MEDICAL STUDENT MISTREATMENT: A JOURNEY

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A Five-Phase Description of the Medical Student Journey through Mistreatment and Reporting

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LAY ABSTRACT

More than half of all Canadian medical student experience mistreatment during their medical school but very few choose to formally report it. In this study we explored how students experienced mistreatment and their decisions about reporting it as well as what supports would be most helpful for them. To better understand this issue, 19 medical students were interviewed about their experiences. The interviews were analyzed through constructivist grounded theory and the identified themes were used to develop a theory of how students experience mistreatment and make decisions around reporting. Students go through five phases: *Situating* themselves in their learning environment, *Experiencing and Appraising* mistreatment, *Reacting* to that mistreatment, *Deciding* about reporting and the risks and benefits and *Moving Forward* within the same medical school as they continue. Students showed mistrust towards the medical school and suggested changes the medical school could make to better support them.

ABSTRACT

Background: Over 50% of Canadian medical students report experiencing mistreatment, yet only a small proportion of students report these concerns to administration. It is unknown how medical students make sense of their experiences of mistreatment and come to decide about formally reporting these experiences. Improved understanding of this phenomenon will facilitate changes at the administrative and institutional levels to better support students.

Methods: This Constructivist Grounded Theory study interviewed 19 current and former medical students from one institution about their experiences with mistreatment and reporting. Anonymized transcripts were reviewed, coded and theory was developed.

Results: Students undergo a journey surrounding experiences of mistreatment in five phases: Situating, Experiencing and Appraising, Reacting, Deciding, and Moving Forward. Students move through these phases as they come to understand their position as medical learners and their ability to trust and be safe within this institution. Each experience of mistreatment causes students to react to what has happened to them, decide if they will share their experiences and reach out for support. They choose if they are going to report the mistreatment, at what cost and for what outcomes. Students continue through their training while incorporating their experiences into their understanding of the culture in which they are learning and continually resituating themselves within the institution.

Discussion: This study revealed institutional mistrust from students especially as it related to reporting mistreatment. Interventions designed to support students and decrease exposure to mistreatment may be best focused on increasing organizational trust and organizational compassion between students and the medical school. Students volunteered mechanisms of support and to improve the reporting process. Medical school administration should consider how they can increase trust with their learners while identifying areas of concern and procedures for intervening and providing more transparent resolutions.

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To the medical students past and present with whom I am fortunate to work and learn, may this work be part of a broader movement of kindness, support and encouragement that allows you and your future colleagues to learn in positive environments so that you will be smart, strong and healthy physicians in your careers.

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LIST OF ABBREVIATIONS AND SYMBOLS

AAMC	Association of American Medical Colleges
AFMC	Association of Faculties of Medicine of Canada
CACMS	Committee of the Accreditation of Canadian Medical Schools
CaRMS	Canadian Residency Matching Service
CGT	Constructivist Grounded Theory
GQ	Graduate Questionnaire
MD	Doctor of Medicine
MDSM	Michael G. DeGroote School of Medicine
MSGQ	Medical Student Graduate Questionnaire

DECLARATION OF ACADEMIC ACHIEVEMENT

With guidance from my thesis supervisor, Dr. Meredith Vanstone, as well as support from my thesis committee members, Dr. Allyn Walsh and Dr. Catherine Connelly, I have completed the research requirements for this thesis. I conducted a review of relevant literature, devised a study protocol in collaboration with Dr. Vanstone and her team working on a broader project about Mistreatment and Abuse, applied for and acquired ethical approval as part of the broader research team. Data for this project was collected by research assistants and graduate students Emily Block, Alice Cavanagh and Marina Sadik. I analyzed the data and wrote the content contained within this thesis. Input for the data analysis was provided by Dr. Meredith Vanstone. Chris Henderson contributed graphic design expertise in the creation of Figure 1. This project was funded, in part, by the Canadian Association for Medical Education Wooster Family Grant in Medical Education.

CHAPTER 1: INTRODUCTION

Orientation to the topic

Over 50% of Canadian medical students report experiencing mistreatment or abuse (AFMC, 2017), yet only a small proportion of students (< 20%) report these concerns to administration (AFMC, 2016). Of the Canadian medical students who do report their mistreatment, only 36% report feeling satisfied with the outcome of that action (AFMC, 2016). Among those who chose not to report, the most commonly cited reasons for not reporting are: the incident was not important enough to report, that they didn't think anything would be done about it, and fear of reprisal (AFMC, 2016, 2017).

Mistreatment and abuse can represent a wide range of behaviors that occur along a spectrum from belittling or publicly embarrassing a learner to frank physical or sexual assault of students. The definition of mistreatment adopted by the American Association of Medical Colleges in 2011 is: "Mistreatment either intentional or unintentional occurs when behavior shows disrespect for the dignity of others and unreasonably interferes with the learning process. Examples of mistreatment include sexual harassment; discrimination or harassment based on race, religion, ethnicity, gender or sexual orientation; humiliation; psychological or physical punishment; and the use of grading and other forms of assessment in a punitive manner." (Mavis, Sousa, Lipscomb, & Rappley, 2014).

Mistreatment and abuse can have serious consequences for learners, patients, and the healthcare system. For example, learners who experience abuse may also experience

mental health consequences, including depression and suicidality (Cook, Arora, Rasinski, Curlin, & Yoon, 2014; Dyrbye, Thomas, & Shanafelt, 2005, 2006; Haviland et al., 2011; A. Heru, Gagne, & Strong, 2009; Richman, Flaherty, Rospenda, & Christensen, 1992). Without comment on potential causes, a recent systematic review documented rates of depressive symptoms (27.2%) and suicidal ideation (11.1%) in medical students (Rotenstein et al., 2016). In addition, burnout, declining empathy, and compassion fatigue resulting from mistreatment have been associated with sub-optimal patient care (Cook et al., 2014; Laschinger, 2014; Shanafelt, Bradley, Wipf, & Back, 2002; Thomas et al., 2007; West et al., 2006) and attrition from the medical profession (Shanafelt et al., 2012; Williams et al., 2001; Williams & Skinner, 2003). There also appears to be a cyclic effect where those that have experienced abuse during training are more likely to go on and enact that same mistreatment when they are residents or staff physicians and responsible for training the next generation of physicians (Barrett & Scott, 2017).

The statistics from the nationwide graduation survey represent the data on formal reporting to medical school administration or through the channels set out by the institution to receive reports of mistreatment. I have found this data echoes my experiences working as a faculty member in Student Affairs for an undergraduate medical program where I was one of the people responsible for receiving formal reports. In this role, I was often the first individual to encounter students when they have had difficult learning or clinical experiences. The situations they experience range from ones where they feel belittled, embarrassed, ashamed or uncomfortable to egregious events that are both disturbing and life-altering. My experience is that students are reluctant to initiate

formal reporting of the incident. These experiences have been continued as I have moved to other leadership roles within the institution. I recognize the importance of reporting in allowing our institution and its leaders to see the scope of the problem, identify recurrent behaviour and prevent future instances of mistreatment or abuse. Without formal reports of abuse to the MD program, the program leadership has limited ability to enact changes or improvements. Formal reporting would enable actions to be targeted to the source of the abuse. Without action targeting the source of this abusive behaviours, this behaviour is likely to continue, and additional students will likely continue to experience mistreatment and abuse, resulting in a variety of negative consequences.

Orientation to the organization of this chapter

In this chapter, I will introduce the purpose and rationale of the study through outlining the problem and impact of mistreatment of medical students and defining the research objectives and research question with an overview of the research project. Following this, I will introduce a historical context of research in this field. I will then outline the range of impacts of mistreatment on students and the work environment, explore the prevalence of mistreatment of medical students, review current definitions and challenges in defining the problem, look at the experience of reporting mistreatment and reflect on my personal experience with the reporting of mistreatment and some barriers that may exist. I will then look briefly at the experience of workplace mistreatment in other professional contexts. I will end the chapter with describing the context and environment in which this study takes place and describe current procedures at my institution for reporting of mistreatment by medical students. Finally, I will

compare our institution's procedures with those of other Canadian medical schools. For the purposes of this writing the term preceptor will be used to include all physicians who are in a teaching or supervisory position over medical students. Faculty will be used only when specifically referring to preceptors with a faculty appointment through the university, if this distinction is relevant.

Study Purpose and Rationale

Mistreatment of medical learners has been discussed in the literature since the 1960's. Descriptions of types of mistreatment, prevalence of the behaviours and specific programs targeted at improving the situation exist broadly across contexts in the literature (Baldwin, Daugherty, & Eckenfels, 1991; Cook et al., 2014; Fnais et al., 2014; J. M. Fried, M. Vermillion, N. H. Parker, & S. Uijtdehaage, 2012; Kassebaum & Cutler, 1998; Lau et al., 2017; Mavis, 2014; Robinson & Stewart, 1996; Rosenberg & Silver, 1984). Students do not report the incidents of mistreatment in high numbers through formal reporting mechanisms (Bates et al., 2018). There exists an inconsistency between the frequency with which medical student mistreatment is reported on anonymous surveys such as the MSGQ and the frequency with which it is reported to program leaders who are in a position to investigate and affect change (Mavis et al., 2014; Siller, Tauber, Komlenac, & Hochleitner, 2017). We do not fully understand how medical students experience mistreatment in the learning environment and how they make decisions around reporting that mistreatment. Reporting is a necessary step to be able to accurately analyze the scope and sources of the problem at individual institutions. If we don't know when, where and by whom this behaviour is happening, we will be unable to effectively

address the individual and systems issues that are perpetuating this behaviour. Understanding the student experience of mistreatment is also important to ensure efforts intended to decrease mistreatment in medical training are directed in ways that are likely to be supportive of students and achieve the desired outcome of decreased mistreatment and improved student experience. Programs and efforts planned and directed solely by medical school administration may not adequately take in to account the experience of students and may not adequately address the concerns of the students. Given that mistreatment of medical students has very significant impact on current learners, their mental health and wellness, their career choices and the safety of the working environment and patients within an institution, adequately addressing this problem is critical. We cannot expect our learners to be well, highly functioning members of the profession and safe future practitioners if we do not create for them safe, supportive learning environments free from mistreatment. Understanding the journey of students who experience mistreatment will allow changes at the level of individual institutions and larger systems to better support students, to improve the reporting process and to address systemic factors that perpetuate mistreatment.

This qualitative research project asks: "When medical learners experience mistreatment in the learning environment, how do they understand that experience and make decisions around reporting?" To answer this question, I will explore the history and current status of medical student mistreatment nationally. I will ask current and former medical students at my institution about their experiences of mistreatment during their training. The research will explore whether students reported these incidents to

preceptors, administration or the MD program and what were the factors influencing their decision to report. For those students who decided to report, the research will also explore their experience with perceived barriers within the current system and challenges they faced in resolving these issues. For those who decided not to report, we will ask about the possible consequences of this decision and factors that might have encouraged reporting. This research will serve as a first step to improving institutional processes and will be used to inform policy and procedural changes within the MD program at our institution. We will engage in knowledge translation by working with other medical schools to report not just our findings from this research but also the structural changes we have made to facilitate reporting and support students at McMaster.

I expect this study will reveal that medical students experience mistreatment or abuse in a variety of learning settings. I also expect there will be instances of mistreatment or abuse that will not have been reported by students, and that students will describe multiple levels of barriers to reporting (e.g. individual, MD program, institutional policies). It is my hope that students will also have ideas around how to facilitate the reporting process and suggestions that will make students more likely to come forward with concerns. I expect students to have doubts and reservations about the current reporting process, including concerns about confidentiality of reporting, efficacy of investigation methods and willingness of institutions to change in response to student concerns.

Literature Review

History of Academic Responses to Mistreatment and Abuse of Medical Learners

Medical students learn within an environment and a culture that has challenges different from many other professions. The high-stakes nature of their tasks in training and the exposure they have to the very personal and private matters of individual patients can make this learning process stressful and daunting. Medical students also learn within the medical community from a profession with a long history of unique culture and a responsibility for self-regulation. All of these factors contribute to an atmosphere in medical training that may encourage, support and inspire future physicians but that may leave them vulnerable to mistreatment and abuse. While the medical community has been training its own since the time of ancient Greece, the veil was not lifted, and insights not provided to the general public until writing began to be broadly released describing the actual lives and experiences of medical trainees. Books such as Boys in White (Becker, Geer, & Hughes, 1961) and The House of God (Shem & Updike, 1978) were the first to expose the culture in which medical students were trained. Tales of expectations, treatment of students and behavior of teachers in these writings may seem extreme and concerning by today's standards but little was written academically of this treatment, or mistreatment, at the time of publication of these accounts.

Following the exposure of this culture in the 1960's and '70's, the 1980's introduced attempts to understand the impact of the learning environment on medical students. In a commentary to the Journal of the American Medical Association in 1982, Dr. Henry Silver from the University of Colorado compared the changes in behavior seen in medical students to that of children who grow up in abusive environments (Silver,

1982). He described their eagerness and enthusiasm at the beginning of their medical school journeys and observed the fear, cynicism, depression and frustration that many developed over the course of their training (Silver, 1982). This caused him to speculate about the possibility of medical student abuse and he wondered "could medical-student abuse also be common?" (Silver, 1982). He asked "what are we going to do about it?" (Silver, 1982). Silver recognized, at that time, that faculty might deny the behavior, minimize it, find alternate causes or dismiss it all together. Rosenberg and Silver followed up on this commentary two years later by surveying responses of physicians who had replied to the original publication, medical students and leadership of medical schools across the United States (Rosenberg & Silver, 1984). This started a discussion that acknowledged the pervasive presence of mistreatment of learners across institutions that was recognized and identified by medical students and physicians. At that time, however, it is worth noting that the mistreatment widely acknowledged by physicians and students was denied by the medical school leaders in 16 of the 18 schools surveyed in Rosenberg and Silver's research (Rosenberg & Silver, 1984). In their follow-up commentary, Rosenberg and Silver called for strong action in identifying, reporting and taking action on medical student abuse because "abuse of medical students has the potential of being one of the most stressful and demoralizing features of medical education" (Rosenberg & Silver, 1984).

In the 1990's, discussion about medical student mistreatment, or abuse as it had been known originally, moved beyond the moral concern of the experience of the learner to focus on institutional and professional impact and policies designed to address the

concerns. By this point in time, it was agreed that medical student mistreatment appeared historically across institutions, "regardless of region, governance and size" (Baldwin & Daugherty, 1997). Studies predominated in the American literature originally but spread to include representation of institutions from across the globe. Through the late 1980's and early 1990's, medical schools and advisory bodies began developing policies surrounding supervisor-trainee relationships and student mistreatment. The Association of American Medical Colleges began asking about student mistreatment on their medical graduate questionnaire in 1991 (Mavis et al., 2014). This graduation questionnaire has become the preeminent source for data regarding prevalence and types of mistreatment towards medical students.

More than a decade after Silver's 1984 commentary, Donald Kassebaum and Ellen Cutler published a special article in Academic Medicine that revisited this topic (Kassebaum & Cutler, 1998). Their work reflected the engraining of abuse within the culture of medical education and the potential long-term effects this mistreatment could cause in future physicians. They recognized that the abuse of medical students had not significantly improved, despite study and statements by the academic medicine community. They also noted, "the culture of abuse conflicts with the renewed commitments of medical educators…to imbue students with a higher degree of professionalism and cultural sensitivity (Kassebaum & Cutler, 1998). Their article focused on the belittlement and humiliation of medical students, which was the most common reported form of mistreatment, and how use of such aversive teaching methods risks causing a "transgenerational legacy" that can result in future mistreatment of others

by those who were taught in such an environment (Kassebaum & Cutler, 1998). They argued that the attitudes, behaviors and values acquired by medical students would be a result of the learning environment they experience and their socialization as much as a result of the formal curriculum and pedagogy (Kassebaum & Cutler, 1998).

