mistreatment than other learners and were reluctant to report. The medical learning environment is already stressful to begin with, experiencing mistreatment, not belonging or feelings of exclusion can only add to more stress. The importance of equity, diversity, and inclusion in the medical learning environment continues to be emphasized in medical colleges as well as in accreditation standards. So, we see, that the groups most impacted by mistreatment are those who are attempting to make inroads in these institutions which are built upon Western colonial, patriarchal heteronormative culture, and structures. The downstream impacts are twofold on the learner itself and the institution. There can be negative outcomes for the learner in terms of their health (Kubzansky et al., 2014) and a sense of belonging, and for the institution, the safety of its environment while it attempts to advance equity, diversity, and inclusion.

In summary, the medical learning environment has its own culture (good or bad), is comprised of support systems (strong or weak), and has specific characteristics (e.g., programs, faculty members, etc.) (strong or weak), all of which can assist or harm the medical learner.

Additionally, a medical learner may experience social adversity due to their social location and identity, their stage of learning, and their trauma history (prior to and/or within the learning environment). Therefore, support systems are important for students when they arrive at school and as they progress throughout learning. Speaking up is also important to address mistreatment. Ultimately, we want to be in an environment where the learner does not have to speak up and put themselves out there. We want to achieve an environment where those around them can speak up on their behalf; the signalling being that this behaviour is not okay.

In this study, we have placed the learner at the centre, and we describe their perspectives on speaking up via their implicit voice, fear of reprisal, social location and identity, and the power dynamics they experience. Encircling this dynamic are the potential sources of mistreatment or support (policy, administration leadership, staff, academic faculty, residents, and peers), where change is required. In the next chapter, we outline the methods we draw upon to investigate whether transgressor's power (administrator, academic faculty) and the learner's gender shape the learners' comfort with speaking up in response to mistreatment. We examine the specific fears and risks that they may have about reporting mistreatment during their medical education. In addition, we investigate what voice they may have about securing and sustaining a respectful and safe work and learning environment.

Chapter 3 Methods

In the previous chapter, we identified why speaking up is important to address mistreatment. In medical colleges, we are directed by accreditation standards and a moral code of "do no harm" to create an environment where the learner does not have to speak up and put themselves out there. In a zero-tolerance environment, we strive for learners to feel secure and confident to speak up, and for those around them to support them and speak up on their behalf if need be. As we noted, learners have described various perspectives on mistreatment from a position of implicit voice, fear of reprisal, social location and identity, and the power dynamics they experience. We further found that potential sources of mistreatment or support are located in policy, administration leadership, staff, academic faculty, residents, and peers, and it is in these locations where change is critical for a positive learning environment. In this chapter, we outline the methods we have drawn upon to 1) investigate further whether transgressor's power (administrator, academic faculty) and the learner's gender shape the learners' comfort with speaking up in response to mistreatment, 2) examine the specific fears and risks that they may have about reporting mistreatment during their medical education, and 3) give voice to learner's perspectives on securing and sustaining a respectful and safe work and learning environment. To guide this research, we felt that participatory research (Cornwall & Jewkes, 1995) was needed to ensure that those impacted and those working in this area would have a collaborative role in the research design. The following sections describes this approach, the study instrument, sample, and data analysis.

Design

This study was undertaken as a participatory research study (Cornwall & Jewkes, 1995). Participatory research was chosen because partnership with an impacted community is needed to

facilitate change and to inform an evaluative approach (Mertens, 2009). For this study, the research involved working with stakeholders from the Rady Faculty of Health Sciences, Max Rady College of Medicine in the design and operationalization of this project. By engaging stakeholders at the outset (as described below), we have engaged a transformative methodology (depicted in Figure 2). This methodology involved reflective consultation (Mertens, 2009) with critical Rady Faculty of Health Sciences, Max Rady College of Medicine faculty and medical student leadership throughout each component of the study — design/methods, survey, focus groups, data analysis, and the final aim — to inform/rethink evaluation for accreditation.

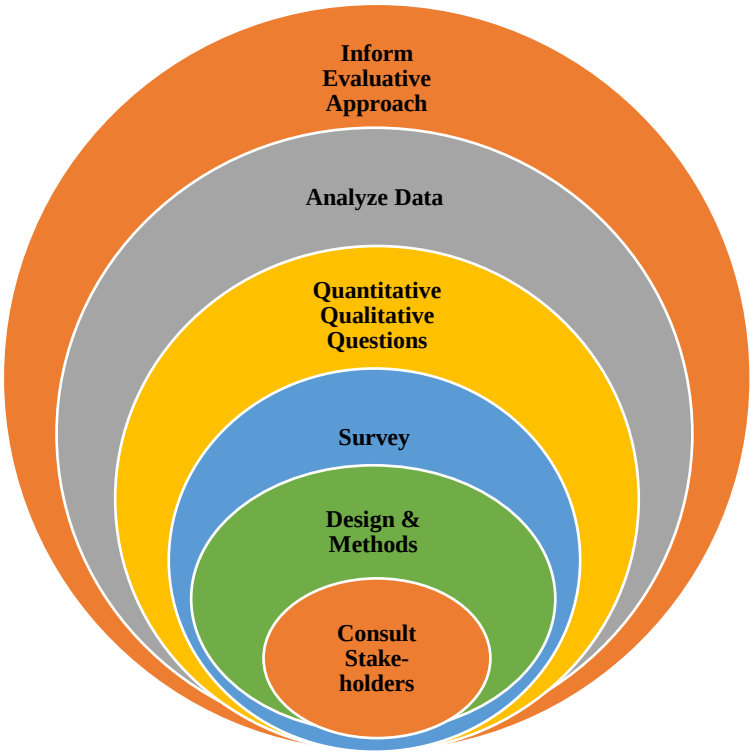


Figure 2: Transformative Methodology of Participatory Research

For this study, a mixed methods survey study design was utilized, and electronic survey data was collected. The study population was the UGME learners in years one to four who were enrolled at the Rady Faculty of Health Sciences, Max Rady College of Medicine as of 2018. As

required for all research involving human subjects, ethics approval was obtained from the University of Manitoba's Health Research Ethics Board.

Existing report data already analyzed and released to college membership set the context for this study. The findings from the Independent Study Analysis, the most recent graduation questionnaires, and the Data Collection Instrument (DCI) narrative responses were reviewed with the participatory team and thesis committee. A draft electronic medical student semi-structured survey was developed and reviewed by a participatory team comprised of individuals from the Office of QI & Accreditation, the Office of Professionalism, and student representation from the Manitoba Medical Student Association. The study instruments, addressed the following study aims:

Aim 1: To better understand how learners themselves think about the barriers and perceived risks to speaking up about mistreatment.

Aim 2: To look beyond institutional policies to reconsider the role of learners by identifying ways in which learners can actively contribute to preventing mistreatment and fostering a positive learning environment.

Aim 3: To assist with informing potential interventions and opportunities to improve the academic and learning environment, whereby students are comfortable to speak up and faculty are receptive to promoting a positive environment.

Aim 4: To propose a reflective evaluation approach for the Rady Faculty of Health Sciences, Max Rady College of Medicine to continually improve and maintain a positive learning environment.

The study questions covered the following thematic areas: speaking up about mistreatment to those in power roles, the barriers perceived by students, and the level of student comfort in speaking up to varying roles. Included were questions on the students' social location and identity to ascertain if they are from historically excluded groups and to ascertain if these social locations and identity influence or impact, for example, their perception of risk in reporting. Prior to the research study, learners would have already received information on specific policies, such as Respectful Work and Learning Environment, Sexual Assault (note both policies are institutional jurisdiction) and Prevention of Leaner Mistreatment (note this policy applies only to the Max Rady College of Medicine) in their orientations and reminders prior to lectures. We evaluated their uptake and understanding of these policies to identify any shortcomings. The participatory team then reviewed the findings and identified interventions and opportunities to improve the learner environment and considered a reflective evaluation approach for the Rady Faculty of Health Sciences, Max Rady College of Medicine to continually improve and maintain a positive learner environment.

Study Instrument and Sample

The survey included questions on social demographics so students could frame their social location (e.g., ancestry, gender, sexual orientation) and identity (see Appendix A). Questions pertaining to implicit voice and power imbalances were asked. For this study, implicit voice was defined as speaking up behaviours and upward communication to those who occupy positions that are hierarchically higher than their own (Detert & Edmundson, 2011). Power imbalance was defined as difference in role power. Power imbalances were measured by asking participants to consider the role of the other party in times when they spoke up and in times when they did not. For example, participants were asked open-ended questions probing for the use of

voice. The questions were adapted from Detert and Edmondson (2011) and example items include: thinking about times you have experienced mistreatment, what would happen if you spoke up (e.g., confront the person, talking up to higher authorities, talking to others) about it? How is it different to speak up to those in positions of power? Why would you feel comfortable speaking up to those in positions of power in the College of Medicine? Why would you not feel comfortable speaking up to those in positions of power in the College of Medicine? See Appendix A for the full list of questions.

The mode of data collection was in text Computer Assisted Self-Interviewing web-based data entry. This was the most efficient method for collecting data from undergraduate medical learners due to the time constraints on their schedules, the continuous popularity of the web-based survey, the tech savviness of this generation, and its suitability for answering reflective questions best responded to in private.