By the turn of century and into the first decade of the 2000's, more data was available from over a decade of North American graduate questionnaires and international studies that reflected the same experience of medical student mistreatment internationally. Reviews and meta-analyses of these studies illuminated a clearer picture of the prevalence, types and sources of mistreatment. Important among this research was a review of graduate questionnaire data by Mavis et al looking at the data from 2000 to 2012 (Mavis et al., 2014). Over this 12 year period, the average percentage of medical students across all schools surveyed who personally experienced mistreatment during their medical school ranged from 12% to 20% (Mavis et al., 2014). Reporting data may be slightly different during this time period than in more current results because at that time there was a screening question on the AFMC Graduate Questionnaire asking first if students had been mistreated and then about the types of mistreatment they had experienced. Students may well have not considered public humiliation a form of mistreatment and screened themselves out of reporting based on the initial question (Mavis et al., 2014). This screening question has since been removed. During the first 12 years of the 2000's, the average percentage across all schools surveyed who reported the incidents of mistreatment to faculty or administrators ranged from 29% to 36% (Mavis et al., 2014). Public humiliation was the most common reported form of mistreatment at

that time, followed by sexist names or remarks, requests to perform personal services and lower evaluations because of gender (Mavis et al., 2014). Clinical faculty in hospitals followed by residents were the most frequent perpetrators of the mistreatment (Mavis et al., 2014). Only one-third of respondents indicated they had reported the mistreatment to faculty or administrators (Mavis et al., 2014). The reasons given for not reporting included that the incident was not important enough to report and fear of reprisal (Mavis et al., 2014).

Almost four decades after the initial discussion of medical student abuse in the literature and five to six decades after we were first given a glimpse into the culture, we arrive in the mid- to late 2010's with a strong pattern of data at a wide variety of institutions (Fnais et al., 2014) and the emergence of programs at individual institutions designed to address mistreatment in specific settings (Dorsey, Roberts, & Wold, 2014; Fleit, Iuli, Fischel, Lu, & Chandran, 2017; Joyce M Fried, Michelle Vermillion, Neil H Parker, & Sebastian Uijtdehaage, 2012; Lau et al., 2017; Scott et al., 2017; Smith-Coggins, Prober, Wakefield, & Farias, 2017). Despite these findings, reports of mistreatment among medical students remain high on graduation questionnaires. Decades of study have not yet fully uncovered the complex interaction of factors that contribute to the mistreatment of medical learners, we do not have a safe and effective reporting mechanism available for many students nor have we successfully implemented approaches that address prevention of mistreatment in medical training to protect future physicians from such abuse. This needs to be the direction of future study.

Effects/Impact of Mistreatment

Medical student mistreatment is problematic due to the impact it has on the individual student and the impact on the learning environment. Mistreatment has been shown to affect individual students emotionally and psychologically and to impact their professional decision-making. An environment that allows for mistreatment also impacts the well-being and safety of that clinical environment.

Mistreatment is correlated with problematic emotional and mental-health outcomes including problem drinking, decreased self-confidence and self-esteem and depression (Frank, Carrera, Stratton, Bickel, & Nora, 2006; A. Heru et al., 2009; Richman et al., 1992; Rotenstein et al., 2016). There is a risk, however, that pre-existing mental health issues, such as depressive mood states, may enhance the negative distortion of medical school experiences. Judith Richman and her colleagues looked at the relationship between mental health status and abuse experienced during training while controlling for pre-existing psychopathology (Richman et al., 1992). They found that students experiencing abuse did not differ from those not experiencing abuse in terms of mental health prior to medical school entrance (Richman et al., 1992). Experience of abuse during training lead to negative psychological outcomes including anxiety and depressive symptoms and misuse of alcohol (Richman et al., 1992). Mistreatment has been shown to negatively impact the emotional and physical health of students as well as interfering with their family life (Sheehan, Sheehan, White, Leibowitz, & Baldwin, 1990). Symptoms of post-traumatic stress can also occur from mistreatment (A. Heru et

al., 2009). Medical students experiencing harassment or belittling during their training are more likely to be stressed, depressed and suicidal (Frank et al., 2006).

Being mistreated during training has an impact on the professional life of medical students very early in their career. Students experiencing mistreatment are less likely to be planning careers in academic medicine (Haviland et al., 2011). Students experiencing mistreatment have lower career satisfaction (Frank et al., 2006). Studies have also shown exposure to abuse leads students to consider dropping out of medical school and second guess their decision to enter a medical career (Frank et al., 2006; Oser et al., 2014; Sheehan et al., 1990; Woolley, Paolo, Bonaminio, & Moser, 2006). Mistreatment early in clinical training can impact medical students' decisions regarding specialty selection (Oser et al., 2014), which could impact the proportion of students entering a given specialty and ultimately affects the physician workforce composition, particularly those students who chose to enter academic medicine and will be the teachers of tomorrow (Haviland et al., 2011). When mistreatment and harassment occurs in an academic setting, there is an impact on the career trajectory of junior trainees as well as limitation to access and participation in research, scholarship, academic and career-advancement (Bates et al., 2018). The perpetuation of learning environments where mistreatment occurs and is not remedied is the risk of a transgenerational effect that leads to future mistreatment of learners by the residents and physicians who were treated in that manner during their training (Kassebaum & Cutler, 1998).

Beyond the very significant impact of mistreatment on individual students well-being and career decisions, mistreatment in the workplace is also associated with poorer

job performance and workplace well-being (Estes & Wang, 2008). Research into workplace incivility in the human resource field has shown that "employees experiencing incivility at work intentionally reduced their work effort" (Estes & Wang, 2008). Workplace incivility, which can represent a precursor to mistreatment and abuse (Lutgen-Sandvik, 2003), results in decreased organizational performance and profit (Estes & Wang, 2008). A study of Canadian nurses showed that exposure to incivility and bullying in the health care setting can have detrimental effects on patient safety outcomes (Laschinger, 2014). Researchers found that negative interpersonal interactions among health-care professionals "may interfere with effective communication about patient care needs and processes, which, in turn, may hinder delivery of high-quality patient care and result in adverse…outcomes" (Laschinger, 2014). Other research in the nursing literature links disruptive physician behavior, which can include medical student mistreatment, to be linked to decreased patient safety (Porto, 2006). Disruptive physician behavior was also found to have a substantial impact on patient care in a 2001 U.S. survey of over 1200 hospitals (Rosenstein & O'daniel, 2008).

Prevalence of Mistreatment

Whereas medical student mistreatment has become increasingly recognized as negative and problematic, much of the research in this field is focused on determining prevalence in individual setting either by stage of training, perpetrator of abuse or country of training (Baldwin et al., 1991; Baldwin, Daugherty, Eckenfels, & Leksas, 1988; Baldwin, Daugherty, & Rowley, 1998; Gagyor et al., 2012; Iftikhar, Tawfiq, & Barabie, 2014; Munayco-Guillen et al., 2016; Nagata-Kobayashi, Maeno, Yoshizu, & Shimbo,

2009; Peres et al., 2016; Rancich et al., 2017; Rautio, Sunnari, Nuutinen, & Laitala, 2005; Richardson, Becker, Frank, & Sokol, 1997; Shoukat et al., 2010). This approach helps to paint a broad picture of the landscape of medical student mistreatment but does not serve to address why the problem continues to exist and what can be done about it.

Data surrounding mistreatment in Canadian Medical Schools is largely gathered from the Association of Faculties of Medicine Graduate Questionnaire (GQ) or individual school internal surveys. The GQ is a survey designed by the Association of Faculties of Medicine of Canada (AFMC) and administered to all Canadian medical school graduates in the time immediately preceding their graduation from their institutions. The response rate on this questionnaire is consistently high with 67.5% of graduating medical students responding in 2017 (AFMC, 2017). The questionnaire asks students to respond to a large number of questions about their experiences in medical school including curricular activities, student supports, financial aid and experiences of mistreatment. It is used by individual institutions to address accreditation requirements, as a method of program evaluation and to gain information supports and challenges present in individual medical schools and nationally. We have Canadian data from 2015-2017 when the GQ was administered by the Association of Faculties of Medicine of Canada (AFMC). Canadian data from 2001-2014 comes from the Association of American Medical Colleges' (AAMC) Canadian Graduation Questionnaire. We have some ability to compare results from the AAMC and AFMC questionnaires but some of the questions changed between GQ's. For example, the 2017 GQ removed the option of reporting "publicly embarrassed" as a form of mistreatment, which makes the data of incidence not directly

comparable to previous years where this was included as a separate form of mistreatment (AFMC, 2017). On the GQ, students are asked a series of behaviors that constitute mistreatment and whether they have personally experienced these behaviors performed by faculty, residents, fellow students, nurses or other institutional employees or staff. Behaviors performed by patients or their families are not included in this survey (AFMC, 2017). In the 2017 GQ, behaviors that were specifically asked under the umbrella of mistreatment included: publicly humiliated, threatened with physical harm, physically harmed, required to perform personal services, subject to unwanted sexual advances, asked to exchange sexual favors for grades or other rewards, denied opportunities for training or rewards based on gender, ethnicity or sexual orientation, subjected to offensive sexist or racist remarks/names or remarks or names related to sexual orientation, received lower evaluations/grades based on gender, ethnicity or sexual orientation rather than performance. In 2017, out of 1914 respondents, 59.6% had experienced at least one of the behaviors listed at least once (AFMC, 2017). There were 40.4% of students who had never experienced the behaviors listed (AFMC, 2017). Canadian data is also supported by a National Resident Survey conducted by the Canadian Association of Interns and Residents in 2012 (Karim, 2014). In this survey, 72.9% of medical residents reported "behavior from others that made them feel diminished during their residency" (Karim, 2014). These values are in keeping with a recent systematic review and meta-analysis by Fnais et al. in 2014 on the topic of Harassment and Discrimination in medical training that demonstrated that 59.4% of medical trainees had experienced at least one form of harassment or discrimination during their training (Fnais et al., 2014). The majority of

the studies included in Fnais' review were conducted in the United States, Canada, Pakistan, the United Kingdom, Israel and Japan (Fnais et al., 2014). Among Canadian students in 2017, the most common forms of mistreatment were public humiliation at 44.1%, subjected to offensive sexist remarks/names at 24.8% and requested to perform personal services at 10.7% (AFMC, 2017). While numbers are low, 1.6% of students report physical harm and 6.3% were subjected to unwanted sexual advances (AFMC, 2017). The students experienced mistreatment most often at the hands of faculty members (Vogel, 2018). The most common source of abuse was attending physicians, followed by nurses, residents, patients and their families (Karim, 2014). There is a paucity of data surrounding the types of abuse enacted by various groups of perpetrators.

Definition of Mistreatment

The variability in prevalence of mistreatment may be understood in part by shifting definitions as to what constitutes mistreatment. While some forms of behavior are commonly understood to be abusive, others are more controversial or open for interpretation. The Graduation Questionnaires by the AFMC and the AAMC have changed over time in how they ask about mistreatment and what behaviors they include on their questionnaires. Studies show that attending physicians, nurses, residents and students are generally able to agree what constitutes abuse and what does not when presented with a series of video vignettes (Ogden et al., 2005). If they had personally previously experienced abuse, respondents were more likely to consider a scenario abusive (Ogden et al., 2005). There is preliminary evidence to demonstrate that medical students who perceive they have been mistreated are not simply oversensitive (Bursch et

al., 2013). This same study asked students to rate four behaviors along a continuum of acceptability, including yelling, swearing, gentle criticizing and name calling (Bursch et al., 2013). This study found that 11% of respondents indicated gentle criticism (e.g. "You did not do well on this; try again next week") was "never" or "rarely" acceptable showing that medical students have a wide range of behavior they consider inacceptable (Bursch et al., 2013). Students also describe perceived mistreatment based on a learning environment in which they feel disrespected (Gan & Snell, 2014). This perceived mistreatment may have a tremendous impact on an individual student but is harder to report because it does not fall under the typical definition of mistreatment as laid out by institutional policies (Gan & Snell, 2014).

Chavez-Rivera et al. undertook a systematic review of mistreatment in medical students looking at the literature between 1980 and 2016 (Chavez-Rivera, Ramos-Lira, & Abreu-Hernandez, 2016). In this review they included concepts such as intention, frequency and directionality in their definitions of mistreatment. They also considered a wide range of behaviors as mistreatment including "mistreatment by means of the use of information and communication technologies" (Chavez-Rivera et al., 2016). A study of final year medical students at McGill University about the perception of mistreatment resulted in a concept map with mistreatment represented along a continuum from incident-based (isolated, easily reportable, blatant) to environment-based (repeated, subtle, difficult to report) where students perceive having more power the more incident-based the behavior and students experiencing more distress the more environment-based the behavior (Gan & Snell, 2014). Authors were also able to distinguish and

conceptualize suboptimal learning environments along a similar spectrum (Gan & Snell, 2014). Whether a student perceived an incident as mistreatment or a suboptimal learning environment was influenced by many factors including: the baseline sensitivity of the individual learner, perceived power dynamics, emotions of the leader and the perceived intent of and relationships with the teacher (Gan & Snell, 2014).

The stage of training of a medical learner seems to influence the learner's perception of mistreatment (Kulaylat et al., 2017). There is a significant difference between perception of mistreatment from medical students prior to clinical training than when they have entered more full-time clinical learning (Kulaylat et al., 2017). The transition to clinical learning seems to be a "key period in influencing or shaping these perceptions" (Kulaylat et al., 2017).

Reporting of mistreatment

Tracking the reporting of mistreatment among medical students is challenging because it relies largely on the students experiencing the mistreatment as the ones responsible for addressing this through the paths of their own institutions (Bates et al., 2018; Binder, Garcia, Johnson, & Fuentes-Afflick, 2018; Kassebaum & Cutler, 1998; Mavis et al., 2014). Beginning with awareness of reporting policies and procedures, the GQ data shows in 2017 that 94.5% of student respondents were aware of the presence of school policies regarding mistreatment and 79.2% of students were aware of the procedures for reporting mistreatment at their institution (AFMC, 2017). Awareness of reporting mechanisms has increased over time among medical students (Mavis et al.,

2014). Of medical trainees who were mistreated, over 80% did not report the mistreatment and less than 36% of those who did report were satisfied with the response by the institution (Vogel, 2018). Medical trainees fear if they report mistreatment, particularly at the hands of faculty, that it may impact their evaluations, their ability to gain a residency position, their reputation or their opportunities for employment at a given institution or within a department (Vogel, 2018). Anonymous reporting systems have had some success in increasing the number of students willing to come forward to report mistreatment but there are still many who do not feel comfortable or safe to bring their concerns forward (Tanne, 2012; Vogel, 2018). In some studies, women perceived a greater risk of reporting mistreatment to their institution than did men (Siller et al., 2017). However, many studies do show that female students report incidents of mistreatment more often than male students (J. M. Fried et al., 2012). When student choose not to report incidents of mistreatment, major reasons include: not considering the incident significant enough to report and fear of reprisal (Mavis et al., 2014). They also feel reporting would not be effective or they managed the incident by themselves (Mavis et al., 2014). Some schools have tried to address these concerns through creation of reporting mechanisms that allow for anonymous as well as nominal reporting and impartial investigation of reports (Fleit et al., 2017). Even among such programs, there still appears to be a gap between preserving student anonymity and communicating results of investigations with students (Fleit et al., 2017). Students seem to want and need this closed loop communication to strengthen their confidence in the commitment of leadership to addressing problematic behavior among faculty (Fleit et al., 2017). The

challenge remains that anonymous reporting mechanisms and faculty's right to privacy do not allow for fully transparent communication and feedback of results to the source of the report (Fleit et al., 2017).

Personal Experience of Barriers to Student Reporting

Throughout a variety of roles in undergraduate medical education at our institution, I have observed and discussed with students the barriers to reporting incidents of mistreatment. The fear of reprisal or negative evaluations are quite close to the surface for many students who consider reporting. This fear, however, seems to be quite broad reaching and includes concerns by students about failure of procedures designed to preserve anonymity in online evaluations and concerns about possible future ramifications including negative impact on residency matching, fellowship training and future job opportunities.

Students have also shared how the personalities of the individuals in leadership positions may influence their willingness to come forward to discuss concerns, including finding individuals unapproachable, uninterested, so invested in the success of the program that students don't feel able to share shortcomings of the program, too kind or appearing emotionally unable to handle difficult news or too busy or preoccupied to spend time on this matter. I have also had students discuss concerns, particularly in smaller campuses or smaller learning environments, that administrators or lead faculty who are tasked with receiving complaints of student mistreatment may be personal

friends with the preceptors involved which may impact their ability to both maintain confidentiality and impartiality in investigating and handling the complaint.

I would agree with the data in that many students express a strong desire to know the outcomes of the reporting of the mistreatment and, if the nature of the investigation or how the complaint is handled is not visible to them, they often feel that nothing was done by administration in response to the complaint. Their concerns for anonymity and desire to know the outcomes of the investigation are, at times, in opposition and cannot be resolved in the face of privacy for the concerned preceptor. It is my experience that the lack of feedback and closed loop communication has appeared to create a feeling among students that administration does not act swiftly or decisively upon student complaints.

A barrier to reporting of mistreatment that I have discussed with students, that I have not seen reflected in the literature, is a conflict within an individual student because they identify positive aspects to the perpetrator or the learning environment even when they have experienced mistreatment. They are hesitant to share negative experiences when they have also had positive experiences. They are also aware that disclosure of incidents of mistreatment could have ramifications for the individual preceptor, the learning environment or clinical setting or the campus and they are reluctant to cause harm or disruption if they also see positive learning that has arisen in that environment.

Within our institution, I have also found there is a sense of feedback fatigue whereby students are asked to give feedback and evaluation of many components of the program frequently and do not have the drive or energy to complete thorough descriptions

of all experiences, including possibly experiences of mistreatment. This feedback fatigue seems to increase as students near the end of their undergraduate training. Student have described to me a sense of looking forward to the next step of residency and not wanting to dwell on the past of their undergraduate medical training. In speaking to some final year students, they have spoken of just wanting to move on to the next stage and not having the energy or motivation to bring up issues of past mistreatment and go through the reporting process at this late stage in the program.

All these discussions, ideas, opinions and reflections on barriers represent a much broader view of the challenges of mistreatment reporting than some of the narrower questions that are traditionally asked in surveys regarding mistreatment. These ideas are also the product of information conversations and observations but do not represent any formalized findings that might allow the university to act on them and develop an approach to overcoming some of these challenges. For these reasons, I am inspired to pursue further research into the area of student mistreatment. I would like to build on current literature and address an area in which I do not see any current data or discussion, namely understanding how students make the decision whether to report mistreatment they have experienced.

Mistreatment and Abuse in Other Contexts

Mistreatment has been explored in other workplace environments. This work, which began in the late 1980's, started with exploration of generalized hierarchical abuse, "the experience of having been mistreated by superiors in general" (Tepper, 2007). The

original focus of this work was nurses and medical students experiences of abusive behavior perpetrated by physicians (Tepper, 2007). There are several key directions this research has taken. One is the concept of abusive supervision which is defined as "subordinates' perceptions of the extent to which supervisors engage in the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact" (Tepper, 2007). Research in the U.S. suggests that 13.6% of U.S. workers are exposed to abusive supervision and the costs due to absenteeism, health care costs and lost productivity are an estimated $23.8 billion US annually (Tepper, 2007). Another direction is the exploration of workplace incivility which is defined as "low-intensity deviant workplace behaviors with an ambiguous intent to harm" (Schilpzand, De Pater, & Erez, 2016). Workplace aggression has also been considered under the lens of interactional injustice which is unfairness or insensitivity displayed when implementing organizational procedures or policies (Cortina, Magley, Williams, & Langhout, 2001) and organizational injustice (Bowling & Beehr, 2006). Work has also been done in considering the consequences of those who have vocally resisted interpersonal mistreatment and Cortina and Magley address work retaliation victimization and social retaliation victimization in their research (Cortina & Magley, 2003)

Commonalities in literature looking at abusive supervision and workplace incivility include research into gender distribution, direct and indirect costs of the behavior, antecedents or behaviors in the supervisors and subordinates that made this behavior more likely and consequences of the behavior (Bowling & Beehr, 2006; Cortina et al., 2001; M. S. Hershcovis, 2011; M. S. a. J. B. Hershcovis, 2009; Tepper, 2007).

Models have been proposed to link causes and consequences of abusive supervision (Tepper, 2007) as well as ways to re-conceptualize workplace aggression in a more cohesive manner (M. S. Hershcovis, 2011). There has not yet been a strong theoretical foundation brought forward to guide the literature in this field (Schilpzand et al., 2016) although organizational violence and cognitive stress theories have been used (Cortina et al., 2001).

Study Context

McMaster School of Medicine

This research will take place at the Michael G. DeGroote School of Medicine (MDSM) at McMaster University in Ontario, Canada. The MDSM is a three-year undergraduate medical education program that leads to the MD degree upon completion and is fully accredited by the Committee on the Accreditation of Canadian Medical Schools. The undergraduate medical program admits 206 students each year and the program is delivered at one of three sites. The main campus is located in Hamilton, Ontario and is home to 150 students each year for a total of 450 undergraduate MD students. The distributed campuses are located in Waterloo, Ontario (Waterloo Regional Campus) and St. Catharines, Ontario (Niagara Regional Campus). Each regional campus is home to 28 undergraduate students each year for a total of 84 students each. Students at all campuses follow the same curriculum and have access to learning resources, teaching and student support at their home campuses. All students spend the first three

months of the program together in Hamilton and then regional campus students transition to their own campuses for the remainder of the program.

Current Reporting Mechanism at Our Institution

At our institution, undergraduate medical students are introduced to the topic of medical student mistreatment during their initial orientation week at the beginning of the program. In a large group session, the Assistant Dean of the Undergraduate MD Program discusses what constitutes mistreatment, what reporting mechanisms are available and what supports are available for students. This topic is revisited at different points during undergraduate medical training including during elective and clerkship orientation and in presentations to the assembled classes from the Student Affairs department. Student are able to report incidents of mistreatment informally to any member of faculty or clinical supervisor. Formal reporting can also occur at each campus through a report to members of administration, to Student Affairs directors, through the Faculty of Health Sciences Professionalism Office or through the university Ombud's office. Students can learn more about these reporting options on the online student portal and in discussion with the Student Affairs department, the Professionalism office or the Ombud's office.

A primary source of information for medical students about many aspects of the program is the online portal. The online portal is the central repository for students and preceptors of curriculum, policies, schedules and resources for undergraduate and postgraduate learners. It is designed for students and preceptors to be able to easily access program-related material, resources and announcements. A recent revision of the

portal in 2017 was the addition of an icon in the shape of a first aid kit on every page of the portal. Clicking on this icon leads students to a landing page outlining assistance that may be required for a variety of situations including needle stick or occupational injury, absences, student mistreatment and mental or physical health concerns (https://www.medportal.ca/assistance). If a student follows the mistreatment link, they arrive at a page where mistreatment is identified in the following manner: "Mistreatment may include, but is not limited to, instances where faculty, staff or fellow students create a hostile learning environment, intimidate, humiliate or harass, discriminate, or engage in inappropriate behaviour." (https://www.medportal.ca/assistance/student-mistreatment). Interested students can click through to read more details about what constitutes mistreatment in classroom and clinical settings. They are advised regarding personal safety and then given a range of reporting options.

There is an opportunity for anonymous reporting though the use of end of learning block rotations. Students would need to include a detailed account of the experience including the names of the perpetrators for the program to act should they wish to use the end of rotation evaluation as a mechanism for reporting mistreatment. Their identity could, however, be protected in that the program leaders who receive these evaluations cannot see the name of the students who submit them. There would also be a time lag between reporting in this way and when the program would be able to review the report and take any action as end of rotation evaluations are not immediately visible to program leaders and it may take time before relevant leads at each campus receive reports. The Student Affairs office at each campus as well as program administrators have lists of

supports available to students on campus including the Human Rights and Equity Services, the Office of Gender and Equity and the Faculty of Health Science Advisor on Professionalism. This information is present on the online portal and in student orientation information although students may not have reviewed this information in detail and may not recall it at the time of an incident.

Students who choose to speak with Student Affairs about situations occurring in the learning environment are advised by the Student Affairs team members that discussions with Student Affairs are confidential. Students may discuss a scenario with a Student Affairs director, who is a faculty member that operates at arm's length from the MD program administration, and Student Affairs directors outline anonymous versus nominal reporting. Through discussion with Student Affairs, complaints can be brought forward in an anonymous manner although the circumstances of the event, the number of students in a given rotation or learning setting and the nature of the event may make it difficult to conceal the identity of the student bringing forward the concern. The limits to the confidentiality of the Student Affairs office are outlined in their confidentiality policy, which is reviewed with students by the director at the start of each visit and is posted on the Student Affairs portal site and in the Student Affairs offices. Situations of abuse of children, sexual abuse of a client by a health professional, need to prevent serious harm to self or others or subpoena of records by a court of law would all be cases in which Student Affairs would be obligated to take further action and could not guarantee confidentiality. The Student Affairs Office also has an obligation under the university Harassment and Intimidation Policy to support a safe and harassment-free learning and

work environment. It may be necessary, at times, for them to bring forward concerns and not maintain confidentiality in order to uphold their obligations. The only truly confidential avenue for students to report mistreatment is through the University Ombud's office.

Reporting Mechanisms at Other Institutions

There are a variety of mechanisms in place in undergraduate medical programs to address reporting of student mistreatment. Having such mechanisms in place is a requirement of the Committee of the Accreditation of Canadian Medical Schools (CACMS). In the Standards and Elements required for successful accreditation of a Canadian Medical School, Element 3.6 specifically addresses student mistreatment:

> "A medical school defines and publicizes its code of conduct for the faculty-student relationship in its medical education program, develops effective written policies that address violations of the code, has effective mechanisms in place for a prompt response to any complaints, and supports educational activities aimed at preventing inappropriate behaviors. Mechanisms for reporting violations of the code of conduct (e.g. incidents of harassment or abuse) are understood by students and ensure that any violations can be registered and investigated without fear of retaliation." (CACMS, 2015).

The University of Toronto allows for online and email reporting of events and outlines the reporting mechanisms online (University of Toronto, 2011). Similarly, the Schulich School of Medicine at Western University allows for online reporting (Schulich). The University of British Columbia outlines a number of Responders with whom students can have initial discussions to learn about their reporting options and then delineates who is responsible to receive the report according to a flow chart (University of British Columbia). The Faculty of Medicine at the University of Ottawa outlines

behaviours that constitute mistreatment versus teaching on their website and allows for online submission of incident reports (https://med.uottawa.ca/undergraduate/beintheknow/know-how-report). Several universities have options for anonymous reporting of incidents of mistreatment online, including the University of Manitoba (http://umanitoba.ca/faculties/health_sciences/medicine/media/FINAL_Policy_for_Prevention_of_Learner_Mistreatment_V10.pdf) with the proviso attached that anonymous reports may not be able to be fully investigated or acted upon. Interestingly, for all these schools it was possible to access their reporting mechanisms though a basic internet search including the university name and the terms "medical school" and "mistreatment reporting". At our institution, a similar search lead to links to various policies that cover topics related to mistreatment but does not lead to information regarding mistreatment reporting procedures.

CHAPTER 2: METHODS AND METHODOLOGY

Methodology – Theory

Grounded theory was first described by Glaser and Strauss in 1967 as it related to their work studying death and dying in U.S. hospitals (Charmaz, 2014). This represented an introduction to a new field of thought in research where theories were developed from qualitative data rather than data being used to deduce testable hypotheses from existing theories (Charmaz, 2014). It formalized a systematic approach by which researchers produced theory "grounded" in the data through an iterative process of data collection and analysis. One hallmark element is the staged coding process which enables constant comparison of data during each stage of analysis (Charmaz, 2014). Glaser and Strauss' original description of grounded theory was based on an objectivist epistemology in which a single truth could be known independent of a researcher's ideas or interpretations (Vanstone, 2018). In contrast, Charmaz uses a constructivist epistemology in her approach to grounded theory. Constructivism posits that people mentally construct, rather than receive, their ideas of the world (Giacomini, 2010). Constructivist grounded theory, as described by Charmaz, continues the approach of theories and explanations being rooted in the research data but recognizes, "research as a construction but acknowledges that it occurs under specific condition – of which we may not be aware and which may not be of our choosing" (p. 13) (Charmaz, 2014). Charmaz's approach to qualitative research reminds us "we are part of the world we study, the data we collect, and the analyses we produce. We *construct* our grounded theories through our past and

present involvements and interactions with people, perspectives and research practices" (p. 17) (Charmaz, 2014).

In recognition of the environment in which this research is taking place, a constructivist epistemology will best allow the researcher to try to understand how each of the medical student participant constructs or creates his or her understanding of being mistreated and issues around reporting of mistreatment. The experience of mistreatment and the decisions around reporting will be individual to each student and their creation of meaning and explanation of their situation is what will ultimately allow the researcher to better understand the many factors at play. The complex nature of interactions between people, procedures and institution as well as researcher in the field of medical student mistreatment lend the most suitable theoretical approach to be one of an interpretive theory. "Interpretive theories aim to understand meanings and actions and how people construct them. Thus these theories bring in the subjectivity of the actor and may recognize the subjectivity of the researcher" (p. 231) (Charmaz, 2014). An interpretivist approach to this topic will allow the researcher to interpret the actions and meanings of the student participants and also allow the researcher to interpret her own actions and meanings in this realm. The topic of mistreatment and abuse will not look the same to all participants or from most perspectives. It is deeply dependent on the perspective of the person who is experiencing it. The work that an individual does in making sense of the situation, deciding how to proceed, with whom to discuss the situation and how they will continue working and learning in that environment, is also very personal and depends on many factors within the individual and their past experiences, their supports, their

expectations and their future goals. I will seek to better understand this socially negotiated process of understanding their experience and use that as a basis for developing theories about reporting of mistreatment. Recognizing that my approach to this research is strongly rooted in my experiences within the medical education system, I will also approach this research with a pragmatic epistemology. A pragmatic epistemology allows for multiple researchers to approach the same problem in multiple credible ways that may produce different results, depending on the methodology chosen (Giacomini, 2010). The ultimate aim of this research is that it can and will be used to influence policies and procedures at my institution to improve the experience of students reporting mistreatment. Applying a pragmatist lens to the research will allow the researcher to define multiple perspectives and study the participants' actions to solve the emergent problem. Through this epistemology, both facts and values are joined and there is an emphasis on problem-solving (Charmaz, 2014). A pragmatic epistemological orientation requires researchers to produce their findings in recognition that they could be used and present their findings in a way that is accessible and actionable (Giacomini, 2010).

Researching the reporting of mistreatment of medical students as someone who has been in the position of receiving these reports, receiving statistics regarding mistreatment and enacting existing reporting procedures and policies puts the author most firmly in the middle of the subject to be studied. In my previous roles in student affairs I have been one of the people responsible for receiving students' confidential reports of mistreatment. In this way I may have acted as a facilitator of the reporting process but

may also have exhibited behaviors that were barriers to student reporting. In my previous roles as student tutor, advisor and clinical preceptor I may have had students approach me about scenarios in which they were unsure if they were mistreated and I may not have handled those discussions in a way that facilitated reporting. As a previous preceptor I may have treated students in a manner that was perceived as mistreatment by them. These experiences all shape the nature of the research question being asked as a way to better understand the roles I may have played and the ways in which I could improve my approach to this important problem. I am also aware, in my current position in medical leadership, that I have the potential to be an enabler of the solution because of my involvement in shaping and evaluating policies and procedures at our institution. Questions in the interview guide were written to explore the student experience but also to consider student input into ways to improve the current reporting structure. Throughout this research, I am aware both research and analysis needs to be rooted in the experience of the research participants and try to stay focused on their stories while acknowledging the experiences and potential biases the researcher may bring to this topic based on their roles in medical education. Constructivist grounded theory is best suited to allow the researcher to recognize and reflect upon my role in the system, to learn more about this system from the perspectives of research participants and to propose theories based on the student experience and consider solutions that are directly rooted in the research data. It would not be possible to separate the author's past, present and future involvement from the data in a way that still allowed her to participate fully in the research process. Reflexivity will be an ongoing activity during this research including

reflexive journaling, discussion with supervisors and research team members and ongoing involvement in institutional discussion around the topic of student mistreatment. Reflexivity will be further discussed later in this chapter.

Study Design

This qualitative research project asks: When medical learners experience mistreatment or abuse in the learning environment, how do they make the decisions about reporting that maltreatment? Through the use of qualitative methodology and Constructivist Grounded Theory (CGT), this study seeks to understand how medical students experience mistreatment and what affects their decision to report (Charmaz, 2014). CGT is a theory that is appropriate for identifying social processes, such as the process of identifying and deciding to act upon an experience of mistreatment (Charmaz, 2014). Data will be collected via semi-structured interviews from current and past (within 5 years) medical students at the same undergraduate institution. While participants were all medical students at the same undergraduate institution, although they may have since moved on to other institutions for training or employment.