The survey ran from February 15, 2019 to April 15, 2019. Weekly reminders were sent to all 440 UGME learners and the MMSA provided a link to the survey on their Facebook page. The desired response rate was 20%. The attained response rate was 32% (completed the survey, n =140) and 28% (responded to the speaking up questions, n = 123). Data cleaning involved range checking and contingency coding. The Lime Survey platform was used as it has a security protection via its secure socket layer encryption. No IP addresses were collected.

A descriptive analysis of quantitative measures was performed using frequencies and other univariate measures. Cell sizes under five were supressed at reporting. Recoding was also informed by factor analysis to identify key thematic variables that are theoretically informed. For factors that cluster, an index was created to reflect high to low, then a reliability test was completed with Cronbach's alpha (Merton, 2009). The following variables were considered for

analysis: gender/sex, sexual orientation, race/ethnicity (including Indigeneity), first-generation student status, whether they had a family member in the health sciences field, whether they had previously experienced discrimination, and their year of study. Predictor variables were dichotomized (yes or no). As for the race/ethnicity question, it had fifteen categories, and participants could choose multiple identities. The number of participants in any given category (e.g., "Inuit"), however, was quite small. Because our approach was informed by intersectionality theory, we also wanted to consider the effects of having multiple categories of difference. Unfortunately, many demographic cell sizes were too small to adequately power each of the possible two-way and three-way (or beyond) interactions involved. Respondents also answered qualitative questions, and their responses were reviewed for salient themes, how we analysed the data is described more fully in these next sections and each of the two following chapters.

Sample Description

In our sample of n=123, 64% identified as female, 36% as having a racialized (i.e., non-Caucasian) identity, and 11% as lesbian, bisexual, gay, trans, 2-spirited, queer, or intersex (2SLBGTQ+). Eighteen percent of participants were first-generation university students, and 65% reported being the only member of their family to work in the health sciences field. Participants included both pre-clerkship students (years 1 and 2; 59%) and clerks (years 3 and 4; 41%). Out of our sample of 123 learners, 113 participants (92%) answered the qualitative questions, the characteristics of the responding students did not significantly vary from that of the total sample (n=123). For these questions, we identified the themes and examples of participants' implicit voice theories about speaking up in response to mistreatment.

Data Analysis

For this manuscript thesis, we analysed the quantitative and qualitative data for two manuscripts. The first manuscript answered the Question 1 and 2, as previously noted:

> **Question 1:** Do the transgressor's power and victim's gender shape student learners' comfort with speaking up in response to mistreatment?
>
> **Question 2:** What are the specific fears and risks (i.e., implicit voice theories) that students intuit to come along with reporting mistreatment during their medical education?
>
> **Question 3:** What role should students have in ensuring and sustaining a respectful and safe work and learning environment?

For research question number 1, we analyzed a sample of n=123, using a MANOVA analysis to test the effect of student gender on the question that asked their awareness of the Medical College and University policies on mistreatment. Then, a mixed repeated-measures ANOVA was utilized to test the effects of student gender and the six targets of speaking up (e.g., faculty, residents, patients, nurses, peers, and staff/administrators) in a mixed repeated-measures ANOVA. We used target as a within-subjects factor in the model with gender (male, female) as a between-subjects factor. For research questions number 2, we analyzed the responses to the qualitative question, what are the specific fears and risks (i.e., implicit voice theories) that students intuit to come along with reporting mistreatment during their medical education? For this analysis, we generated categories of students' implicit voice theories by analyzing their open-ended written responses using an inductive approach to generating categories since there was no a priori theory of the potential content of the medical learners' implicit voice theories about mistreatment. This analysis is described below in more detail.

In the second manuscript, we answered research Question 3: What role should students have in ensuring and sustaining a respectful and safe work and learning environment? For this question, we analysed qualitative data from a sample of 101 learners which represented 82% of the overall sample. Of the 101 learners, 62% who identified as female, 66% were white, 20% were first-generation university students, and 65% did not have family member working in health care. Participants included students in their first two years of pre-clerkship study (56%) and those in their two-year clerkship period (44%). Based on the enrolled study body, our sample slightly underrepresented those in their clerkship years (44% versus 50%) and slightly overrepresented women (62% versus 50%).

In both manuscripts, we analyzed students' open-ended written responses using inductive qualitative thematic coding units were organized into themes that emerged from the data. Several iterations between the data and codes occurred. As new units were coded, themes were added, dropped, aggregated, and disaggregated until new units could easily be assigned to thematic categories, and each category contained a sufficient number of similar examples. These analyses are reported in Chapter 4 and 5.

As this research was participatory action research, the survey analyses of the data were presented as preliminary analyses to gain insight and knowledge and to hear from the stakeholders. The following groups were presented to:

- Max Rady College of Medicine Dean's Council, September 10, 2019
- Pediatric Medical Education Group, Works in Progress, September 12, 2019
- Max Rady College of Medicine Department Head's Council, September 20, 2019
- Manitoba Medical Students Association, October 15, 2019

Gaps and limitations were identified by the stakeholders that can inform new studies going forward. These are addressed in the study limitations in Chapter 6. The next chapter reports on the first manuscript which examined if transgressor's power and victim's gender shape learners' comfort speaking up and what learners' implicit voice theories are with reporting mistreatment during their medical education.

Chapter 4 Speaking Up is Hard to Do: Gender, Power, and Learners' Implicit Theories about the Risks of Reporting Mistreatment: A Cross-Sectional Survey Study

Abstract

Background: To combat the underreporting of medical learner mistreatment, we must understand the perceived risks learners associate with reporting. We examined learners' implicit voice theories about speaking up in response to mistreatment, exploring the role of power and gender in learners' willingness to speak up.

Methods: In a cross-sectional survey of medical learners from a Canadian undergraduate medical program in 2019, we examined the role of gender in willingness to speak up about mistreatment to varying roles of power. Willingness to speak up was captured by a Likert scale measuring comfort speaking up to different targets. A mixed repeated-measures ANOVA tested the effects of student gender and the targets. Learners' implicit theories about the risks of speaking up were described using qualitative thematic analysis of open-ended responses.

Results: In our sample of 123 learners, we found that women were less comfortable speaking up about mistreatment than were men. Learners felt significantly less comfortable speaking up to faculty members than to residents, to nurses, to patients, and to administrators. Seven themes around the reason for their discomfort emerged from the qualitative data, related to concerns about reprisal, negative impacts on residency matching, negative evaluations, reputational harms, threshold of severity, the perpetrator protected by power, and inaction in administrative responses.

Interpretation: Our findings identified that despite awareness of reporting mechanisms learners' taken-for-granted beliefs about the consequences and gendered differences in comfort with

speaking up about mistreatment were barriers. These findings should inform how institutions design and administer reporting mechanisms for mistreatment.

Introduction

Learner mistreatment, ranging from belittlement to humiliation, and from assault to abuse, is worryingly prevalent in medical education. A recent survey of Canadian medical learners shows that a majority of learners personally experience at least one form of mistreatment during their medical education[1]. Learners who experience mistreatment are more likely to experience lowered mental health and career dissatisfaction[2] and that mistreatment can deteriorate the learning environment and undermine communication, coordination and effective patient care[3-5].

Research in organizational psychology reveals that those in lower-power roles in workplaces are less likely to speak up about mistreatment[6]. In particular, women are more likely to be targeted, face graver consequences, and have stronger concerns about reporting[7]. A major challenge in managing workplace mistreatment is that the victims or targets feel that they are unable to speak up or respond actively to instances of mistreatment[8].

These challenges may also be acute among medical learners, who must navigate a steep, hierarchical occupational structure[9,10] and may face higher barriers to reporting mistreatment[11]. In one study, the majority of medical learners who experienced mistreatment chose not to report it, in part because they saw mistreatment as an inherent aspect of medical training and culture[12]. One way to understand why medical learners are apprehensive to report mistreatment is by understanding their *implicit voice theories.* These are the taken-for-granted assumptions that people have about the consequences of speaking up. Implicit voice theories are often socially acquired, rather than developed through firsthand experience or specific knowledge[13].

The purpose of this study was to better understand how learners themselves think about the barriers and perceived risks to speaking up about mistreatment. Our research addresses the following questions: 1) Do the transgressor's power and victim's gender shape student learners' comfort with speaking up in response to mistreatment? 2) What are the specific fears and risks (i.e., implicit voice theories) that students intuit to come along with reporting mistreatment during their medical education?

Methods

Participants and setting

Participants were medical learners, recruited from a survey sent to the 440 students enrolled in the University of Manitoba undergraduate medical program in Winnipeg, Canada. 64% identified as female, 64% were white, 18% were first-generation university students, and 65% were the first member of their family to work in health care. Participants included students in their first two years of pre-clerkship study (59%) and those in their two-year clerkship period (41%) to determine whether students' implicit theories change during this transition. Based on the enrolled student body, our sample slightly underrepresented those in their clerkship years (41% versus 50%) and slightly overrepresented women (64% versus 50%).