Data Collection

Recruitment & Sampling of Participants

Eligibility

Eligible participants include students who are current MD program learners at our institution or those who have been MD students at our institution within the past five years. We are focusing on students from within our institution to focus the data on possible institution-specific barriers. Participants will have experience with the same reporting system, and findings will be directly relevant to our program. Some

participants may discuss experiences of mistreatment and abuse that happened once they graduated from our program; their answers as they pertain to experiences and reporting as an undergraduate medical student will be the focus of the data collection from their interviews. We are also interested in the general suggestions about reporting they may have based on their experience at other institutions. We assume that individuals who have been enrolled as medical learners are fluent in English and are over the age of 18.

Medical learners for this project will be recruited through e-mails from their program office, through online advertisements posted on social media outlets such as Twitter, Facebook, Instagram, through posters and electronic notices placed on bulletin boards and screens at all campuses of our institution and in student lounges. Participants that come forward will also be asked to contribute to snowball sampling by asking them to mention the study to peers and colleagues they feel may be interested or engaged in this project. This project will also be discussed in-person with students during large group sessions. In these presentations, the Associate Dean of the Undergraduate MD program will introduce the Principal Investigator of the larger project, Dr. Meredith Vanstone, and then leave the room. Dr. Vanstone is not a physician and not in a position of power over medical students, so she is the most appropriate team member to introduce the project. A video will also be produced that will be distributed to current and former learners and made available through social media in which the study is outlined and request for participants is made. All recruitment material will direct potential participants to contact a research team member who is not a physician and is not affiliated with their evaluation, career trajectory etc. Confidentiality of names of participants and data

collected during the project will be explained in all presentations and videos used for recruitment and will be reinforced during the interviews to all participants.

Recruitment of students will continue until we reach theoretical saturation. We will know this has occurred when coding data and identifying themes does not reveal any new or significantly different themes in subsequent interviews. I predict this will require 15-25 participants. Revisions of the interview guide may occur following preliminary review of the data and students who have previously participated may be contacted to be asked to elaborate on specific themes or answers.

Interviews

Data will be gathered from participants through individual interviews. Interviews will be conducted by trained qualitative researchers who are not health professionals and not involved in teaching or evaluation in any manner in the undergraduate MD program. This may include McMaster faculty members who work solely in research, graduate students and research assistants. A sample interview guide is included as Appendix 1. The interview guide will evolve as the data collection progresses and analysis indicates areas of theoretical interest. Pursuant to our commitment to protecting the identity of medical learners from those who may have influence over their evaluation or career, and to ensure participants can speak frankly and comfortably, all data collection activities with learners will be conducted by a non-physician research team member. No physician member will ever have access to identifying information about participants, including original audio-files of interviews or un-edited transcripts.

Interviews will be conducted in a quiet, private space that is mutually convenient for the participant and interviewer. This could include the participant's office, the researcher's office, or a quiet room on campus, at a hospital, or clinic. Interviews may also be conducted over the phone or by online video connection, if the participant prefers. All interviews will be audio-recorded with permission of the participant, and later transcribed verbatim. Transcripts will be de-identified before any physician member of the team has access to them. Interviews will be approximately 60 to 90 minutes in length.

The interview guide was designed and written with the consultation and participation of the research team. Questions were constructed to allow for gathering of demographic data, exploration of student definition of and experience with mistreatment or abuse during their training, and then more specific questions about whether they had reported the mistreatment and what influenced their decision to report or to not report. Questions are largely open-ended and allow for participants to offer their experiences, their concerns and their suggestions. Prompts are inserted after specific questions asking participants to elaborate on answers, when needed. The pace of the interview is meant to facilitate the student sharing their own experiences and prompts and statements are used to offer compassion and empathy when a participant discloses a difficult event. Iterations of this guide will occur in response to preliminary trends noticed as the research team reviews transcribed interviews and to allow for more focused questioning in areas that appear to be high yield. Alterations to the guide may be made by any member of the research team, including those conducting interviews, and major changes will be

circulated to the team for approval while small changes in phrasing of questions will be up to the discretion of those conducting interviews.

Protection of Participants & Confidentiality

Recognizing the potential of these interviews to potentially trigger memories of distressing events or to bring up difficult emotions in participants, all participants will be offered support, resources and referral to student affairs at the start and at the completion of the interview. At the completion of each interview, the interviewer will offer the participant a printed sheet with contact names, numbers and information regarding student support services and mental health crisis lines (Appendix 2). This resource sheet was developed in conjunction with the student affairs team and includes local resources and 24/7 crisis resources for students in distress. The research team member conducting the interview will also follow up with participants via email one week following the interview to thank them for participating and remind them of sources of support and resources for mental health and wellness that were given to them at the time of the interview. The purpose of this contact is not for diagnosis or reporting. The email will be sent by the person who conducted the interview for the participant, so that confidentiality is maintained.

If, at any point in time during the interview, the participant becomes significantly distressed or indicates they do not wish to continue, the interview will terminate immediately, and the participant will be given the choice of having their partial interview recording destroyed. A member of the student affairs team for the undergraduate MD program has agreed to be available to the research team members conducting interviews

for contact via text message or phone if a student participating in the interview is distressed and needs immediate connection with support. The interviewers are not clinicians, and so do not have a professional duty to report. They also do not have the skill or knowledge needed to diagnose suicidality, depression etc. For this reason, we will only invoke this optional reporting clause if a participant explicitly indicates that they are currently at risk for harming themselves or others.

Confidentiality is a significant concern in this study owing to the nature of the information discussed and the concerns by participants that sharing such information could have a negative impact on their academic program or their future career trajectory. All information shared within the interview will be considered confidential. It will be stressed with participants in recruitment information and during the interview that this interview represents a research project only and does not, in any way, result in reporting of incidents of mistreatment to the undergraduate MD program or student support services. Should a participant wish to make a report of an incident of mistreatment, or consider making such a report, they will be directed to student affairs in the undergraduate MD program to discuss their options. Participation is voluntary, and without offering confidentiality we may be unable to conduct this research. Identifying information will only be collected for the purpose of scheduling the interview and will be discarded at the completion of data collection. At no time will participant identity be available to clinician team members.

Data Analysis

In Constructivist Grounded Theory, data collection and analysis proceed iteratively, with initial findings informing future sampling and data collection. We will engage multiple analysts with different perspectives to establish trustworthiness of our findings. Data analysis will begin with an initial open code and proceed with multiple rounds of focused coding. We will use the Constant Comparative analysis technique to compare findings across factors such as campus, year, specialty, severity of incident, decision to report etc. (Boeije, 2002). Coding will be performed primarily by the primary author but will also be compared to coding done by other members of the research team working on related projects.

The coding of data from anonymized participant transcripts will take place in a staged manner moving from initial coding to focused coding and then to theoretical coding. The coding will be done using the software NVivo. Coding in Constructivist Grounded Theory, as described by Charmaz (p. 43), is a process that involves "naming segments of data with a label that simultaneously categorizes, summarizes, and accounts for each piece of data" (Charmaz, 2014). Initial coding will involve going through the anonymized transcripts looking for themes using the participants' words, finding concepts that are recurrent, looking for links to existing literature and similarities between experiences of different participants. In the initial coding process, I will also be looking for specific barriers mentioned by participants or experiences they had during the reporting process as well as suggestions they make towards improving the reporting experience. The initial coding process is important to ensure that the analysis of the data is descriptive and based on what participants themselves are discussing rather than having

existing data or theories imposed upon their information. This will allow any theory about the data to be firmly rooted within the data. I will know it is time to move on from initial coding when all transcribed interviews have been gone through, line by line, and no new ideas seem to be arising from the interview transcripts. This initial coding also allows me to go through a large amount of data while keeping my own ideas, preconceptions and biases out of the analysis.

Following initial coding, I will move on to focused coding. Focused coding is an opportunity to go through all the ideas discovered in the initial coding process and begin to group them into categories that are relevant to the research question and to group like ideas together. Its purpose is to begin to make sense of the data and move towards larger patterns of thought within the data. If new ideas or categories arrive in focused coding, I may return to the original transcripts to look to see if anything was missed in initial coding. It will be done by reviewing the initial codes and searching for similarities and recurring themes. Focused coding allows me to better develop ideas about the landscape in which I am working without imposing my own view or interpretation of the issue from the outset. Focused coding will also allow me to condense the data. I will know it is time to move on from focused coding when I am no longer seeing new themes or topics arising from the data and cannot develop any new subcodes from the initial coding data.

The final stage in the process is theoretical or axial coding, in which I will analyze the themes developed in focused coding in order to create a framework, understanding or theory about the data. Development of a theory will help me understand why things happen the way they do instead of merely describing the phenomenon. I will work to find

similarities within the themes and uncover the relationship between the categories outlined in the focused coding process. A theory developed through theoretical coding may help us to understand the decision-making process that students go through when they experience mistreatment and need to decide if they will report it or not. Such a theory can be used to design reporting processes and student supports in manners that will facilitate the decision-making process.

Rigor

Rigor is an important consideration in qualitative research studies to protect against bias and enhance the reliability of findings (Mays & Pope, 1995). While there are many standards of rigor that can be used to evaluate a qualitative study, several that are important and relevant to this study include: credibility, auditability, originality, resonance and usefulness (Charmaz, 2014; Chiovitti & Piran, 2003).

Research that is credible demonstrates an intimate familiarity with the setting and topic. The claims in credible research are plausible based on the data collected and the process of research and this can be seen through evidence provided in the text that allows reader to follow the author's logic and form their own independent assessment and agree with the claims (Charmaz, 2014). Credibility will be demonstrated in this research through situating the study in the historical setting of the study of medical student mistreatment and amongst current literature and findings as part of a thorough literature review. The primary researcher has current and previous involvement in the reporting and monitoring of medical student mistreatment. The researcher will also be performing

key informant interviews following initial data collection and coding to seek feedback on their experiences in dealing with students reporting mistreatment and their understanding of the current procedures and why they are in place in their current structure.

Auditability "refers to the ability of another researcher to follow the methods and conclusions of the original researcher" (Chiovitti & Piran, 2003). In a constructivist grounded theory approach this auditability is not for the purposes of another researcher replicating the research. Indeed, the pragmatic lens I am taking allows that different researchers would approach this research topic in different manners, all of which could yield credible results. The importance of auditability is for the researcher to be transparent in the decisions she made in the research process and for readers to be able to understand how the decisions were made. Specifying how and why research participants were recruited is one method of demonstrating auditability (Chiovitti & Piran, 2003). In this research study, convenience sampling will be used initially meaning any participant that comes forward and meets the eligibility criteria will be included. Snowball sampling where participants are asked to invite colleagues and peers they feel may be interested and engaged will also contribute to participant recruitment. We recognize, however, that due to the very personal nature of these experiences and the concerns of participants about anonymity, there may be limited uptake of peer referral to participate. Participants will continue to be recruited and interviewed until theoretical saturation is reached, meaning the point at which new data does not provide new insights into the issues of theoretical interest (Chiovitti & Piran, 2003).

Originality is the quality whereby research offers new insights in field and the developed grounded theory challenges, extends or refines current ideas, concepts and practices (Charmaz, 2014). A preliminary review of the literature, described earlier in this document, shows significant scholarship in the areas of prevalence of mistreatment and programs in place designed to address mistreatment. There appears, however, to be a gap in depth and breadth of literature referring specifically to reporting and barriers to reporting of mistreatment. This research aims to expand the current field of knowledge surrounding medical student mistreatment and allow for new insights into why students are not reporting these incidents. Is so doing, our institution and others will be able to have new insights in to how their policies and procedures may either facilitate or discourage reporting and how they can create a safer, more accessible environment for students.

Resonance refers to the research findings portraying the fullness of the studied experiences. They should be recognizable by those who have experienced the phenomena and offer them deeper insight about their lives and their world. Resonant research draws links between institutions and individual lives, where appropriate (Charmaz, 2014). The use of key informant interviews following initial data coding will allow input and reflection from members of administration and student support services at the institution to which the research participants belong. A range of experiences from students are being sought including from students who had positive experiences during training, who found they were able to report mistreatment without barriers and from students who experienced mistreatment and faced difficulties in the decision to report it

or the actual process of reporting. The results of this study may help current and future students consider their individual situations and make decisions around reporting mistreatment based on the experiences of study participants.

When qualitative research shows usefulness, its interpretations should have practical applications in the everyday world and the analysis should spark further research into other substantive areas. The research should contribute to the body of knowledge in the field and contribute to making a better world (Charmaz, 2014). This project is focused at one institution to allow results to then shape changes in policy and procedure at that institution in order to address barriers that are identified. The issues that will likely be identified in this project, however, are unlikely to be unique to one institution and could be used as a starting point for other institutions to consider barriers and enablers to reporting mistreatment within their own policies and procedures. The intent of this study is to allow for specific amelioration of students' ability to report and perceived ease of reporting of mistreatment at our institution.

Reflexivity

The genesis of this research arose out of observations I made in my leadership position in student affairs for the undergraduate MD program. In this role, I had opportunity to interact with students and act as a confidential first contact for students wishing to discuss negative experiences during their training. The number of students coming forward to discuss incidents of mistreatment was far smaller than the prevalence of mistreatment indicated by national and institutional survey data. This led me to

speculate on reasons why students would not come forward to discuss mistreatment they had experienced. Informal discussions with students brought up the expected responses of concerns about evaluations or implications for future career planning but also ideas around the administration not being receptive to hearing about negative events in their program or the individuals in leadership positions not being open to feedback or being too friendly and nice to be able to tell bad things to. At the same time, my position as a faculty member allowed me to interact with other medical educators and leaders, who appeared to be a group of individuals dedicated to student learning and wanting positive outcomes and experiences for students learning with them. This contrasts with student reports of negative environments and challenging experiences. I recognize that the facets that are presented to me by faculty when I am in a peer role compared to when I am in a position of leadership or authority may vary. I also realize that how students portray themselves and their experiences to me will depend on the relationship I have with that student, how we have interacted in the past and what potential influence the students perceive I may have on their future. I also will hold a different understanding and interpretation of the significance and gravity of any interaction between a student and a preceptor, based on my past experiences and my position in the medical program at the time. What I perceive to be mistreatment may not be experienced as that by a learner or a preceptor and they may define an interaction as abusive when I do not interpret it in that way.

Memories of incidents that occurred during my medical training that were upsetting and negative also caused me to reflect on how they would likely be classified as

mistreatment under current definitions, but were experienced as acceptable, normal or par for the course in the atmosphere of medical education twenty years ago.

I realize that the need to keep participant identity anonymous is critical to the confidentiality of the study and the ability of learners to speak openly. Within a three-campus setting and due to the small nature of the distributed campus site where I am a senior leader, it is challenging for me to not make assumptions about the identity of individual participants. Despite best efforts to de-identify as much information in the interview transcripts as possible, I am privy to discussions with previous students and faculty members that may contribute to my having a sense of which student may be speaking. There is also a risk because, by the nature of my previous and current roles in leadership of the medical program, students who were not satisfied with my response to situations or did not feel I was effective in advocating for or protecting them may be less likely to come forward with information knowing that I continue to have power and influence within the program. This research places me in an uncomfortable position of recognizing that I may be both part of the solution through my current leadership role but also be part of the problem in this role and in previous roles where students either felt mistreated under my teaching or did not feel comfortable coming forward to me to report mistreatment they experienced. There is also the risk that the results of this research may cause me and my colleagues in leadership to need to seriously reconsider current policies and procedures and this may be met with resistance by institutional leadership and individual faculty. I do realize that, despite honest desire to ameliorate the situation for

current and future learners, the institutional barriers may prove to be insurmountable in enacting the change envisioned by research participants.

Knowledge Translation

The results of this research will not be useful if they live in a thesis and are not used to enact change within our institution and to inform other institutions of potential areas of concern or change. With knowledge about the reasons students choose not to report maltreatment and their suggestions of ways to improve the current system, work can continue examining policies and procedures for reporting student mistreatment and abuse in the Undergraduate MD program at our institution. As a clinician, administrator, researcher and educator with specific leadership roles in this area, we will be able to mobilize this knowledge to improve ease of reporting for students, encouraging faster and more transparent resolution. We also recognize this research may uncover recurring patterns of behaviour in specific education or clinical settings that could be the target of future targeted interventions.

The initial audiences for knowledge translation of this project will include: MD education program administrators, medical students, and preceptors. We will address all these groups through presentation at medical education conferences such as the Canadian Conference on Medical Education and through submission of papers to peer-reviewed publication. Within the undergraduate MD Program, the results of this study may be used to inform changes to process and policy within our institution. Exploration of facilitators and barriers to change through interviewing key informants in leadership positions in the

program may help ensure such change is supported and encouraged at a variety of levels. Members of the research team occupy leadership positions that enable them to influence change within the program and this research has the strong support of the undergraduate MD Program. It will also be important to disseminate this information to students through online portals, targeted communication and presentations in group settings as well as incorporation into orientation activities at various points throughout the three-year program. The intention would be to increase student awareness of current reporting mechanisms, address any identified misperceptions about reporting systems as they exist, engage students in feedback and discussion of proposed policy and procedure changes and ameliorate barriers as identified by students. There may also be a role for having key student leaders involved in institutional changes to allow for peer consultation and distribution of information and to demonstrate an increased willingness by administration to engage students in the process in a transparent manner. Preceptors will be another key target group to involve in dissemination of information and for targeted interventions to address barriers as identified by students. There would be opportunity to share research results and broaden the discussion of the issue of student mistreatment and barriers to reporting through presentation at department academic rounds, annual student advisor training workshops, faculty development events at all campuses and workshops delivered to target audiences. In such presentations it will be important to inform preceptors of the findings of this research and solicit input as to how the findings may be used to improve reporting procedures and program responsiveness to student sin distress. These events will also aim to increase preceptor understanding of the ways in which they may be

contributing to a negative learning experience for students, so that they can adapt their methods and learn more effective ways of interacting with students.

CHAPTER 3: RESULTS

Results for this study were coded from transcripts of 19 current and former medical students of the same Canadian university. Participants identified as male (5), female (13) and non-binary (1) and ranged in medical training from medical students (15) to residents (4) completing their postgraduate training. There was representation among participants from all three campuses of the medical school including the main, urban campus (11) and the two distributed campuses (4). Information gained from review and progressive coding of student data revealed a journey that students undergo surrounding mistreatment and how they process it (see Figure 1). The journey can be represented as an upwards spiral pattern with multiple phases all influencing the central core state of Situating. The spiral is advanced upwards by a cycle of Experiencing and Appraising, Reacting, Deciding, and Moving Forward. The central state of students is the Situating state where students come to understand their position as medical learners, the spoken and unspoken rules and philosophies of their institution and their ability to trust and be safe within this institution. The students are continually in a state of making sense of the new culture in which they find themselves and integrating and storing information and experiences of their own and of their peers to understand their environment. While they are constantly situating and re-situating themselves, students go through different stages that influence their situation and build on previous experiences to bring them to a new understanding of who they are within their profession and their institution. Experiencing mistreatment is the phase during which students are subject to a behavior, event or circumstance that they perceive as damaging, harmful or unfair. While the individual

student definition of mistreatment is beyond the scope of this writing, students had similarities in how they experienced and understood episodes of mistreatment. Many looked to observers or peers in the moment to try and understand what was going on and the absence of action or support by onlookers increased the students' confusion about how to interpret the behavior. The Experiencing phase acts as the catalyst to move students forward through the spiral and may occur multiple times throughout a student's training. Each time, the experience of mistreatment sets forward a new movement upwards in the spiral as the student must react, decide and move forward from this event. The Reacting phase is the time during which students come to understand what has happened to them, decide if they will share their experiences with anyone and potentially reach out to peers, preceptors and family for support. This phase is subject to great variability in response from each student based on their own emotions, interpretation, stage of life and understanding of what has occurred. Students then move on to the Deciding phase. During this phase they must choose if they are going to report the mistreatment and, if so, at what cost and for what outcomes. Their own sense of risk, energy required, and likelihood of a desired outcome plays heavily into this decision. The last phase is the Moving Forward phase during which students continue through their medical training while incorporating this experience into their identity and their own understanding of the culture in which they are learning. This phase may include sense-making or resolution of the situation, or it may leave them profoundly uneasy and mistrustful of the institution in which they are learning. Their future career decisions are often impacted during this phase and they may consider their own possible future

teaching roles and how they will behave when they are in a preceptor position, vowing to do better toward their junior learners when in positions of power as supervisors. A common action during this phase is the sharing of information and experiences with their peers to warn them about known offending person or challenging learning environments as well as their understanding of policies, procedures and administrative support available. This then feeds into a new Situating phase for both the individual and the peers with whom they have shared their experiences. Throughout the Results and Discussion chapters, direct quotations from study participants will be used and will be marked with quotation marks. In an effort to maintain participant confidentiality, attribution to specific participants is not provided in order to prevent the ability to identify participants through aggregation of their quotations.

Situating

Situating is a constant state in which students make sense of who they are as learners, within the hierarchy of their profession, within their educational institution and their individual learning environments. The medical school administration, as understood by the students, is a diverse group that includes physician leaders of the medical school and physician leaders of individual curricular components of the medical school, senior administrative leaders and local support staff that have administrative roles in organizing and delivering curricular components. Together this group holds a voice of the university institution and is seen by students to have power over the educational path of learners.

Many presentations, speeches and lectures are given to students by various leaders in the MD program at the beginning of medical school and the start of each curricular unit when orientation sessions are delivered. In addition, there are presentations given to students throughout the three-year program outlining topics including professionalism and student mistreatment. In all of these sessions, students learn about the expectations of the medical school program, the supports available to them, the avenues to give feedback and expect they will be treated professionally and courteously by preceptors, that their input will be openly received and acted upon by the medical school administration and that when they raise concerns or seek help they will not face barriers to receiving support and assistance from supervisors, administrative staff, student support services and the leadership of the medical school. However, the lived experiences of students and their peers of being mistreated, of being frustrated or feeling barriers in seeking help and in giving feedback that they do not feel is acted upon is in direct contradiction to the messages that were delivered to them formally.

Students situate themselves using information they have received formally and informally from peers, from preceptors and from the medical school administration. This information may take the form of anecdotes of other students being mistreated, stories of experiences with preceptors, advice from supervisors or residents about the best ways to manage situations, formal presentations by preceptors or administration about policies and procedures and informal discussions. Students take all this information and incorporate it into their understanding of the formal and hidden curriculum of their medical training, the rules they are to follow and the culture in which they are learning.

The information they are incorporating often conflicts with the official message of student-centeredness and advocacy the institution espouses and the personal and peer experiences of mistreatment and challenges in dealing with school administration. One participant observes, "…they give us all these talks on wellness and reporting, but when it really comes to accessing that system, it's not as good as it sounds on paper in their presentation." This lack of consistency between messaging and experience sets up an underlying tone of mistrust between learners and their academic institution.

When students report repeatedly hearing from administration of the problem of mistreatment, but they cannot see or recognize the concrete efforts being taken by the institution to address the problem, they report becoming frustrated and disillusioned and develop a lack of confidence in the value of reporting. Many participants express frustration at being part of an institution that prides itself on wellness and student input yet does not seem to reflect that in the behavior of administration, "I feel like there is no end support from the school. And then maybe the school doesn't know what's going on. We all got the sense of, the school knows and just doesn't care." In this study many students generalize their own and their peers' experiences of dealing with administration for more trivial matters as to how easy to access and how responsive administration will be if they choose to report mistreatment. An example given by one student is "when I was on (specific rotation), I was following a patient very carefully and she unfortunately passed away rather suddenly. And I was invited to the funeral and I wanted to attend the funeral, but it would involve missing half a day of clinic. And if I wanted to miss half a day of clinic, I needed to fill out all these forms and I needed to write a two-page essay on

the topics that I would miss that day. And it was just so much work in order to miss that half day." Many of the participants describe a sense of it being difficult to get administrative support for matters they view as relatively straightforward or simple and are reluctant to bring forward more difficult matters to the institution, "I think it's been difficult for us to get support from administration for really benign things. If we get so much pushback for benign things, then the idea of taking something that is so emotionally draining and difficult and reporting that formally to administration, I think it doesn't seem like it's worth it."

Students discuss an increasing gap between themselves and preceptors, particularly administration, and that gap makes it less likely that they will be willing to come forward with concerns. This is well-described by one participant, "I've met many of the people in the administration just over the last few years. And they are all very nice, caring people who obviously are deeply concerned and passionate about medical school and medical students. But there's a distance between them and us that seems, at times, insurmountable". As they hear experiences of their peers, they begin to build a picture of an entire system that is dysfunctional and non-supportive and frame the medical school culture as one where mistreatment is likely to happen and accepted by many.

Additionally, students enter many learning environments having been given advance information about the preceptor and the setting by other learners. They report being particularly disillusioned and frustrated by preceptors that are known by their peers to be repeat offenders in mistreating students yet continue to be active teachers. A student describes, "we were on (specific rotation) and there was this tutor who we felt was really

inappropriate, we actually learned that he had received comments like this in the past and despite those comments was again the tutor for our cohort...They reported it, they tried to make their voices heard, and then nothing tangible happened." Another student describes, "the sense that we would get as medical students is everyone is out really to protect their jobs more than to protect students."

In processing and incorporating all the information and experiences they are receiving, students then discuss coming to understand for themselves a culture within the institution and within medicine where "there is a very rigid hierarchy of, you're the medical student, you are the bottom of the totem pole". They appear to make judgements around trusting, or more commonly mistrusting, the administration and bring this understanding as a backdrop to any future experiences they have during their training. While students appear to be able to re-situate themselves within the institution and the culture based on subsequent experiences, many of them appear to have fixed ideas of what will happen in future situations.

Experiencing and Appraising

The "Experiencing and Appraising" phase of the student's journey is the time during which the student is exposed to behaviour and appraises that behaviour as mistreatment. In this study, students have different thresholds for behaviour they are willing to tolerate and vary in their definitions of mistreatment and abuse. The individual differences in definitions of mistreatment and abuse are being explored in a related research study by Vanstone et al. (M. Vanstone, personal communication, March 26,

2019). The frequency of the behaviour, particularly in environments where a student experiences it repeatedly from the same preceptor, seem to lead students to question if it even represents mistreatment, "and she was yelling at me. But, that's not atypical… we're yelled at constantly. It seems to be normal. I don't even know if that's mistreatment at this point. It's just too ubiquitous." Students also seem to use the spoken and unspoken reactions of bystanders during the behaviour to try and make sense of what is going on and decide about the severity of the actions. When no one steps up to label the behaviour as wrong, students seem to second-guess their own assessment of being mistreated. The experience of feeling mistreated publicly without the support or validation in the moment by by-standers sets up a cognitive dissonance for students that is unsettling. One student observes, "Sometimes you'll have, with the physicians, the occasional nurse witness. Nobody ever intervened on anything. Never, never, never. It's funny because I was here, and I saw an example of mistreatment going on with a nurse and I actually intervened. And I thought, wow, nobody ever did that for me. Which isn't to say that I shouldn't do it for somebody else, but it was just a funny thing." Students appear to begin to tolerate repeated bad behaviour from some preceptors or look to the positive opportunities that preceptor is offering them to try and justify the difficult behaviour to which they were subjected: "I was also thinking, as much as there were bad things that she did there were also good things, like she gave me a lot of opportunities to be on call with her, and she let me go into the O.R. with her. And sometimes, she says nice things to me, she says 'good job' sometimes. So, I don't know if that's an abused victim type of mentality or something."

Students also report preceptors trying to draw bystanders and other students or medical staff into the situation and appear distressed by the feeling of being singled out or picked on, as described by one learner: "… (he) would call me names, basically, and belittle what I would say, or minimise my concerns. He'd be looking to the rest of the group to join in laughing at me, in certain instances." Many students recount instances of people approaching them following the incident to express concern or upset at what they have seen. Commonly it seems to be residents who explain the behaviour, clarify that the student is not at fault in the experience and offer sympathy or support. In some cases, the residents seem to be quite significantly affected by the incident and bring it up to the students repeatedly in the time following. Some students appear to use senior learners and residents as a way of checking-in or confirming their experiences and would ask if there was any way they could have prevented or changed their response to a bad situation. One learner describes, "and then, after everything was done and the surgeon left, the resident came up to me and she said, are you okay? And I said, yeah, I'm fine. And I said, are you okay? And she said, I'm used to it or something. And she kept bringing it up for the rest of the rotation. I think it was upsetting for her, and I mean, understandably so. But she brought it up a lot". Students generally describe residents as helpful and supportive and that they reinforce the lack of fault on the part of the medical student. Students also describe experiencing intense emotions in the moment of the mistreatment and that may result in difficulty continuing immediately in the learning environment, "I wished I'd had the courage to say that it was about the way that you were speaking to me and the level of emotion that he was experiencing in that moment, that was the reason I

felt so overwhelmed. But I didn't have the strength in that moment to share that." Students express concern when the event was unwitnessed because they feared they will not be believed if they tell anyone. One shares her experience, "…or what if they don't believe me, because this is kind of dramatic, her putting her hand over my neck? She didn't squeeze, so maybe that's okay. It was still a gesture. These are kind of the things I was thinking about".

The setting of the mistreatment they experience is also significant because some students describe feeling they were geographically isolated or the only learner in an environment and that this puts them at higher risk and without supports. One lone learner in a setting describes: "I felt really isolated being the only learner and it was sometimes harder in that sense to stand up and identify things." They also seem to recognize that not everyone will interpret the behaviour as mistreatment and there are reports of students second-guessing their own assessment of the situation when peers do not experience it in the same way, "… it was from the back of my mind like, oh, okay, no, if you have this concern, that there seem to be other people who were okay with it. But I remember thinking, oh my gosh, this is pretty terrible, I hope that other people don't have to go through similar experiences because in the moment it was really not a good experience." Students also express confusion and upset at how preceptors interpret their own behaviour and discussed that, at times, that the preceptors appear to turn the situation around to be one of student not properly interpreting their behaviour or overreacting out of inexperience, fatigue or lack of knowledge. One student describes the experience as, "it's interesting to me, about an hour an hour and half after, he approached me and said,

do you have too much on your plate? Are you overwhelmed? You know, you're one of the best medical students here. He kind of went into a flattery mode with me and inquired, like there was something wrong with me about how I had experienced the situation, as opposed to something he had done that had been problematic."

Reacting

The Reacting phase occurs once the incident is over and the student is removed from the immediate experience of mistreatment. This may occur immediately following the incident or may be quite delayed in time and students may not react to a given situation until many months or years following the event. One participant described, "But I think it takes you a while to realise what's inappropriate, and what's part of the environment, sometimes." For some study participants the process of discussing mistreatment they had experienced seems to uncover reactions to it that they had not previously gone through and that they were seeing their experiences in a new way by talking about them with the interviewer. The interviewer, to one participant, suggested, "(the experience) sounds really problematic" and the participant responded, "It's definitely bad, but I don't know if it actually counts" and went on to discuss her perception of the experience.

Regardless of when the Reacting phase occurs, it is one during which both uncertainty and emotion are strong as students respond to the mistreatment they have experienced. Students appear to struggle with understanding the behaviour of the preceptor and why they are being subject to this behaviour. They are unsure at times if

the behaviour even represents mistreatment, "I think that when you're in the scenario yourself, you ruminate and you wonder if in fact it was your own fault and if in fact, you're making it all up in your head and in fact, you're just being histrionic and a troublemaker and that sort of negative self stock I think discourages you from reporting it yourself." They appear to recognize that intense emotions are not commonly displayed by physicians in the clinical environment and seem to question how they should mask or hide their own reactions. Students also seem to try to understand if their own behaviour plays a role in the situation and second guess their actions, "that's not never said, obviously, just implicitly, you want to feel like you're meeting the challenges that are being put in front of you. And if you are crying about your feelings being hurt, then it means that you are weak and you're not dealing with it. It seems more of a … it's saying something about you than about the environment. The environment is a given, and your reaction is your choice, so you can either whine about it or you can just deal with it." Students mention being concerned about the long-term implications of being treated this way and how it could impact their evaluations and their residency choices, "there was this underlying threat from multiple people of it affecting my CaRMS match, affecting my performance on the rotation."