Data Collection

We employed a cross-sectional survey which included quantitative and qualitative open-ended questions. Participants were recruited by email, with reminders by email and through the medical student society's social media accounts. Participants responded to questions via an anonymous web-based survey, which was reviewed and approved by the university research ethics board.

Measures and Analyses

Quantitative

We measured participants' awareness of learner mistreatment, respectful work and learning environment and sexual assault policies (aware or unaware). We measured participants' comfort in speaking up in response to mistreatment on a six-point scale, from 1 (very uncomfortable) to 6 (very comfortable). We asked participants to rate their comfort with respect to six different targets, varying in relative power: Patients, fellow medical learners, nurses, residents, faculty members, and administrators. These outcomes measures were assessed by gender (male, female) and if they were in pre-clerkship or clerkship.

A MANOVA analysis tested the effect of student gender on awareness of these three policies. A mixed repeated-measures ANOVA tested the effects of student gender and the six targets of speaking up (e.g., faculty, residents, patients, nurses, peers, and staff/administrators) in a mixed repeated-measures ANOVA. We used target as a within-subjects factor in the model with gender (male, female) as a between-subjects factor. Because the assumption of sphericity for repeated-measures ANOVA was violated (Mauchly's $W=.56$, $p<.001$, Huynh-Feldt $\varepsilon=.86$), we report the repeated measures effects using Huynh-Feldt sphericity corrections. The *p* values reported were all Tukey-adjusted to account for multiple comparisons.

Qualitative

We also asked two open-ended qualitative questions aimed at understanding medical learners' implicit voice theories about speaking up about mistreatment (see Appendix A). In each question, we generated categories of students' implicit voice theories by analyzing their open-ended written responses using qualitative thematic coding [14,15]. We took an inductive approach to

generating categories since there was no a priori theory of the potential content of the medical learners' implicit voice theories about mistreatment. This process was developed in collaboration between the authors, and the coding was conducted by the first author. For each question, responses were unitized into individual meaning units[16], and those units were then organized into themes. Several iterations between the data and codes occurred. As new units were coded, themes were added, dropped, aggregated, and disaggregated until new units could easily be assigned to thematic categories, and each category contained a sufficient number of similar examples.

Survey Results

Quantitative

The vast majority of learners were aware of reporting policies and procedures: 92% were aware of the learner mistreatment policy, 73% of the respectful work and learning environment policy, and 84% of the sexual assault policy. A MANOVA analysis found no significant gender differences in awareness of policies, Wilks' Λ=.95, $F(3,118)=1.96$, $p=.12$.

We then examined the role of transgressor power in reporting by assessing participants' comfort with speaking up to each of the potential targets. There are clear role-based power differences in a traditional medical hierarchy (e.g., the power of faculty members). Even if we adopt an interprofessional rather than traditional hierarchical lens, there are still power distinctions between the students and those responsible for their training[17]. We found significant effects of both target ($F_{Hyunh\text{-}Feldt}(4.32, 531.36)=28.13$, $p<.001$) and learner gender ($F(1,123)=13.93$, $p<.001$) on comfort speaking up about mistreatment. There was no significant interaction between target and learner gender.

Examining the effect of learner gender, we found that women were less comfortable overall with speaking up about mistreatment (M=3.59) than were men (M=4.28, $t_{diff}(123)=-3.73$, $p<.001$; see Figure 3), and this effect, occurred across all targets (i.e., average comfort ratings across all types of transgressor).

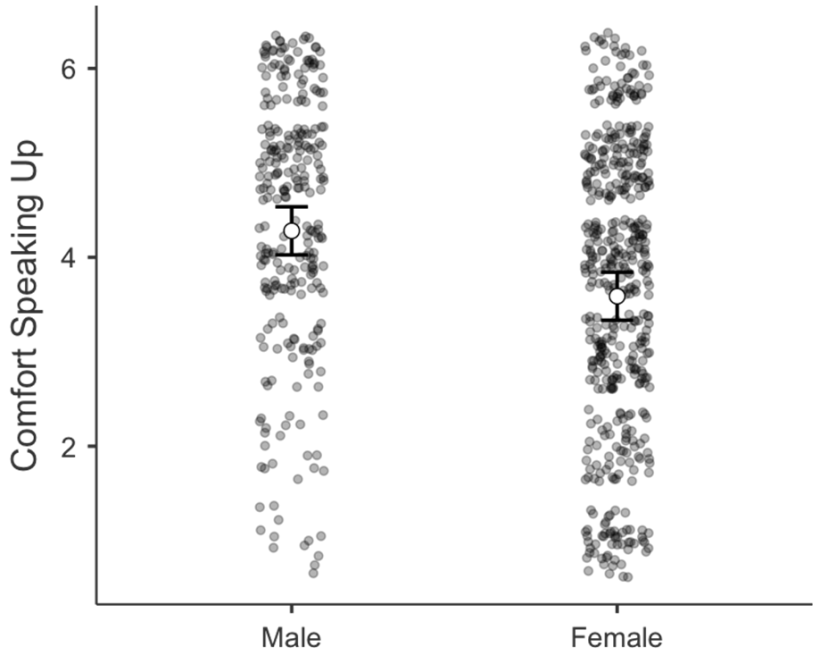


Figure 3: Gender differences in comfort speaking up about mistreatment

Examining target effects (i.e., power), learners felt significantly less comfortable speaking up to faculty members (M=3.36) than to residents (M=3.79, $t_{diff}(615)=-3.13$, $p=.02$), to nurses (M=3.76, $t_{diff}(615)=-2.93$, $p=.04$), to patients (M=3.95, $t_{diff}(615)=-4.29$, $p<.001$), to students (M=4.90 , $t_{diff}(615)=-11.24$, $p<.001$), or to staff and administrators (M=3.85, $t_{diff}(615)=-3.58$, $p=.005$). Learners, however, felt significantly more comfortable speaking up to their peers (M=4.90) than to other targets, including faculty (as reported above), residents ($t_{diff}(615)=8.11$, $p<.001$), nurses ($t_{diff}(615)=8.31$, $p<.001$), patients ($t_{diff}(615)=6.95$, $p<.001$), or staff and administrators ($t_{diff}(615)=7.66$, $p<.001$). (See Figure 4 and Tables 1 and 2).

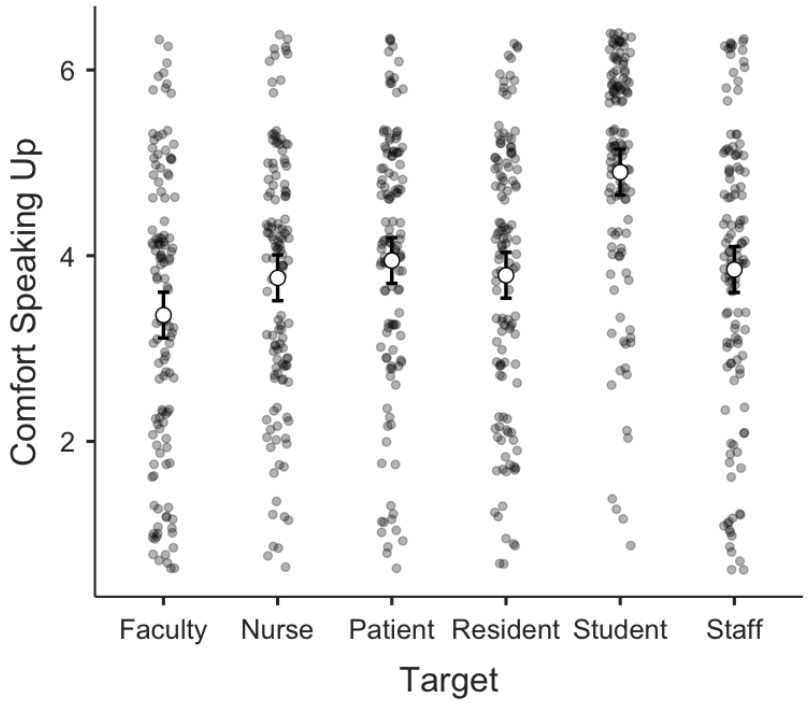


Figure 4: Student comfort speaking up, by target role

Table 1: Student comfort speaking up, by target role

Estimated Marginal Means - Target

	95% Confidence Interval	
SE	**Lower**	**Upper**
0.125	3.113	3.607
0.125	3.515	4.008
0.125	3.701	4.194
0.125	3.542	4.036
0.125	4.653	5.146
0.125	3.604	4.097

Table 2: Differences in student comfort speaking up by target role

Post Hoc Comparisons - Target

Comparison							
Target		**Target**	**Mean Difference**	**SE**	**df**	**t**	**p_{tukey}**
Faculty	-	Nurse	-0.401	0.137	615.000	-2.930	0.041
	-	Patient	-0.588	0.137	615.000	-4.288	< .001
	-	Resident	-0.429	0.137	615.000	-3.133	0.022
	-	Student	-1.540	0.137	615.000	-11.238	< .001
	-	Staff	-0.490	0.137	615.000	-3.579	0.005
Nurse	-	Patient	-0.186	0.137	615.000	-1.358	0.752
	-	Resident	-0.028	0.137	615.000	-0.203	1.000
	-	Student	-1.138	0.137	615.000	-8.308	< .001
	-	Staff	-0.089	0.137	615.000	-0.649	0.987
Patient	-	Resident	0.158	0.137	615.000	1.156	0.858
	-	Student	-0.952	0.137	615.000	-6.950	< .001
	-	Staff	0.097	0.137	615.000	0.710	0.981
Resident	-	Student	-1.110	0.137	615.000	-8.105	< .001
	-	Staff	-0.061	0.137	615.000	-0.446	0.998
Student	-	Staff	1.049	0.137	615.000	7.659	< .001

Since implicit voice theories are based on taken-for-granted assumptions, not experience, we expected that comfort with speaking up would not vary with year of study (i.e., pre-clerkship vs. clerkship). We found no significant associations between year of study comfort speaking up to any of the targets (*r*s -.05 to .17, *p*s .06 to 69; see Table 3).