A smaller number of students appear to interpret the behaviour as a rite of passage or sign that the preceptor is taking special interest in them by being extra tough on them. Sometimes they discuss this as necessary to endure in order to prove their abilities to the preceptor or to gain their trust and confidence. One learner describes, "in some cases, if somebody is particularly aggressive and nasty, sometimes just showing her or him that

you can take it, will make the behaviour go away. And I've actually experienced that. There are some physicians who test you, it seems and if you pass, then they stop being aggressive. They see whether you'll crack and then they'll be nice." During this phase students again seem to look to the reaction of those around them about the incident including peers, residents and any witnesses to the behaviour. Some of them use these reactions as ways to understand and accept the behaviour or to guide their own response. When peers have a different understanding of the situation and the culture it appears to normalize the behaviour for some of them. One student shares, "when I mentioned this to one of my friends, he was really interested in general surgery and he's big in that whole surgical culture, and he said, well, it's actually not that bad. This is just normal surgical culture, this is how we talk to each other, like that's just how it goes. And I think having done a lot of electives in this, he recognizes this just being the norm in surgical culture, and he didn't see that as being as bad as I thought it was. He thought of it like constructive criticism, basically. So, that could be something that I think you could even see that as being in the grey zone. I would see that as being, whoa, this is really bad, but to him, it was grey." While in this stage students once again express concern that they will not be believed, and mention worry about not having proof of the behaviour, "and who's to say that if I were to go to somebody else in charge, not only would I be told I'm making this up but perhaps there would be repercussions." Some students report sharing their experiences with a preceptor or advisor but mention confusion and upset if it is met with doubt, denial or explanation that the behaviour should be tolerated as demonstrated when a participant discloses "one of the most disappointing things I think in medical

school was my advisor's response to me which was, I think word for word is, you must be lying, that doesn't go on here." Students describe being unclear on the policy and reporting procedure and appeared to wonder what the process might look like and what possible outcomes of reporting might be describing, "the lack of clarity about the processes for reporting, and what would that would look like. Was there anything else that we're missing?"

Deciding

The "Deciding" Phase of the student experience appears to be the least significant phase of the journey from the perspective of the students. This phase encompasses the time in which the student has recognized that they have experienced mistreatment and then decides about whether to report this mistreatment through formal, or informal, channels at the institution. Students during this phase describe focusing on the emotion, the energy, the cost and the perceived work of reporting, "because going through with a formal reporting process can be very, very stressful … most often students certainly choose not to report because there is so much more stress that we experience, going through with that reporting process." The previous experiences of the students and those of their peers seem to either encourage or discourage students from reporting. Many students share a prevailing sense of futility in reporting or lack of demonstrated action to previous reports that acts as a strong discourager of student reporting. As told by one participant, "…it discourages us from reporting anything at all because clearly a group before us had had the same scenario…They reported it, they tried to make their voices heard, and then nothing tangible happened. So, again, what's the point if we take on all

this responsibility as learners to put in this extra effort to report someone and to go through the hoops and to battle the administration, if at the end it seems like nothing is going to happen?" Factors the participants describe that seem to favour not reporting their experience of mistreatment include: the degree of uncertainty around the process and outcomes, the personal risk and effort of reporting as well as a strong mistrust towards the institution and their commitment to enact change. A participant describes, "…when you feel like you're being mistreated, what you want to happen more than anything else is that you just want it to end. You don't want to think about the scenario anymore. You want to move on. And you just don't want to have to deal with it. And so, the idea of reporting and sort of drawing out this process somewhat unnecessarily is really not attractive." Students perceive a high personal cost in terms of time, energy and emotion but also a real risk to their reputation and their ability to succeed in the rotation or in their medical studies. One student questions, "that's what it came down to, right? It was like, what is going to happen if I report it? Is anything going to change? I didn't believe anything would change. Why would I put myself in a situation like that where if nothing is going to change, I'm just shooting myself in the foot when I've got to work with this person or be a part of this department or want a career here one day?"

Students are reliant upon supervisors for many things beyond teaching and clinical supervision. They need to ask physicians with whom they have worked to write reference letters for them as they apply to residency programs. They require narrative evaluations that speak to their strengths and abilities so that their transcript will help them be competitive applicants for the residency matching system. They are also trying to

impress their talents and virtues to preceptors who may be involved in selecting candidates for limited residency program positions. The competitiveness of the residency matching system, particularly in disciplines with small numbers of available positions, leaves students feeling vulnerable and continually trying to audition for the position they are seeking. There is a real fear from students of the potential impact a preceptor can have on their career trajectory if they are not viewed by that physician as a strong or worthy candidate. In this way, students find the power imbalance between student and supervisor and the significant role preceptors carry in evaluation, reference letters and residency program selection discourages them from speaking out against the behaviour of preceptors, "there was a lot of lack of clarity in terms of what the procedures would be, should I actually report someone, and what impact that would have on me, I think specifically my career and my standing for CaRMS and all of that." Speaking poorly about a preceptor or reporting behavior they viewed as mistreatment leaves them vulnerable to potential retaliation in the form of mediocre or poor evaluations, declining to write a reference letter or unofficially blacklisting the student during the residency application process. If a student is not successful in obtaining the residency position of their choice, they do not know all the factors that played into that decision and would worry that it was a result of them speaking up about a faculty member within a clinical department.

While students appear to recognize that failing to report may result in a continuation of the mistreatment for other learners, they did not express having enough trust in the system to believe that reporting of the mistreatment will result in the end of

such behaviour. One student worries, "maybe it was selfish, because I … maybe I should have been thinking about trying to protect other people from a similar thing, but … it actually didn't really cross my mind at all because I don't know what I would gain from it…I was like, I don't want to put my time and energy into this". If students choose to report, some of them describe an altruistic sense of protecting peers and future learners. They also describe being likely to report mistreatment that they witness towards other learners and behaviours that happen in a group setting than personal or isolated experiences, "I think anything that happens in a group scenario, I'm more likely to report." Students describe a burden of time and emotion to go through a reporting process and their previous experiences with administration for other issues seemed to colour their expectation of a difficult experience reporting mistreatment, even if they have not been through the reporting process themselves. One student states that "given my experience in trying to complete really benign administrative tasks has been so much work, I really have no motivation or desire to voluntarily add that workload to my plate, given that my experience in the past has been sort of it's been a lot of work and it hasn't been a helpful process."

An important finding in this phase is that many students describe a process of testing the water around their decision making over reporting of mistreatment by discussing a scenario informally with a peer, a resident or a preceptor. They may bring up a scenario they experienced in an informal conversation, they may give a hypothetical scenario, or they may share a piece of their experience in more causal conversation. Often the person they bring this up to is a resident with whom they are working.

Residents are closer in training to medical students and may be seen as safe and approachable. Students and residents are often working closely together in the clinical setting and may be part of the same clinical team for many weeks. They also spend long on-call shifts together which further promotes bonding and ability to discuss a range of topics more easily. Sometimes the student will test the water with a preceptor with whom they feel particularly close or safe. They may bring up information about a current situation or something that has happened in the past to them or to a colleague. They tend not to formally request input or advice on the issue but rather to put out some of the information to see what response they receive. They then use this response to decide if they will share further information, ask for assistance formally or if they will shut down any further discussion of the topic with this individual, or all together.

The response they receive in this testing the water situation appears to weigh heavily into their ultimate decision around reporting, "I casually shared it with a member of the staff. And, unfortunately, that staff member did not have a reaction that I felt was supportive, which led me not to share any further at that time." In many of the student experiences, they share that they are discouraged from formally reporting an incident either because the person to whom they are speaking downplays the event or doubts the scenario as mistreatment or they advise the student that the reporting process is not worth the time and effort it takes, "I have sought counsel, but the consensus among the physicians I've talked to is that complaining is more trouble than it's worth." Many of the residents and preceptors with whom students are testing the water are unlikely to recognize this is what is going on. Their response of normalizing or minimizing the

student's experience is unlikely to be because they find mistreatment to be acceptable, but rather because they themselves have experienced similar events and they want to show solidarity and support for the learner. They may also be considering the potential risks and implications of reporting mistreatment as well as bringing in their own experiences in various settings when they respond to the student. This is one potential point of intervention in the medical student journey where residents and faculty members could be trained to recognize the testing the water scenario as it is occurring and learn responses that are more likely to keep conversation open and support students in being open to a range of possible decisions around action.

Moving Forward

"Moving Forward" is the stage during which students come to enough of a resolution of the situation that they can proceed within the same system to continue their medical education. Sometimes this resolution happens as a result of reporting their experiences of mistreatment, but this does not seem to be the case for most students. Some students appear to recognize that the decision to not report means that action cannot be taken to improve the situation, but they discuss their resignation that nothing would happen anyway, "So that's really frustrating and to be honest after that experience, when I experienced other things in the future in further rotations, I stopped reporting it because what was the point." Being discouraged from reporting mistreatment or not seeing concrete action as a result of reports seems to fuel the students' mistrust of the institution. Students discuss having a strong desire to know the outcome of their reports and appear to look for concrete evidence that their concerns have been heard and acted upon. When

this action does not occur in a way that is recognizable to the students or on a timeline that the students are able to witness, they students appear to use that information to reinforce their mistrust of the institution. One student suggested, "I think the person who makes the report should have some sort of feedback about this is what was done. And it should be visible to the community, like to the medical students and the learners in general, that these reports do lead to change because right now it doesn't seem like there is." Personal or peer experiences of mistreatment in certain learning environments appear to also play a factor in the career decision-making process of students. Student who experience positive learning and working environments mention they are more likely to pursue residencies in these areas. Disciplines that students specifically note to have supportive and positive environments and where they have preceptor role models that are encouraging to them are family medicine and pediatrics. One student states, "I've seen rotations work and I've experienced really great treatment and respect. And I know that it's not a sort of pie in the sky ideal, it's very possible. And it makes all the difference. And those rotations I've had have reassured me in my decision." For disciplines where students describe more mistreatment, particularly surgical and high acuity specialties such as ICU and ER, some students discuss choosing to not pursue careers in those disciplines or the need to internalize the atmosphere as one which is expected and required for further learning and come to normalize the behavior within that environment. A participant describes, "…in some way it just made me a little bit stronger and a little bit tougher, and that I was like, okay, look, you're going to have to learn how to deal with this. If you're going to work in an environment like this, have a mechanism of coping."

Regardless of the residency interests of students, students discuss the reality that they need to continue within the institution and even within some of the difficult environments to complete their training.

Some recognize their time within the environment, and institution, is limited and take the approach of keeping their head down, working hard and enduring in order to complete their learning. They describe various coping strategies including, "I just became very focused and not necessarily as a very positive coping mechanism, but I really threw myself into my work, really focused on that…I just kept my head down, pushed forward, and threw myself into my research and stuff like that."

Other students describe a significant amount of mistrust and disillusionment with the institution and are anxious to leave, "It made me a lot less invested in my learning, it made me really disillusioned with University-X" mentions one student. Several students mention that they would not consider pursuing further training at the institution because of their perception of the institutional culture, "there really was no way I was going to stay at University if I had a choice in the matter." As students continue their medical learning, the support of peers appears to be a significant factor in helping students cope with the mistreatment. Student report a sense of solidarity when they recognize their peers experience the same behavior and some of the most significant resolution mentioned by students is knowing they are not alone in their experiences, "the biggest thing that helped me was my friends, because… my classmates. You would kind of know who was going through what and when you went through this and then you know this person is going through this". The experience of mistreatment appears to also influence

some students in their decisions around future careers as preceptors. "I think, if anything, this forced … pushes me more towards a teaching career because I, on one side, say look at … so I may not be a good teacher, I have no idea. But I know that I would not abuse my students…I would at least be able to offer them a chance to learn that perhaps I was not given myself."

The medical training system is one based in many ways on hierarchies of knowledge and experience. There is a long tradition of an apprenticeship model where more senior physicians and trainees supervise and pass skills along to those more junior. Medical students come to learn this hierarchical culture through their experiences in various environments in medical school. Throughout each phase of the students' journeys they are figuring out their place within their learning environment at that moment and their place in the hierarchy of medical education, "as a senior or as a staff, if someone says something to me, I know my place and I know that I've earned to be where I have, as opposed to as a medical student or resident, where I haven't had that yet." They are Situating themselves within their institution and the profession of medicine. One student observes, "as a person, you are less than a physician. The physician has passed some moral code that you are not part of…". As they progress through their medical education, students continue to Situate and re-situate themselves based on their own experiences and observations and the experiences shared with them by their peers. The core task of Situating continues throughout their training and can help learners make sense of where previous learners have been and the direction in which we might be headed: "And things probably have gotten better because I do hear people talk about

what it was like when they were at my stage of training, and things do sound like they're different in a lot of ways so maybe it's just a slow thing that you don't notice over time. Maybe we're all waiting for this one big thing to change, and maybe we just have to look back in five years."

Student-identified Supports and Suggestions

Students in this research were very forthcoming with their experiences of mistreatment and how it affected them. They were also very open in discussing the strengths and supports that helped them move through the experience and continue to function in the learning environment. The supports identified by participants can be classified into those provided by peers, by family, by preceptors and by the institution. Table 1 outlines the sources of support identified by students in coping with mistreatment and what supports each group was able to offer.

Source of Support	Types of Support Offered
Peers "It was a very strong camaraderie, and I appreciated that very much because sometimes it made you less along, because other people know what you're going through"	• validation • shared experience • identification of unacceptable behavior • understanding of reporting process • safe space • informal network
Residents "The resident who was on my team immediately said it wasn't my fault and that was unfair, and his behavior was not appropriate, and I didn't do anything wrong. The other two residents sort of chimed in that they felt the situation was	• validation • bearing witness to events • removal of self-blame by students • first line for reporting • testing the water • shared experience

unfair, at least his behavior was unfair and totally not appropriate."	
Family and Friends "My family and friends and the host family who I was staying with, they were really supportive"	• validation • emotional support/encouragement • distraction • unconditional love • host families when on rotations away may understand the context/personalities • foundation of emotional wellness
Preceptors "that was an advisor…I felt comfortable going to anything to her…anytime I had anything going on personally or professionally, she was great. I felt really lucky to have been linked up with her."	• positive mentoring experiences • personal relationship/connection with preceptors led to increased ease in sharing difficult experiences • allow students to leave clinical duties to seek help without questioning • informal check-in
Institution "It was great that the program…had a debriefing session, like a confidential debriefing session with the program assistant and we were able to talk about residents who were difficult, talk about our negative experiences with staff, and so that feedback would be given back to them in a way that wouldn't affect us, like, it would be anonymous and confidential."	• debriefing opportunities – formal and informal • approachability esp. by Program Assistants • ability to talk with Student Affairs when concerned about a colleague • accessibility of support services • past positive experiences with administration lead to more willingness to engage in the future

Table 1. Sources of support identified by medical students to cope with mistreatment

Students also made many suggestions about possible steps that could be taken by the institution to address their concerns about institutional approach to mistreatment (see Table 2). Students expressed that these mechanisms are largely the responsibility of the

institution, but some may also involve peers, residents and preceptors at individual and group levels

Mechanism	Student Suggestions
Anonymity "I also think it would be nice…having a way for a student to anonymously report what happened, and then to have to that as an opening for supportive counselling"	• anonymous reporting • anonymous place to ask about next steps and outcomes • Option for anonymous or nominal reporting options • Confidential person to explain next steps in reporting and outcomes at arms' length from program/Anonymous advisor "even a confidential person who can tell you what the next steps are going to be I think is helpful. So, just like, this person you can go to, you can kind of tell them anything, they won't tell you anything, but they'll give you advise about the next steps…"
Procedural Changes "I think there should ben an option for immediate reporting in that I don't have to wait for the end of six weeks to get the tutor Eval in order to have my voice heard. I think there should be an option for multiple modalities. In some cases, I might just want to write a quick email to describe what was wrong and why I felt I was mistreated or why I felt someone else was mistreated. In other cases, I actually don't want to put that in writing, and I want to talk to someone on the phone about what happened and how I felt and again why I felt I was mistreated."	• Increasing reporting of mistreatment on evaluation and end-rotation forms so more opportunities to formally consider the subject • Reporting through multiple modalities and more frequently during rotation other than final evaluation form (e.g. phone, email, in-person, immediate or delayed) • Ability to report witnessed mistreatment towards peers/other learners
Accessibility	• increased ease of access to personal counselling

"So, I didn't really have anything to report, but I felt that process was really easy and really helpful. I was able to make an appointment easily over email. I was able to leave clinic. I just told them at the clinic that I had an appointment and there were kind of no questions asked. I was able to go to that appointment and I didn't have to fill out a leave of absence form, and I felt that was like a really easy and productive experience."	• increased accessibility to student support services on site especially in distributed learning environments • decreased administrative burden of reporting • increased practical accessibility to reporting process
Outcomes "Give a real example of someone files a complaint and something was actually done about it and then you can circulate that to the students who see that, oh, the medical program actually did something."	• Seeing examples of other situations where students reported and understanding process and outcomes • Feedback on what happens with reports and increased visibility of outcomes to students • Consequences to preceptors for mistreatment of students • Increased vetting of preceptors to remove preceptors as preceptors if they are repeat offenders • Formalized reports of what was brought to programs attention and what was done about it
Awareness "I think it would be useful to make those resources as transparent as possible and continue reiterating that these resources exist. I think when you get halfway through clerkship, you forget the conversations that you had at the start of clerkship. I think just reiterating, even through emails, that some of these support services exist might be useful."	• increased awareness of presence and role of Faculty of Health Sciences Professionalism Office • reinforcing supports available and reporting systems at intervals throughout clerkship • increased publicity of who to contact with concerns in each clerkship rotation (during orientation, wrap up, large group sessions) • Increased clarity of policy around mistreatment and wide dissemination of policy • Improved clarity, information about reporting process