Table 3: Correlations between year of study and comfort speaking up

Year of Program	Pearson's r	—
	p-value	—
Faculty Member	Pearson's r	-0.051
	p-value	0.573
Nurse	Pearson's r	0.057
	p-value	0.527
Patient	Pearson's r	0.036
	p-value	0.691
Resident	Pearson's r	0.166
	p-value	0.064
Peer	Pearson's r	0.042
	p-value	0.640
Staff/Admin	Pearson's r	0.081
	p-value	0.370

Qualitative

Our analysis uncovered seven distinct themes or categories of beliefs about the costs, riskiness, or appropriateness of speaking up about mistreatment. We had data from 113 participants, (note the characteristics of the responding students did not significantly vary from that of the total sample n=123) but began to see signs of theoretical saturation (i.e., no new categories emerging[15] after the first half of responses were coded). The themes were (1) fear of reprisal, (2) effects on learners' future careers, (3) effects on academic learning and assessment, (4) harms to the learner's reputation, (5) concerns about whether the incident met a threshold severity to report, (6) the characteristics of the perpetrator that might protect him or her, and (7) concerns about the

effectiveness or fairness of administrators' responses. The themes, descriptions of each, and examples from the participants' open-ended responses are presented in Table 4.

Table 4: Themes and examples of participants' implicit voice theories about speaking up in response to mistreatment (n=113). Note CARMS is Canadian Resident Matching Service.

THEME	DESCRIPTION AND PREVALENCE	EXAMPLE
Future career	Participants described the impact they believed would occur for their careers and in particular the CARMS (residency) matching process 60% of participants made at least one mention of this theme.	*No matter how much faculty encourages us to speak up I know there will be identifiers in the [reporting] process and that can directly impact my [residency] application. One resident or attending might talk to their colleagues regarding perceived 'lack of resilience' for complaining about mistreatment from them and if those colleagues happen to be on a [residency matching] panel I feel that it could seriously jeopardize the match process. Nobody like a 'complainer'.* *When the person you are speaking up against is someone in the faculty that you want to be part of. I felt that speaking up, I would have been identified somehow and this would potentially cause me to lose out on a position compared to someone who did not say anything.* *It feels especially risky to speak up to people with more authority in an area you are interested in working in, because there is a thought that speaking up could jeopardize you chances to match to that specialty* *When those with more power also have a role in evaluating you/ have the ability to impact your career options through processes like*

		CaRMS and having the ability to speak about you to selection committees
Current academic evaluation and educational experience	This is described as if they were to speak up their evaluations would suffer as a result of their actions and their educational experiences would be affected. 47% of participants made at least one mention of this theme.	*I would never speak directly to the person because it's likely that this person is the main preceptor you are working with and he/she is capable of failing/ passing rotation. As a student, I think we get to work with a preceptor for a few fleeting moments in rotations that people usually deem difficult and tough. In this short period of time, some of the preceptor's evaluation is solely based on a very short impression that we make with a question or a presentation.* *When that person holds power over your pass or fail for a rotation.* *When those people have the real of perceived ability to impede my progress through medical school* *When they are completing your evaluations. The school provides no recourse if a person with which you had a problem has say over your rotation review/feedback.* *It's always uncomfortable because you never know if someone will be receptive or defensive/dismissive or outright racist. Medicine is a small community and many residents and attendings are evaluating us on our rotations. It's scary to speak up to someone who has power in whether or not you pass the rotation.*
Efficacy of administration responses to reporting	Participants described consideration of whether there would be effective action in response to reported mistreatment	*Nothing would happen. The person, at best may get a "Speaking to" -but the impact I feel is worse on the student speaking up, as now that attending/superior knows you spoke*

	39% of participants made at least one mention of this theme.	*up and "told on them" - this may reflect poorly in an evaluation or in future experiences with that individual in a professional setting.* *To be honest, I have a hard time believing that anything meaningful would happen in terms of disciplinary action, unless it was a heinous act which I could prove somehow, or had people to corroborate what I was saying, both of which would probably be very difficult to have.* *I believe that the College would act appropriately and try to collect all of the facts before coming to any conclusions. I am inclined to believe that some reports will be "investigated" but no serious action will be taken if the reports call out an old, "respected" professor who has serious stake in the university.*
Fear of reprisal for speaking up	Participants described concerns that if they spoke up that could be held against you in a negative way. 37% of participants made at least one mention of this theme.	*Speaking up will invariably result in the accuser suffering severe backlash. This is the "catch-22" that medical students find themselves in that currently prevents many medical students from speaking truth to power abuses…whereas medical students whom speak up, are left almost completely defenseless; danger alone prevents most complaints from ever being reported, and allows abuses to be rampant in medical learning; as unfortunate as that is.* *I feel that it is dangerous to speak up if there is a risk for someone in a position of authority to be disciplined, and who may retaliate against the person speaking up* *Probably no repercussions for the person responsible for the mistreatment. If anything, I'd be the*

		one suffering for speaking up and the one cast aside. *There would be consequences and I think in general you might be flagged as being "unprofessional".*
Characteristics of the person in power	The characteristics of the other party was also seen as a barrier speaking up, in particular if the person was older, and well respected. Of note on three occasions participants referred to if the other party was male, they would not feel comfortable. 21% of participants made at least one mention of this theme.	*I am inclined to believe that some reports will be "investigated" but no serious action will be taken if the reports call out an old, "respected" professor who has serious stake in the university.* *When those in power have been in their position for a long period of time, when the person in power is male.* *When they've held a position for a long time, when everyone speaks well of them.* *Speaking up to those of higher authority may result in them respecting your initiative or it may strain the relationship between you and your senior staff causing trouble with team work and your reputation.*
Small community/gossip reputational risk	Medicine is described by participants as being a small community so not knowing who is connected to who and fear that those in authority will speak to others about the learner could affect the learner's reputation. 19% of participants made at least one mention of this theme.	*Nearly any chance of a compromised career is not one I (or, I believe, most students) are willing to take. I fear I would be labeled as a troublemaker, a whiner.* *I would be worried that they would find a way to spread false rumors about me or my abilities on the wards which could undermine my ability to learn or care for my patients.* *We are constantly told that medicine is a small town and everyone talks, including allied health care professionals and administrators. We are told if we aren't nice and polite to someone everyone will know and our*

		futures will be affected. This makes it extremely difficult to speak up in fear that you will appear rude. *Also, medicine is a small community so you don't know who they could talk to*
Threshold concerns ("Worthy enough")	Participants described not knowing if the incident is "worthy enough" to speak up about and also concerned that they would be labelled as a complainer for doing so. 17% of participants made at least one mention of this theme.	*If it was a type of mistreatment that is universally considered wrong (sexual harassment, hazing, name calling, etc.), the event was severe and I could prove it then I would feel very comfortable not confronting the authority figure and reporting it formally. That being said, the issues come in when the event is harder to prove, the event is something that is very contextual and could be seen from an outsider as not extremely severe. People tend to think about mistreatment as if it comes in one flavour - clear cut, easy to prove and severe but the truth is that small things can add up too.* *Sometimes it is hard to tell whether an incident is worth speaking up about or not. I do not want to feel like I'm being a "baby" about a situation.* *When the line is grey, maybe you are unsure if you should speak up or not and the…Or maybe the consequences for an action are severe and the persons actions are close to being inappropriate but you aren't sure if it qualifies*

Given our earlier finding about female learners' lower levels of comfort with speaking up about mistreatment, we also examined the qualitative responses for mention of gender issues. We

cannot make claims as to the prevalence or generalizability of these experiences, but they help to generate insights into why women perceive barriers or risks to speaking up.

One female student described, for instance, how crude jokes were laughed at by others, which created concerns about whether that mistreatment was normal and expected and might not reach a reportable threshold (theme 5). Two other female students described gender as a base of power, suggesting that it was riskier to speak up to men in the same way that it was riskier to speak up to those in positions of authority.

Interpretation

This study offers four primary contributions to the literature on mistreatment of student learners. First, it demonstrates that institutions must go beyond simply having reporting mechanisms and making students aware of them. Secondly, it shows that reporting mechanisms must consider the power relationships and imbalances between perpetrators. Third, it shows that there are gendered differences in comfort with speaking up about mistreatment. Finally, it describes the taken-for-granted assumptions (implicit theories) that students hold about the risks and potential costs of speaking up in response to mistreatment.

The first contribution is that knowledge of reporting procedures is not enough. Our participants were overwhelmingly aware of the policies around learner mistreatment and the reporting mechanisms. The college in which this research was conducted had invested in developing a 'Speak Up button' to allow for confidential and/or anonymous reporting of mistreatment, which had been shared with learners via a range of outreach efforts, including lectures and orientations. Although 92% of students were *aware* of mechanisms for reporting mistreatment, they nonetheless expressed significant discomfort at the prospect of actually speaking up and

identified a range of risks that might interfere with their ability to do so. In short, strong reporting mechanisms are a necessary condition for students to speak up but are not sufficient. Educators and health care professionals must consider the climate and context around their reporting mechanisms, including how implicit beliefs about the risk or safety of using these systems are formed and socially shared.

The second is that despite shifts from traditional hierarchies to collaborative and interprofessional models of training and teamwork, power dynamics remain significant barriers to student willingness to raise their voice about mistreatment. Our study found that while learners might be comfortable speaking up to peers, they express considerably less confidence about the prospect of speaking up to nurses, patients, residents, administrators, and even stronger concerns about speaking up to faculty. If students self-censor about mistreatment experienced at the hands of higher-powered transgressors, feel reluctant to report it, or, as one participant described, "normalize mistreatment", it contributes to a 'hidden curriculum' where students learn that silence about mistreatment is a normal and expected element of medical culture.

Third, this study highlighted how gender influences the willingness to speak up about mistreatment. While progress has been made on gender diversity in medical education, there remain important challenges related to recruitment into specialities, pay differentials, a 'leaky pipeline' to leadership roles, and other important outcomes for the profession[18, 19]. Selective incivility theory suggests that acts of mistreatment are quite often covert enactments of sexism, bias, and misogyny[20]. If we want to address issues of inclusion and gender equity in medicine, we need to better understand how to create environments that enable women to comfortably raise concerns about mistreatment rather than resorting to self-censorship.

Finally, we identified learners' implicit voice theories about what they expect to happen if they speak up about mistreatment. Whether or not these beliefs match what *actually* results from speaking up about mistreatment, we found seven assumptions about what they saw as risks from speaking up. They worried about reprisal, from grades and evaluations, to the prospect of having their residency matching somehow undermined by making detractors out of faculty they need as allies. They worried about harms to their reputation. They expressed concerns of the efficacy of responses by administration, suggesting the performative nature of institutional policies[21] and concerns with avoidance responses by administrators[22]. They expressed concerns about whether the behaviour would meet a particular threshold of severity—an important concern, given the tendency shown by selective incivility theory to enact bias through low-intensity acts whose ill intentions can plausibly be denied[20]. We see these attitudes among pre-clerkship and clerkship students alike. Implicit voice theory research suggests that these theories are formed earlier and carried with us through our careers. In short, seeing these expectations and assumptions set so early is a troubling sign for fixing the culture of silence around mistreatment that has been previously reported by residents[23] and physicians[24]. Future research needs to consider not only how these implicit voice theories are carried through careers in healthcare, but also how they can be dismantled. As we noted, programs and mechanisms for soliciting reports of mistreatment must understand and address these strong assumptions and implicit beliefs head-on.

Limitations

This study was a single site investigation; future research using multiple study sites would clarify whether these findings are a product of a specific institutional setting or represent a challenge for medical education across contexts. The self-report, cross-sectional survey included questions not about actual behaviour but intended behaviour. Future work, using diary studies, critical

incidents, or other designs, may clarify whether the concerns described have observable effects on actual reporting behaviour.

Our study was also not able to clearly examine the effects of race or intersectionality. Our sample included a measure of racialized identities but lacked the sample size and statistical power to test the effects of ethnic or racial group memberships on comfort speaking up, in combination with gender, class, and other elements of social identity. Prior work on selective incivility suggests that the experiences of women are exacerbated when women are also members of racial minorities[20]. The intersectionality literature suggests the need to assess difference along multiple dimensions, with cumulative and multiplicative disadvantaging effects[25]. Future research with larger samples focused on members of historically excluded groups may extend our findings beyond gender and consider race and intersectionality.

Conclusion

This study examined learners' implicit voice theories about speaking up. We identified seven themes related to implicit theories. Although the majority of learner's had an awareness of policies, their implicit theories may act as a barrier in using them. When looking at speaking up to different power roles, we showed that gender played a role in response. Looking to the future, institutions must consider what they can do to address this. We wonder, is the onus to be on those in lower power roles to speak up or should it be placed on the institution to create structural change, to an environment where such behaviours are not tolerated, and those who witness mistreatment take action. As we seek a more diverse medical student body, we must ensure that the environment is safe for them to be there. We need to create structural change to support an environment where not only our learners survive but are able to thrive.

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So where do we go from here? We identified learners' implicit voice theories, the role of gender in speaking up and the role of power, but how are we able to impact change? The next chapter reports on the second manuscript which examined what role students should have in ensuring and sustaining a respectful and safe work and learning environment. We focused on the qualitative question that was posed to learners on what they could contribute to creating a positive learning environment. This analysis links us back to Chapter 2 where we discussed the different reporting mechanisms in institutions and the differences between institutional policies and faculty/college specific policies. If we could listen and hear from learners what they need, and couple this with what the barriers are to reporting then perhaps we could utilize the data to inform intervention opportunities to impact positive change.

Chapter 5 'We Have to Take the Reins': Learners' Perspectives on Creating A Safe Learning Environment

Abstract

Context: Previous research shows the prevalence of medical learner mistreatment and the challenges of addressing mistreatment via institutional policies. The aim of this research was to look beyond institutional policies to reconsider the role of learners in contributing to a positive environment. We sought to absorb and understand from learners themselves what role they should play in contributing to a safe and respectful environment to contribute to lasting change.

Methods: In a cross-sectional survey of medical learners from a Canadian undergraduate medical program in 2019, we asked learners, “what role should students have in ensuring and sustaining a respectful and safe work and learning environment?”. Open-ended written responses were analyzed using qualitative thematic coding.

Results: In our sample of 101 learners, six themes emerged. Four of these themes related to students’ own role in promoting a respectful environment: speaking up, modelling behaviour, mutual support and taking an active role. Two of the themes pushed back against the question itself, highlighting the need for students’ roles to be understood in the broader context of power, structures, and institutions: not our job and fear of reprisal.

Conclusion: Our findings indicate the need for mistreatment to be addressed through both policy initiatives, and changes to culture and behaviour enacted by students themselves. While learners communicated the complexity of reporting mistreatment and choosing to speak up, they also saw a clear role for themselves as active change agents.

Introduction

Mistreatment of learners is commonplace in medical education, despite a range of initiatives to combat it. Recent US estimates suggest that between 25% and 40% of medical learners will experience at least one type of mistreatment during their training[1]. Mistreatment, ranging from minor acts of incivility to more intense forms of intimidation, bullying, and harassment can negatively impact learning environments and affect patient care[2], particularly for learners from underrepresented demographic groups[3-9].

This problem has been resistant to sustained policy efforts. For example, one study of an American medical school described the introduction of new policies, staffing, reporting mechanisms and training over a period of more than a decade – but found that mistreatment persisted, and severe forms of mistreatment in particular were unchanged by this robust policy initiative[10].

Recent work suggests that students are often reluctant to report mistreatment, even when well-designed reporting policies and mechanisms are in place, in part because of organizational culture factors, like low trust in administration[11]. Previous research on mistreatment tends to focus on institutional policy and reporting responses[12] and barriers or student resistance to reporting using those systems[13]. In other words, work to date tends to think about preventing mistreatment through deliberate action and direction from the formal organization: Medical education programs create policies and structures; students use (or resist using) these policies and structures.

However, another view of organizational capacity focuses on processes of emergence[14]. Rather than change occurring through managerial planning and strategy alone, new organizational norms and capacities can be developed from the bottom up through the

interactions and behaviours of individual members. In other words, students may not be passive targets of school policies, but rather active crafters of their own environments. This qualitative research asks learners what role they themselves should play in actively creating and sustaining a respectful and safe work and learning environment. Our aim is to identify ways in which learners can actively contribute to preventing mistreatment and fostering a positive learning environment.

Methods

Participants and setting

Participants were 101 medical learners, recruited from a survey sent to the 440 students enrolled in the University of Manitoba undergraduate medical program in Winnipeg, Canada. Of the 101 learners, 62% who identified as female, 66% were white, 20% were first-generation university students, and 65% did not have family member working in health care. Participants included students in their first two years of pre-clerkship study (56%) and those in their two-year clerkship period (44%). Based on the enrolled study body, our sample slightly underrepresented those in their clerkship years (44% versus 50%) and slightly overrepresented women (62% versus 50%).

Data Collection

The open-ended qualitative responses described here were collected as part of a larger survey of student mistreatment. Participants were recruited by email, with reminders by email and through the medical student society's social media accounts. Participants responded to questions via an anonymous web-based survey, which was reviewed and approved by the university research ethics board.