Education "maybe tutors can receive some kind of training, other than the limited training that I believe they receive about group process and PBL. There's other kind of training about power they could probably go through."	• increased education to students about mistreatment and their rights • mandatory learning modules to all preceptors re mistreatment • training modules on learning styles, constructive feedback for preceptors • case-study modules for preceptors
Support "I think we would have more of a check-in system, where you know, hi, how are you, without discussing things in detail. Because nobody wants to discuss these things in detail." "And I think there should be services, more so available to students for counselling and support than there currently is."	• Balint groups in clerkship • Formal peer mentoring program • Resources to promote peer support • Linking clerks to resident mentors • CMPA equivalent for students (anonymous, supportive, advice-giving) • Small group debriefs at end of rotations • Check-in system, esp. if far away or isolated, without asking for formal reports (up to weekly to see if concerns when on away rotations) • Confidential debriefing session with rotation admin staff
Culture "So, maybe just encouraging staff, physicians, nurses, residents, just to be kind…It's like the whole culture has to change. It has to focus on well-being and not on other values such as elitism and other aspirational values	• Foster a culture of kindness • Restorative justice and mediated conversations with preceptors

Table 2. Mechanisms suggested by medical students to improve reporting of student mistreatment

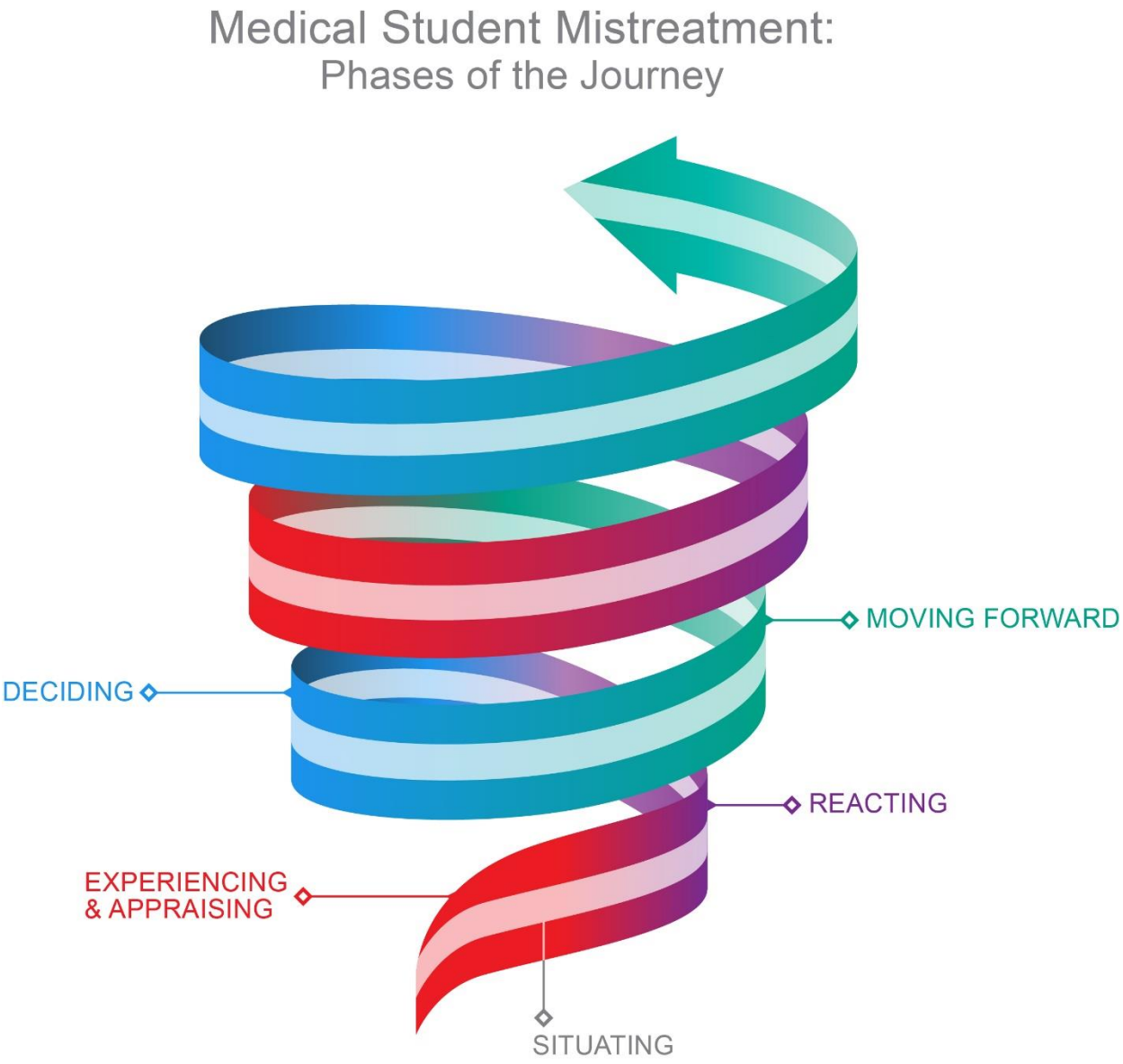

Figure 1. A Five-Phase Description of the Medical Student Journey through Mistreatment and Reporting

CHAPTER 4: DISCUSSION

Summary of Findings

This constructivist grounded theory study, using data gathered from interviews with 19 current and former students of a single Canadian undergraduate medical program, characterized the medical student journey of mistreatment as consisting of five phases. Our theory begins with *Situating*, the underlying phase that occurs longitudinally throughout a student's medical training. Medical students situate themselves through a process of making sense of the environment in which they are learning and their place within that environment, taking into account the formal and informal information they receive from their own experiences, those of their peers and what is taught to them by the institution. The second phase is *Experiencing and Appraising* which occurs when students encounter an event that they perceive as damaging or harmful. During this phase, students use their own understanding and the reaction of witnesses to interpret the behavior. Following the experience and appraisal of mistreatment is the necessity of *Reacting.* As students come to understand what has happened to them, they determine if they will share their experiences with anyone and who, if anyone, they will reach out to for support. This phase may occur immediately following the experience or may be delayed for short or long periods of time. The fourth phase is that of *Deciding* where student choose if they will report the mistreatment. Understanding where they might report and weighing the risks and potential benefits of this process is a key part of the Deciding phase. The final phase is *Moving Forward* during which students continue through their medical training, incorporating this experience into their understanding of

the learning culture and deciding how it will influence them. This cycle is iterative, with each subsequent experience of maltreatment informed by previous experiences, appraisals, and reactions. Likewise, the perpetual phase of *Situating* is informed by prior experiences and continues to shape future experiences.

Throughout the interviews, students were able to identify varying sources of support. These supports came into play in all phases of their journey. The strongest source of support throughout all phases was identified as the support of peers. Students also identified changes that could be made to address the issue of mistreatment and these changes were most relevant to the *Deciding* and *Situating* phases. They expressed that many of these changes are the responsibility of the institution but also saw a role for contributions from individuals including peers, residents and preceptors. These student supports and suggests will be further explored below.

Discussion

The literature regarding theories of medical student mistreatment remains in its infancy. There are many theories from the worlds of social science and business studies that can be applied to this field. In this discussion we will examine the concept of psychological contracts and how the experiences of medical students experiencing mistreatment may result in breaches of this contract with resultant impact on the relationship of the student to the institution. There are also methods reviewed that can help maintain and strengthen this contract between learners and the institution in order to lessen the mistrust that occurs through contract breach. The idea of Educational Alliances

will be explored as it relates to the relationships between individual teachers and learners and how breaches in this alliance can impact current and future learning experiences. Organizational trust, as a necessary component of cooperation and performance within an institution, will be described as well as outlining the risks to students and the institution when this trust is not present. The concept of Organizational Compassion will then be discussed in recognizing how an institution, and not just its component members, can collectively notice, feel and respond to the pain of students through policy and procedure. We will examine the sources of support identified by medical students and look at some practical ways these can be strengthened within an institution. Lastly we will consider the implication of these findings for the medical education setting by exploring student suggestions to improve the role of faculty, student support services, mistreatment reporting, feedback and awareness of outcomes that include examples of programs put in place within our institution and others that serve to strengthen the student experience during medical school.

Throughout this discussion it is worth noting that the preceptors we are discussing may be teachers who have high volumes of learners working with them individually or in small groups (such as internal medicine physicians working on a clinical teaching unit that may have 4-8 learners at any given time learning on the unit and the unit has learners continually). Preceptors may also have very few teaching exposures and work one to one with learners in a clinical setting very infrequently (e.g. once every year or two). This means the familiarity of preceptors with university policies, the range of student abilities and challenges and with teaching strategies might be quite variable.

Breaching and Maintaining the Psychological Contract

Canadian students enter medical school having had some previous experience with post-secondary education given that all Canadian medical school require a minimum of three years of undergraduate university study before medical school. Some students may have a great deal of post-secondary experience with one or more graduate degrees under their belts before medical school and potentially experience in the world of work. Entering medical school, however, represents a different sort of educational experience regardless of the past studies of each student. Medical school acceptances are highly sought-after, and, at our institution, there is an acceptance rate of approximately 4% of applicants. Entrance into, and successful completion of, medical school is a gateway to joining a highly valued and respected profession, that of physician. The workload during medical school can be considered quite onerous and the responsibilities, particularly as students recognize they are directly influencing the health outcomes of their patients, carry a gravity that may not be present even among other professional university programs. We can view the interaction between medical students and their medical school, therefore, as a relationship with high stakes, and one in which both the student and the institution have strong responsibilities to each other in order to ensure successful outcomes. The relationship between medical students and the institution in which they are learning can be viewed as a form of psychological contract, as described by Denise Rousseau (Rousseau, 1989). A psychological contract is "an individual belief in a reciprocal obligation between the individual and the organization" (Rousseau, 1989).

In the case of medical training, "the organization" is the medical school in which the students are learning. The idea of a psychological contract between medical schools and their learners is growing in awareness and has even been reinforced in some institutions, including our own, through a white coat ceremony. The white coat ceremony is held at the start of a medical student's training and is an event in which students are welcomed to the profession and the responsibilities that lie therein through speakers, the donning of white coats presented by senior physicians, making a public acknowledgement in front of friends, family and faculty that the students willingly assume the obligations and responsibilities of the medical profession and celebration of this new start. The white coat ceremony originated in 1993 in New York's College of Physicians and Surgeons and was supported by the Arnold Gold Foundation that identified this ceremony as helping to "create an environment which fosters establishing a psychological contract for professionalism and empathy in medicine" (Gillon, 2000). While the psychological contract may indeed be with the medical school as the institution, students have the most experience with the institution through their interactions with individual leaders and teachers. The beliefs, behavior and intentions of the institution, are concretely demonstrated by the beliefs, behaviors and perceived intentions of the faculty and administrators within that institution. Misbehavior of individual educators reflects not only on themselves but also on the institution as a whole.

Medical students enter medical school with expectations about how they will be treated and protected by their institution. These expectations may be based on experiences they have had with other educational institutions prior to medical training,

discussions with other medical students, information found online or in publications put out by the medical school, and information shared about the school by other sources. Early in training students work to incorporate communication from administration and the leadership of the school into their understanding of what can and should be expected during their training. These communications may come in the many forms including: emails, brochures, policies shared with students, and information in lectures. Several participants in this study discuss the disconnect that occurs when the information that is given formally (through lectures, emails etc.) about how students are protected and supported does not match with the actual experience of them or their peers when they were subject to mistreatment, had difficulties in reporting it or could not find support when they were seeking it. This disconnect represents a breach of the psychological contract because the student perceives the institution did not hold up their obligation of professionalism and empathy. When this psychological contract is violated, it causes damage between the organization and the individual and subjects the individual to a form of trauma (Rousseau, 1989). This violation undermines the trust and good faith in the relationship between institution and individual and can cause the individual to feel anger, resentment and a sense of injustice (Rousseau, 1989). Contract breaches also lead to decreased psychological well-being, decreased trust in the organization and more cynical attitudes towards the organization (Coyle-Shapiro, 2008). The fulfilment of the psychological contract can contribute independently to the prediction of trust, commitment and satisfaction an individual experiences within an organization (Rousseau & Tijoriwala, 1998).

As our data shows, medical students understand what to expect and receive this information formally and informally in the *Situating* phase of their journey. Situating can be seen as the phase in which the psychological contract is formed and re-formed as the student proceeds through their training at the institution. The *Experiencing and Appraising* phase of their journey, where they are subject to an act or multiple acts of mistreatment represents a breach or violation of that psychological contract. It is understandable, therefore, that in the *Reacting* phase students would feel strong negative emotions towards the institution and in *Moving Forward* they would have a decreased sense of trust, commitment and satisfaction within the institution. Participants spoke of being eager to leave the institution or not wanting to come back for further training when they had negative experiences during medical school. Some participants also shared positive experiences of reporting in which they felt supported, encouraged and validated by the preceptor or administrator to whom they brought the concern. This allowed them to feel safe in the institution and that it was worthwhile bringing forward their concerns. Students also expressed optimism and gratitude towards the institution when they saw evidence of senior leadership taking concerns seriously and working towards changing attitudes and behavior that may have been tolerated in the past. In these ways we can see the psychological contract being strengthened.

In cases of psychological contract violation, employees tend to blame the organization less if they see the breaches of the contract to be as a result of a misunderstanding or of circumstances beyond the control of the organization rather than a willful act by the organization (Aselage & Eisenberger, 2003). How might this be applied

to the situation where a learner feels the medical school failed to act on reports of student mistreatment by a preceptor? The student who sees this as a willful act by the medical school would therefore be more likely to blame the medical school and be suspicious or wary of future interactions with the school or with that particular preceptor, even if they do not have any personal experience of mistreatment. On the other hand, fair procedures for dealing with contract breaches have the effect of reversing the negative reactions of the individuals towards the organization and demonstrate that the employee is still a valued member of the organization (Aselage & Eisenberger, 2003). A study of university students revealed they understand the fairness of their learning environment in terms both respectful partnership of staff and students as well as systemic fairness for accessing information and for effective problem-solving procedures (Lizzio, Wilson, & Hadaway, 2007). In this way, having a process for dealing with complaints that is seen by students to be respectful and effective would be more likely to be viewed by students as fair and could serve to maintain or restore the trust of the learners in the institution, even if they have experienced mistreatment.

Educational Alliance

There are many experiences that influence the journey of a medical student. As we have seen, the interactions with individual teachers can strongly influence the trust that learners have towards the institution, but also on an individual level with that teacher. This theory shows that the student may spend significant time appraising the event and understanding whether or not it represents mistreatment. Even if the student decides they will not *appraise* the negative event as mistreatment, there remains an impact on that

student that they will incorporate as they again *Situate* themselves within the institution. At an institutional level, this was reflected through ideas of mistrust towards the institution and anticipation of future negative interactions. At the individual level, such negative experiences can also influence the relationship of learners to their preceptors currently and may also influence their future ability to trust and form safe relationships with future teachers. This relationship and the possible breach can be viewed through the lens of an Educational Alliance. The concept of an Educational Alliance is a relatively new concept in medical education and is used when discussing the feedback process. First described by Telio and colleagues, the Educational Alliance looks at the feedback process by understanding the relationship between the teacher and the student and how this relationship impacts the student's ability to receive and act on the feedback (Telio, Ajjawi, & Regehr, 2015). In this model, feedback becomes viewed as being negotiated within the context of a supportive educational relationship between teacher and student (Telio et al., 2015). The quality of the relationship between teacher and student is important in the student's interpretation and use of this external information to change their behavior and the quality of this relationship must be assessed from the trainee's perspective (Telio et al., 2015). The learner is assessing and judging this relationship from the first meeting with their teacher and is exploring the supervisor's commitment to the learning process (Telio et al., 2015). If we view feedback as a social negotiation occurring within the context of a relationship, then Telio and colleagues recognize that the learner must like, trust and value their preceptor and believe that those feelings are mutual (Telio, Regehr, & Ajjawi, 2016). Learners are constantly judging the credibility

of the preceptor in terms of both their credibility as a clinician and as a partner in the educational alliance (Telio et al., 2016). These judgements affect the content of the feedback given in the moment and also future learning interactions with that teacher (Telio et al., 2016). Learners with a weaker educational alliance with their preceptors were more guarded in their disclosures to teachers, were unreceptive to feedback, were avoidant of the preceptor and tended to not seek feedback from them in the future (Telio et al., 2016). Those trainees with stronger educational alliances were more likely to seek external feedback, engage in open and constructive feedback encounters and were more able to provide focused self-assessment (Telio et al., 2016). Learners were found to test their supervisor's commitment to the educational alliance early in the relationship through partial disclosure of personal information or offering mildly contradictory opinions. By so doing they were assessing their supervisor's capacity and willingness to develop a strong alliance (Telio et al., 2016).