Measures and Analyses

Participants were asked: "What role should students have in ensuring and sustaining a respectful and safe work and learning environment?" We analyzed students' open-ended written responses using qualitative thematic coding[15, 16]. An inductive approach to generating categories was used. The first author unitized responses into individual meaning units[17], and then organized those units into themes that emerged from the data. Several iterations between the data and codes occurred. As new units were coded, themes were added, dropped, aggregated, and disaggregated until new units could easily be assigned to thematic categories, and each category contained a sufficient number of similar examples. This process was developed in collaboration between the authors, but the coding was conducted by the first author.

Results

Six themes emerged from the inductive, constant-comparison coding approach described above. Four of these themes related clearly to our research question about students' own role in promoting a respectful work and learning environment. Two of the themes pushed back in productive ways against the question itself, highlighting the need for students' roles to be understood in the broader context of power, structures, and institutions. We begin by examining these responses, since they help contextualize our later findings about ways that students can build a respectful work and learning environment.

Not Our Job / Fear of Reprisal

The critical responses from students could be organized into two categories. The first, mentioned by 12% of participants, can be described as the argument that this work cannot and should not be the 'job' of students themselves. These participants highlighted in their responses

that administrators, not students, have the responsibility to create a safe and respectful learning environment, in part because it is administrators who wield the institutional authority and power required. One participant wrote that students *"… should play a very minimal role in this. It should be the responsibility of the people in positions of power to use that power and ensure that the work environment is safe for the less powerful to feel comfortable and able to safeguard their human rights without feeling like they will suffer any direct and personal consequences on their future careers"*. Another described students as users of reporting systems, but placing the onus of responsibility on administrators: *"[Students must adhere] to professional standards [and] should also have a role in bringing forth complaints. However, the onus should not be entirely on us as we are often in a large power imbalance where our careers are on the line."*

The second category of critical responses related to students' fear of reprisal for acting to report or resist mistreatment. They mentioned fears related to their professional reputations, their progress in their program, and their ability to match into their preferred speciality for residency. *"In some ways, it is our duty to report offenses to create a culture shift… [but] on the other hand, nobody really wants to put their own butt out there."* Another identified a perception that the reporting systems are either window dressing or a way of shifting the burden onto students: "*Even though there are policies, they really feel like they're there for show—for the university to say, 'yep, we have those too, therefore if students encounter mistreatment… it's on them for not reporting it because we have 'policies' for those things.*" One participant described a mismatch between the availability of reporting mechanisms and the risk of actually using those mechanisms: *"The reality is, the [way] the system is run, students aren't in the position to safely speak up."*

We describe these categories of response first because they help to offer context for the main themes that follow. While our participants pointed to ways in which students can actively contribute to the prevention and remediation of mistreatment, they were clear that this cannot be work that is carried out by students alone, or without the structures and systems described earlier.

Speaking Up

55% of participants mentioned the centrality of students choosing to speak up individually and collectively in response to mistreatment. One participant described a need to speak up for individual reasons: *"We have to take the reins in regards to calling out mistreatment… we can't rely on others to do this for us."* However, others described a shared and collective sense of responsibility for reporting. They described it as a means to prevent future harassment, *"students should try to think about the hundreds of other students may work with that person in the future and how helpful reporting could be for even one of them",* and as a shared duty—*"…for each other, and … for the student body as a whole."*

Mutual Support

30% of participants made mention of the importance of creating a culture of support and solidarity in the face of learner mistreatment. This included arguments about creating the medical culture learners wanted to see in the future: *"We need to look out for each other, and make sure the next generation of doctors has a healthier mindset about medical education."* But underlying many of the responses was a logic of collective action in response to the perceived risks of reporting: *"There is power in numbers, and if students speak up as a united front, there is no opportunity to single students out or disadvantage someone later on during something like the CARMs [residency] match."* Participants described a range of acts of solidarity with mistreated learners: Encouraging reporting, joining meetings, serving as a witness, and offering help to

those who are mistreated were all raised as examples of ways that students can support one another and collectively lower the risks and barriers to reporting.

Modelling Behaviour

25% of participants mentioned the need for students to actively model the behaviours and culture they wish to see in the program. One participant described acting with respect and integrity as a way to avoid normalizing mistreatment: Modelling behaviour can *"not only decrease mistreatment, but … also make claims easier to prove when they happen."* By creating a *student* culture of respectful treatment, it helps to avoid the perception that mistreatment is expected or normal. Participants also focused on engaging in deliberate reflection and active listening: *"Listen to others tell of indignities they have suffered,"* one participant suggested, "*and work not to make the same mistake."* Finally, modelling behaviour was not only described in terms of avoiding mistreatment but taking deliberate action to restore and repair relationships in cases of peer mistreatment: *"If you mess up, apologize. Don't make an excuse."*

Taking an Active Role

10% of participants went beyond the categories above to describe learners taking a more empowered role in the creation of policy and practice. Rather than being simple users or clients of institutional policy, one participant described a more agentic view of learners' roles: Respectful treatment, one participant noted, is *"a multiparty goal, and [students] are one of the parties. They can't sit back."* Another participant was more specific about students taking a stronger seat at the table in policy development and evaluation: *"Students need to be part of the process of developing policy as they are frequently the survivors of mistreatment. Furthermore, they should be involved in the evaluation of claims made under these policies."* Others focused on creating peer-level processes of accountability: Students, one participant argued, must *"call*

each other out on harmful words and positions" and *"hold ourselves accountable."* Finally, one participant described a more active role for students in collectively making sense of their experiences of mistreatment, especially when it can feel like it individually may not reach a threshold of severity: *"Students need to collaborate with each other and check their experiences with others to see if it is a consistent experience, or one unique to themselves. If multiple people are having trouble with a preceptor, then I think we'd be more comfortable coming forward."*

Discussion

This study draws on insights from open-ended responses from a sample of medical learners to provoke us to rethink the role of learners in creating a respectful and mistreatment-free work and learning environment.

The paper highlights the need for mistreatment to be addressed through top-down policy initiatives *and* bottom-up changes to culture and behaviour enacted by students themselves. This research found that speaking up could also result in a reprisal which learners feared. While learners communicated the complexity (and perils) of reporting mistreatment and choosing to speak up, they also saw a clear role for themselves as active agents of change. They described a role in speaking up collectively, in role-modelling the culture and behaviour they hoped to see emerge in medicine, in supporting one another, and in shaping mechanisms of accountability—both institutional and informal alike.

A common thread across response categories is a need to address the quandary of learner speaking up and fear of reprisal, and the need for an administrative process to address mistreatment and involve students collectively rather than in isolation. For learners, typical reporting processes rely on individual complaints, and conceive of mistreatment as involving a single transgressor and single victim per complaint. For reasons of both privacy and fairness,

many policies are designed to keep reporting out of the eyes of others, including learners' peers. Educational institutions therefore need to address speaking up and fear of reprisal through education on conflict management, rights and responsibilities, implicit bias, anti-racism, and gender and social orientation discrimination. This education needs to be directed to learners, faculty members, leadership, and other contributors to the learning environment. Leadership needs to take a firm position in fostering and sustaining a positive learning environment. They need to hold people to account and to make transparent zero tolerance for mistreatment and discrimination. From the responses of our participants, they also would like a socially shared process of reporting mistreatment. Students voiced interest in joining leadership to collectively establish shared expectations and norms for treatment. Via this partnership, they would have a leadership position to convey and interpret their experiences and to drive change. Through their own student body organization, they can also provide encouragement and support in reporting. Together learners can hold themselves and others accountable, as a shared undertaking. To complement this action, educational institutions need to amend policies and reporting mechanisms to recognize multiparty reporting and support community-involved approaches to achieve justice[18].

This research has certain limitations: It represents the viewpoints of participants from a single program. While the context of study site is not unusual or exceptional in any clear way from other undergraduate medical programs, there remains a question of generalizability. Future research using multiple study sites would help to clarify whether these perceptions are specific to a single institutional setting, or whether they represent widely shared perceptions across medical education contexts. Upon reflection, while the thematic categories are presented as distinct themes, it is easy to see how some learners' perspectives also overlap into other themes. Some

perspectives that fall in the theme “speaking up” also reflect a form of “mutual support”, whereby some students articulate the value of speaking up for themselves but for others as well. This power to speak up and the altruism of speaking up for others shows an interrelationship that is not truly captured in the two separate themes. More in-depth qualitative research would have permitted the depth to understand this interrelationship which bridged these two categories and may very well be a distinct category in and of itself. This coding quandary becomes a limitation in the study design, whereby we did not conduct in-depth qualitative interviewing. Moreover, we were not able to do member checking of qualitative responses from the survey instrument with the respondents due to the anonymity of the survey. While further iterative team coding would have helped discuss this dynamic further, in-depth interviewing and member checks would have flushed out the relationship between these themes.

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Chapter 6 Reflection and Conclusion

From this research, was clear that speaking up is hard to do. Little research has been conducted on whether or how students' action their institutional human rights processes to address experiences of mistreatment, harassment, and/or discrimination. This work was inspired by my previous roles at the Manitoba Human Rights Commission dealing with human rights complaints and at the University of Manitoba, working at the Office of Human Rights and Conflict Management administering the Respectful Work and Learning Environment and Sexual Violence policies (2020). There is risk with voice; anecdotally, people spoke about the fears of coming forward and pursuing either informal processes or formal complaints under the Respectful Work and Learning Environment and the Sexual Violence policies at that time. If a person brought forward a concern, the response was to either pursue informal resolution or to access the formal complaint mechanism. But the thought always lingered in my head as I would speak to, for instance, a student who was experiencing discrimination by, say, their professor to advise them of the complaint mechanism to pursue. I wondered what is the actuality of them doing so given the power structures that exist? Alternatively, they may not come forward until after they have graduated and are "safe" because of the imbalance of power, the vulnerability, and the potential impact on grades.

Applying this to the health sciences field, I often wondered how does not speaking up ultimately impact the learning environment and patient safety? Over the past decade, conflict seems to have accelerated across all health practice settings (Wayne, 2012), and mistreatment is a continuing concern as detailed earlier in the literature and in the media. A perfect storm has been brewing that is reliant upon the status quo. Change will not occur if we do not do something

differently. We need to change not only our individual cognitive habits, but the processes and the structures that hold the institution up and reinforce these cognitive habits.

We discussed the influence of Zimmerman's (2013) multi-level theoretical paradigmatic approach that recognized the dynamics between power and cognitive habits. This was essential to our framework in that it provided space to consider how power can influence learners' reactions to mistreatment. Intersectionality theory aided us in examining the impact of power and gender on comfort speaking up and finally implicit voice theory allowed us to examine the fears and risks to reporting.

We also saw how underreporting and/or hesitancy to report can have downstream consequences on equity, diversity, and inclusion, by impacting the health of the learner and sense of belonging, and for the institution the wellbeing of the environment. To combat these structures, this study aimed to produce a more in-depth understanding of why some academic learning environments are positive, while others are not. This work provides six contributions to the research area.

Turning to the first manuscript which examined the comfort level of learners speaking up to power and learners' implicit voice (themes that acts as barriers to speaking up), we saw that the findings validated that institutions must go beyond simply having reporting mechanisms and making students aware of them. Students knew of the reporting processes but were reluctant to use them. Learners expressed considerable discomfort at the thought of reporting and identified several barriers that would get in the way of speaking up. Institutions must consider these implicit beliefs regarding the risks of speaking up when accessing these systems around their reporting mechanisms.

Secondly, reporting mechanisms must consider the impact of power imbalances. The Max Rady College of Medicine does have an anonymous reporting mechanism in place and zero tolerance policy, which as noted in Mavis et al. (2014) may assist with learners' coming forward. Other initiatives to consider are engaging learners in the discussion. For example, as discussed in Voogt et al. (2020) to combat power imbalances suggestions could be to actively invite learners to provide input, and for faculty to develop an open attitude towards learners' suggestions. Additionally, the Vanderbilt Co-worker Observation Reporting system that addresses disruptive disrespectful behaviour by physicians through a peer-to-peer informal cup of coffee all the way to disciplinary intervention (Clendening, 2016) could be another initiative to address physician disruptive behaviour. Lastly considering the introduction of "Power Day" used by Yale School of Medicine to critically analyze and define power dynamics. Vignettes about social hierarchies and power are utilized to promote open dialogues rewarding positive role modelling, establishment of a trainee network for empowerment and leadership and fostering of interprofessional collaboration (Angoff et al., 2016).

Thirdly, it provided evidence of what we knew all along: that there are gendered differences in comfort with speaking up about mistreatment. We found that women were overall less comfortable with speaking up about mistreatment than were men. This was seen throughout all the targets (faculty, nurse, resident, administrator, patient, learner). We know through the literature that those in lower power roles are less likely to speak up about mistreatment (Harlos, 2010) and that women have greater concerns about reporting, face more consequences and more likely to be targeted (Siller et al., 2017). If we want to tackle issues of gender equity and inclusion in medicine, we must create environments that empower women to raise concerns about mistreatment rather than resorting to self-censorship.

Fourthly, it described the taken-for-granted assumptions (implicit theories) that students hold about the risks and potential costs of speaking up in response to mistreatment. We found seven implicit theories about what learners see as risks to speaking up. They were concerned about reprisal, from grades and evaluations to the potential of having their residency matching impacted by making enemies out of faculty. They worried about reputational harm. They expressed concerns of the effectiveness of administration, implying the performative nature of reporting policies (Ahmed, 2007) and concerns with avoidance by administrators (Barsky & Wood, 2005). They voiced concerns about if the behaviour meets a particular threshold of seriousness.

In the second manuscript, which discussed what learners can contribute to a positive learning environment, the fifth contribution we identified was the complexities of learners dealing with mistreatment and their ability to speak up. Six themes emerged, four of these themes related to our research question about students' own role and two of the themes pushed back on the question itself. This emphasized the need for students' roles to be recognized in the larger context of power, structures, and institutions. Additionally, we found that speaking up could also result in reprisal, which was a clear theme identified as a barrier by learners. It is clear that the dilemma of speaking up and fear of reprisal needs to be addressed. The dichotomy between the fact that anonymous reporting is available and the fact that learners knew about the reporting mechanisms yet did not speak up is difficult to explain. As suggested, institutions may consider addressing speaking up and fear of reprisal by means of education on conflict management, rights and responsibilities, implicit bias, anti-racism, and gender and social orientation discrimination. This needs to be directed to all in the environment. Leadership needs

to hold people to account and take a firm position in fostering and sustaining a positive learning environment.

The sixth contribution of this study is that learners identified the need of supporting others, a strong sense of allyship, standing in solidarity, and a passion about social justice. This sense of supporting one another and of speaking up voices the need for creating a culture change to address environmental issues. We know that there is strength in numbers. Now we need action in our reporting mechanisms to reflect this.

We also need to turn our attention to the structures on which these processes are built upon: who decides the rules? What is supporting the structures: white supremacy, Western colonialism, and a hetero-normative patriarchal culture that can be retraumatizing for a learner who has low power, and especially for those who may come from historically excluded groups (Cortina et al., 2013; Fnais et al., 2014; Alexis et al., 2020). The reporting processes takes the "person out of the process." Perhaps we need to endeavour to find a way to put them back in?

Previous studies found most trainees who experience microaggressions and mistreatment were women and those from other historically excluded groups who would not report mistreatment (Fnais et al., 2014). We attempted to identify who felt safest speaking up in terms of learner identity as it relates to intersectionality. For example, were those from historically excluded groups less inclined to speak up? However, given the relatively small sample size we were not able to make conclusive statements in this regard. Further research is needed.

Overall, we also saw that it did not matter if a learner was in pre-clerkship or clerkship, debunking the myth that it is only applicable to the wards as most research is focused on clerkship years (Chung et al., 2018; Afif et al., 2017; Haglund et al., 2009). We identified perceptions of why some students were able to address concerns while others experienced

challenges. It also made transparent the underlying challenges within the culture of medicine. In the spirit of speaking up, this study can inform interventions and opportunities to improve the learner environment to one where students are comfortable to speak up and where faculty are receptive to promoting a positive environment. Finally, to inform a reflective evaluation approach for the Rady Faculty of Health Sciences, Max Rady College of Medicine to continually improve and maintain a positive learning environment, we need to approach this differently. Key to this endeavour was the discovery of what learners need in order to speak up. We heard from learners how they could contribute to a positive learning environment.

This research, therefore, could inform intervention studies that are directed at determining the effectiveness of teaching individuals not just in schools of medicine but in the health sciences field on how best to address situations created by a power differential and how that knowledge could make a difference in the organizational behaviour within those environments as a whole. This could perhaps advance a practice of speaking up to better society. However, we also question resting this notion on the shoulders of the learner population. What about those in leadership roles, whether it is a faculty member attending on the wards or the dean?

We must also not ignore the connection between complaints and structural challenges that are embedded in institutional practices. We can learn form those that come forward to take a step back and ask what is this telling us about our institution? There exists a continual interaction between the internal/individual and the external/ structures of organization. For lasting change to occur, it needs to be interrupted at both levels (World Trust, Social Justice & Equity Movement Building, 2020). Therefore, if we can work with what the learners need while, at the same time, addressing the structure of the organization and the actors contained with in, a step forward

might be taken in the right direction. Organizations must commit to building institutional capacity for change in order to change the culture. This will take time. This entails recruitment of historically excluded individuals and leadership who use their power to create equitable, safe environments (Marcelin et al., 2019). For real, lasting change to occur, reflection on structures and systems and those who occupy positions of power is required. Saxena et al. (2019) note the impact of power on the well-being of learners and physicians. They consider power as framed by feminist theory, which envisions planning and executing shared power. This ideology of collaborative power assists in addressing equity gaps in medicine and healthcare, ultimately elevating medical education and patient care. Another approach saw improvement when a hospital moved the decision making from a hierarchical organization to a flat and interdisciplinary processes (Van Bogaert et al., 2016). Nurses in this study described feeling more empowered due to involvement in the decision-making processes. We also saw, in the research of Edmundson et al. (2001), the impact of leadership styles on psychological safety in the learning environment. Leadership approaches that motivated members to feel a part of the learning process, that encompassed practice sessions, and that encouraged reflective dialogue were shown to be effective in their study of implementation of technology in cardiac surgery in different hospital settings (Edmundson et al., 2001). The authors emphasized the importance of psychological safety in creating new routines, particularly those that interrupt status relationships. Additionally, Schein (1993) pointed out how psychological safety can assist with overcoming learning anxiety. There is much work to do, and we are at a jumping-off point. Now, if only we can land in the right direction towards institutional change.

Study Limitations

A potential limitation of a web-based data entry is that participants may rush through questions, or they may have questions during the survey but are not able to have them immediately addressed (e.g., question clarification). Additionally, as there were qualitative open-box responses some participants may not have taken the time to answer those questions. This study was a single site investigation; future research using multiple study sites would illuminate whether these findings are a product of a specific institutional setting or represent a challenge for medical education across contexts. The self-report, cross-sectional survey included questions not about actual behaviour but intended behaviour. Additionally, a limitation in the study design was that we did not conduct exhaustive qualitative interviewing which may have added clearer insight to the tension between some of the themes. Our study was also not able to clearly examine the effects of race or intersectionality. Our sample lacked the sample size and statistical power to test the effects of ethnic or racial group memberships on comfort speaking up, in combination with gender, class, and other elements of social identity. Future research with larger samples focused on members of historically excluded groups may extend our findings beyond gender and consider race and intersectionality.

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Appendix A

Max Rady College of Medicine
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Winnipeg, Manitoba R3E 0W3
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Survey on Advancing Positive Medical Student Academic Learning Environment to Enhance Student Well-Being

Introduction

Hi,

My name is Jackie Gruber and I am currently pursuing my MSc in Interdisciplinary Studies at the University of Manitoba. I am researching how to encourage a positive student learning environment to enhance student well-being by examining if and when students speak up on learner mistreatment in the learning environment in the health sciences field. This survey is being sent to all undergraduate medical learners at the Max Rady College of Medicine.

Notice Regarding Collection, Use, and Disclosure of Personal Information by the University

Your personal information is being collected under the authority of The University of Manitoba Act. The information you provide will be used by the University for the purpose of this research project. Your personal information will not be used or disclosed for other purposes, unless permitted by The Freedom of Information and Protection of Privacy Act (FIPPA). If you have any questions about the collection of your personal information, contact the Access & Privacy Office (tel. 204-474-9462), 233 Elizabeth Dafoe Library, University of Manitoba, Winnipeg, MB, R3T 2N2.I invite you to complete this voluntary (15 minute) questionnaire, available at *SURVEY LINK*, this study seeks to understand the barriers that medical learners perceive when speaking up with individuals in positions of power.

This survey is part of a research study and is divided into two sections as follows: About You, and Your Experiences. The risk of participating is low, for example, one may tire from taking the survey or may experience emotions due to the sensitive nature of some of the questions. However, your participation in this survey would benefit future medical students/residents by the data that is gained from the survey that can be used to inform teaching and learning environments.

If you agree to participate in the survey, please note that you do not need to complete the survey in one sitting, in other words, the system will let you save your survey responses and return to complete them later.

Your response will be confidential and aggregate information will be used in my thesis. Thus, your email address will not be collected, and IP addresses will not be tracked with the completion of the survey, and you will not be contacted further. By continuing on and completing the on-line survey you are consenting to participate in the on-line survey.

If you do wish to participate in the trained student facilitator run focus group, please email me at gruber@myumanitoba.ca . Focus groups are group discussions with people who know something about the topic of interest. Focus groups are ways of finding out people's thoughts and ideas about a specific topic. These sessions will be audio recorded with the recordings being destroyed within three years of completing the transcriptions and the transcriptions destroyed three years after the completion of this evaluation. The group will be asked some questions relating to your experience with mistreatment and your knowledge on policies at the University of Manitoba. These questions will help us to better understand how to encourage a positive student learning environment to enhance student well-being by examining if and when students speak up on learner mistreatment in the learning environment in the health sciences field.

If you have any questions about this survey, please do not hesitate to email me or contact me at or 204-228-2198. This study has been approved by the University of Manitoba Health Research Ethics Board.

Thanking you in advance for your time and consideration.

Jackie Gruber, Graduate Student

University of Manitoba

Version January 22, 2018

SURVEY ID #_____

Section A

This section is all about you. It is important to know your background and where you are in your program.

INSTRUCTIONS

Please read each question carefully then enter a checkmark (□) in the appropriate boxes or fill in blank lines as necessary.

Demographic Information

Q1. What is your age? ____ I would rather not say □999

Q2. What is your ethnic identity? (select all that apply)

□1 First Nations
□2 Métis
□3 Inuit
□4 Asian
□5 Black
□6 Caucasian /White
□7 Latin American /Central or South American
□8 South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.)
□9 Chinese
□10 Filipino
□11 Arab
□12 Southeast Asian (e.g., Vietnamese, Cambodian, Laotian, Thai, etc.)
□13 West Asian (e.g., Iranian, Afghan, etc.)
□14 Korean
□15 Japanese
□17 Other (please specify) _____

Q3. Were you born in Canada? Yes □1 No □2 If yes, skip to Question 5

Q4. If NO, how old were you when you came to Canada? _____ years old

Q5. Are you (check one only)

□1 Med Student year one
□2 Med student year two
□3 Clerk third year
□4 Clerk fourth year

Q6. Do you have a physical disability?

Yes □1 No □2

Q7. Do you have a cognitive disability?

Yes □1 No □2

Q8. Have you accessed resources due to mental health (i.e. depression/anxiety)?

Yes □1 No □2

Q9. What sex were you assigned at birth, meaning on your original birth certificate?

Female □1 Male □2

Q10. What is your current gender identity?

□1 Female
□2 Male
□3 Trans male/Trans man
□4 Trans female/Trans woman
□5 Genderqueer/Gender non-conforming
□6 Different identity, please specify: _____

Q11. What do you consider your sexual orientation to be? Please select all that apply.

a) Bisexual Yes □1 No □2
b) Gay Yes □1 No □2
c) Lesbian Yes □1 No □2
d) Straight/Heterosexual Yes □1 No □2
e) Transgendered/Transsexual Yes □1 No □2
f) Two-Spirited Yes □1 No □2
g) Queer Yes □1 No □2

h) Questioning Yes □1 No □2
i) Other (please specify below) Yes □1 No □2
If yes, specify _____

Q12) Are you the first person in your family to go to university? Yes □1 No □2

Q13) Do you have family members who work in a health sciences profession? Yes □1 No □2

Section B

This section is attempting to gain an understanding if you have experienced past mistreatment or have current experiences in addressing mistreatment. Speaking up is defined as upward communication to those who occupy positions that are hierarchically higher than your own (Detert & Edmundson, 2011, p. 461). Therefore, positions of power are defined as an individual in a hierarchically higher position.

Q14. First of all, how comfortable would you feel if you were to speak up to any of the following positions? Check one for each position.

	Very Comfortable					Very Uncomfortable
	1	2	3	4	5	6
a) Faculty Member	1	2	3	4	5	6
b) Nurse	1	2	3	4	5	6
c) Patient	1	2	3	4	5	6
d) Resident	1	2	3	4	5	6
e) Fellow Student	1	2	3	4	5	6
f) Staff/Administrator	1	2	3	4	5	6

Q15. When does speaking up to those with more power feel risky, dangerous, or inappropriate? Please state below, in your own words.

Q16. If you experienced mistreatment, what do you think would happen if you spoke up (i.e., confront a person, talk up to higher authorities, talk to others) about it? Please state below, in your own words.

Q17. In what way does a persons' social location (e.g., economic status) and/or identity promote or act as a barrier speaking up?

Q18. In what way does speaking up promote or can take away a person's human dignity (e.g., self-respect), social dignity (e.g., inclusion) and human rights (e.g., free of discrimination/harassment)?

Q19. Thinking about before you were admitted into the College of Medicine, had you ever experienced discrimination (based on for example, ancestry, sexual orientation, nationality etc.)?

□1 Strongly agree
□2 Agree
□3 Neither agree or disagree
□4 Disagree
□5 Strongly disagree

Q.20 Thinking about the last year, have you ever experienced discrimination (based on for example, ancestry, sexual orientation, nationality etc.)?

□1 Strongly agree
□2 Agree
□3 Neither agree or disagree
□4 Disagree
□5 Strongly disagree

Q21. Would you feel comfortable speaking up to those in positions of power in the College of Medicine?

□ 1 No □2 Yes, sometimes □3 Yes, always

Q22. Before today, were you aware of the following policies:

a) College of Medicine's Prevention of Learner Mistreatment policy?	Yes □1	No □2
b) Respectful Work and Learning Environment Policy?	Yes □1	No □2
c) Sexual Assault policy	Yes □1	No □2

Q23. Before today, have you read the:

a) College of Medicine's Prevention of Learner Mistreatment policy?	Yes □1	No □2
b) Respectful Work and Learning Environment policy?	Yes □1	No □2
c) Sexual Assault policy?	Yes □1	No □2

Q24. Finally, what role should students have in ensuring and sustaining a respectful and safe work and learning environment?

Thank-you for taking the time to participate in the survey!

Please be reminded of the supports and resources available to students at Bannatyne campus as follows:

http://umanitoba.ca/student/staffdir/ssbc.html

http://umanitoba.ca/faculties/health_sciences/medicine/student_affairs/contact.html