Educational alliances can be seen as important concepts when considering student mistreatment as well. The student begins assessing the teacher's commitment early in the relationship and explores their commitment to the education process. When a learner experiences a negative interaction early on with the supervisor, as is the case when a student experiences mistreatment at the beginning of their rotation, it will lead them to assume a weak educational alliance in that setting. A student may have already formed what they consider to be an education alliance with their preceptor but then an unexpected act of mistreatment, as demonstrated by one of our participants who felt her preceptor made advances towards her during a visit to a remote clinical site, can serve to breach the

existing education alliance which will then influence the learning environment for the remainder of the rotation and impact the student's ability to receive and internalize feedback from that preceptor.

The testing that learners were seen to do early on by partially disclosing personal information in the educational alliance model is similar to the testing of the waters that students discussed in reporting mistreatment. They describe using an informal discussion or posing a hypothetical question to a supervisor to gauge whether or not to formally disclose that they have been mistreated. In our study we found that this partial disclosure often resulted in the student being deterred from pursuing formal reporting processes. The resident or preceptor that they approach would often normalize the behavior, share their own similar experience or try to redirect the student in an effort to focus them on something less upsetting. While it may have been well-intentioned by the resident or preceptor, the effect on the student was to minimize the significance of their experience or to discourage them directly from pursuing a formal report. In the same way this personal disclosure can strengthen or weaken the educational alliance, so too can this disclosure of mistreatment, in an informal manner, strengthen or weaken the student's perceived connection with and support from the individual preceptor and, by proxy, the medical school as an institution. The minimization, normalization or dismissal of the description of mistreatment gives the student the message that they cannot or should not bring this forward to medical school administration and perhaps even that they should tolerate such behavior as an expected part of medical training.

Students in this study stated that their personal relationships with and connection with preceptors made it easier to share difficult experiences. The long hours of clinical duties and intense and emotional nature of some clinical experiences can lead to strong connections being formed between students and preceptors. While these relationships are often supportive and professional, paradoxically there can be a risk that a relationship that is overly personal could be a risk factor for mistreatment or make it difficult for the student to come forward with concerns to their preceptor. The power differential that exists between preceptor and student must be kept in mind by the preceptor and factored into decisions around boundaries and behavior. It is important for both students and preceptors to understand each other as individuals and have a sense of each other's lives outside of medicine to help contextualize the learner and the teacher. It is not necessary, nor appropriate, for the student or teacher to insert themselves into each other's personal lives. The boundaries in the student-preceptor relationship appear modelled, in some ways, after the boundaries in the physician-patient relationship and the boundaries are defined by the culture within the workplace. Some clinical settings are quite informal and provide the opportunity and space for much sharing of opinions and experiences while others are faster paced or higher intensity where there is less opportunity to bring one's own experiences into the setting. The research into educational alliances would also support that creating strong relationships between learner and teacher make it easier for the student to seek out, receive and act upon feedback that is given. Strong educational alliances should be encouraged in faculty development sessions and new faculty orientation training with an emphasis on discussing the important positive outcomes of

such an alliance. When discussing relationships between students and preceptors in faculty development training sessions and teaching sessions to students it is important to define, discuss and emphasize healthy boundaries and limits within these relationships and respect the inherent power differential that exists between student and preceptor.

Organizational Trust

Organizational trust is the expectation within an organization that an individual is willing to allow themselves to be vulnerable and can expect the organization to be trustworthy (Costa, 2018). Trust within an organization is important because it increases cooperation and performance (Dirks & Ferrin, 2001). Trust affects both how one interprets past or present actions of another party as well as how one assesses the future behavior of another party(Dirks & Ferrin, 2001). With high levels of trust, one is more likely to respond favorably and interpret positively the actions of another compared to relationships with lower levels of trust (Dirks & Ferrin, 2001). As earlier discussed, within medical school the institution is represented by the behavior and attitudes of individual preceptors that students encounter. Students view mistreatment perpetrated by one individual preceptor as a reflection of the medical school as an institution. Particularly when there seems to be a disconnect between the information that is delivered in print, email or formal teaching sessions and the experiences that students and their peers have during their training, students in this study based their assessment of the institution on the events that transpired to them or their colleagues and used these personal experiences to make judgements about the institution. Medical students who experience mistreatment within their medical school are therefore less likely to trust the

medical school and its leaders and faculty because of the negative treatment by individuals within the school. The theme of mistrust was strongly echoed in the responses of research participants. This mistrust of the medical school as an organization, can lead students to negatively interpret past and future behavior they experience at other points in time during medical school. If the institution is able to build and nurture trust among its learners, it may result in students being less likely to interpret the difficult or unproductive behavior of a preceptor as mistreatment. This may not necessarily be a desirable outcome as the result of trust-building between medical students and medical school should not be the tolerance or acceptance of mistreatment. Rather, there are some situations that occur between learner and preceptor that may not represent mistreatment but may be unproductive, poorly worded or challenging. If the student had high trust in the medical school, they might be able to approach the situation looking for contributing factors and find ways to address the behavior in the moment or seek support from other sources. If the student mistrusts the medical school, they may be more likely to experience this behavior as mistreatment and to feel isolated or unsupported in the situation.

Given that organizational trust improves individual performance within an organization, establishing and maintaining this trust between medical students and medical school can act to improve the performance of medical students. Such an atmosphere, where students are willing to be vulnerable in their learning and believe their preceptors and learning environments are trustworthy, can also foster high performance of students. Students who are performing at a high level are more likely to respond to

feedback, be aware of their own limitations and seek out assistance when required. This could result in improved patient safety when students are not afraid to ask for help and feel safe in admitting their limits with their supervising physicians.

Organizational Compassion

Beyond maintaining a psychological contract with the organization and having a sense of trust in the organization, organizations require compassion. Compassion is a powerful, positive force in organizations (Kanov et al., 2004). Organizational compassion, as described by Kanov and colleagues in 2004, happens when "members of a system collectively notice, feel and respond to pain experienced by members of that system" (Kanov et al., 2004, p. 808). This is particularly important in organizations in which dealing with human pain or suffering is central to the organization's mission, such as health care organizations (Kanov et al., 2004). In such organizations, collective compassion allows for sustainability and effectiveness of the organization despite the challenges of everyday business. Medical school, therefore, can be seen as an organization where organizational compassion is of particular importance to maintain the smooth functioning of the members and the body as a whole.

Organizational compassion occurs through three subprocesses: noticing, feeling and responding (Kanov et al., 2004). Individuals within the organization can act on their own in compassionate ways that notice, feel and respond one on one to the suffering of another within the organization. That is, however, not sufficient to represent organizational compassion, even if many individuals within the group act in this manner.

Organizational compassion requires the group to facilitate collective action and reflect the noticing, feeling and responding to the pain of its members in ways that can only be accomplished by the organization. While it is up to individuals within organizations to attend to each of these subprocesses, it is not enough that the only action to be taken is done by individuals. Organizations must collectively demonstrate that they are noticing the pain of their members and attending to it. This can be done through sharing of information, the design of space to allow for gathering and sharing and designing policies and procedures that respond to that pain (e.g. leave of absence policies). The feeling of compassion must also happen at both the individual level at the corporate level where senior leadership demonstrates their concern and caring, where members are encouraged to express their strong emotions, and these are valued and held safe and where leaders model the behavior they would like to see. Organizations must also show their collective response to the suffering of their members. This can be done through policies and practices that acknowledge and respond to employee suffering with compassion and by promoting a culture in which employees believe they are working together to alleviate pain in their members (Kanov et al., 2004).

Many physicians demonstrate a high degree of compassion in their individual interactions with their patients and their students. This, however, is not sufficient for the medical school as an institution to demonstrate organizational compassion. In medical education, organizational compassion could be demonstrated by faculty members and program leaders explicitly addressing the challenges and suffering of their students. This must be done, however, in an atmosphere of honesty and genuineness or else it runs the

risk of contributing to the perceived hypocrisy that students feel when stated messages about being safe to make mistakes or speak up about concerns are not consistent with student experiences when they seek support or assistance. Medical school leaders can create space within the curriculum and required academic activities to allow students to share their challenges and feel their voices are heard. Explicitly discussing ways that leaders are working towards change, including through conducting research such as this, demonstrates to learners that they have advocates within leadership. Policies that affect students directly, such as leave of absence and reporting of mistreatment policies, should place as little burden on the students as possible, recognizing that these policies are only used by students when they are facing a challenge or difficulty. Developing these policies with direct input from students and considering the many different stressors that medical students face throughout their students allows the policies to be student-centered and to promote the healthiest environment to foster learning and growth.

Recent revisions to the leave of absence policy at our institution, in response to student concerns, have attempted to make them more easily accessed by students with fewer administrative barriers. Recognition of the range of reasons for which a student may need to be absent from learning activities and ensuring the leave of absence policy broadly encompasses these reasons, is a form of **noticing** the pain of students. Increasing the amount of time students have away from studies by adding in a winter break week and relieving students from any mandatory education activities during the residency interview time period are ways in which our institution has **responded** with compassion to the stress level of students. It will be important to remain vigilant to any changes that

are made out of organizational compassion in order to ensure that the new policies easy to understand and that program leaders enact them efficiently so as to remove administrative burden from students.

A proposed addition to the curriculum in which faculty members, particularly program leads and medical school leadership, share their difficult experiences and stories of past challenges and failures with students is another way in which our institution can be seen to display organizational compassion. It would be important that these discussions do not come across as senior physicians sharing their own horror stories of abuse and normalizing the experience. Rather, this is an opportunity for students to see that these physicians, who are viewed as successful and accomplished, have faced personal challenges in the past that they may have seen as insurmountable at the time or that may have had a significant impact on their career paths. By having senior leadership share personal challenges, pain and obstacles, this promotes an environment in which students are also able to share these difficulties with faculty and each other and encourages open dialogue and support.

Sources of Support

In this study, students identified sources of support they felt helped them to cope when they experienced mistreatment. The main sources of support participants identified were peers, residents and friends and family. There are many ways medical schools can encourage students to make use of these supports and can incorporate them more formally into the curriculum or structure of the medical school. Our institution, and other medical

schools, have engaged peers, residents and friends and family to support students in innovative ways and there remain many directions for future consideration when optimizing student support systems.

The strongest of these student-identified supports was their peer group, particularly students in their own medical school class, because peers offered a source of validation, a shared experience and could help in identifying unacceptable behavior. Medical schools can build upon this self-identified support system by encouraging and facilitating the development of peer networks and making explicit the importance of sharing experiences among peers. Peer discussion groups have been found to "help students process conflict, nurture self-awareness, and promote empathy" (Dyrbye et al., 2005). There are risks to relying upon support systems that are purely peer-mediated because many of the members of the class could be experiencing similar events and they may not be aware of or may have incorrect information around formal supports and reporting structures that are in place. There are ways, however, that opportunities for peer support can be encouraged with engagement of faculty in a safe manner. One such occurrence is the presence of "ice-cream rounds" at one of our medical school's campuses. During these informal gatherings, held at the hospital at the end of the clinical day at intervals throughout the year, students gather over ice cream and snacks for an opportunity to discuss topics related to stress, wellness and coping with educational challenges in a largely peer-organized and run event where the Student Affairs Director of the campus is present for support and guidance in a confidential manner. The transition in medical school from pre-clerkship activities, during which students have

almost daily connection with a larger peer group, to clinical clerkship, during which students are relatively isolated from large groups of peers in day to day interactions, represents a time when it is particularly important to ensure students continue to access the support of their peers.

Students in clinical rotations have schedules that seem to be consumed by clinical work with very little time left for reflection and discussion of the events they are experiencing on an emotional level. Rotations can build in academic teaching sessions that pull students from multiple rotations to address a non-clinical topic of common importance, perhaps incorporating the different roles of disciplines in addressing the same problem. Facilitated debriefing sessions can be incorporated at intervals throughout clerkship to allow for discussion of challenges and concerns. Stanford University School of Medicine created and implemented a rotation specific video- and discussion-based mistreatment program for their surgery clerkship which helped students establish learning environment expectations, understand definitions of mistreatment and promote advocacy and empowerment in addressing mistreatment (Lau et al., 2017). This program led to feelings of an improved learning environment and culture, increased interest in surgery as a career and a decrease in the number of reported incidents of mistreatment each year following implementation (Lau et al., 2017). Institutional support, in the form of funding and administrative and organizational assistance, for peer mentoring programs and peer-led educational sessions is another way in which institutions can strengthen the support systems that students identify as important to themselves. These supports may be particularly important at times of transition such as entry to medical school and entry to

clerkship. Innovative programs have been developed including the University of Sydney's drama-based workshop series using applied theatre techniques to help students develop professionalism and interpersonal skills to deal with challenges in the healthcare environment (Scott et al., 2017).

Residents are another identified source of support and are very accessible to many students in learning environments where there are learners at multiple levels. Residents play a role in validation and bearing witness to the events but can also serve to remove self-blame and may be the first line of students reporting mistreatment. The phenomenon of students testing the water by informally discussion situations of abuse with a resident (or preceptor) to gauge a reaction before deciding upon whether to formally report it was common to many study participants. Residents may not be aware of the important role that they play and may need formal teaching and support around their involvement with students, how to receive reports of mistreatment and how they can best connect students with other university resources. This is challenging given the wide range of experiences, time constraints and engagement in medical student interaction that is seen among residents from a wide variety of programs. This could be accomplished through developing the role of residents as teachers. Formal education sessions about mentorship, teaching skills and formal supports available from the institution could be incorporated into the academic curricula of residency programs. Brown Medical School used role playing with residents to produce videotapes about student mistreatment for resident education sessions and this training allowed residents to handle mistreatment more effectively and incorporate positive behaviors into their current and future teaching (A.

M. Heru, 2003). Based on the findings from this research, a series of workshops in professionalism that are being designed by the postgraduate education department at our institution will also include discussion and training on dealing with reports of mistreatment by medical students, skills in speaking up as a bystander and topics that reflect the dual role of residents as both teachers who must choose to not mistreat students and learners who may be subject to mistreatment by their attendings. As part of orientation to new rotations, residents may need to be explicitly tasked with engaging with medical students in meaningful ways and residents may need to receive information about mistreatment, reporting mechanisms and supports available not only for their own protection but to be able to serve as safe sites of first reporting and connection for medical students that approach them informally. Layered learning should be encouraged whenever possible, particularly in environments where there are not large groups of learners such as distributed learning sites. In these settings the presence of upper year students and residents can act as a support and a connection to the institution to avoid the risks of isolation described by students. In these ways, institutions can develop a culture of support where each member of the health care teaching environment is looking to those who are above them and below them in the hierarchy to see ways in which they can support the success and growth of all people in the system.

Friends and family were also noted by students to be important sources of support. They provided emotional support and encouragement as well as unconditional love to the students, particularly during challenging or stressful experiences. Students identified their friends and family as the foundation of their own emotional wellness. Medical

students must be encouraged to maintain close ties to family and friends during the busy schedule of their training and institutional policies such as holiday times and access to leaves of absence can facilitate the maintenance of familial connections. Recent changes to the undergraduate medical curriculum have been made at our institution to incorporate several shorter breaks in the program that will hopefully allow students to visit family or friends at more regular intervals. Traditional leave of absence policies tend to encompass need for time off of mandatory learning events for medical appointments, illness, religious holidays and conferences. Institutions may need to consider more flexibility in these policies, while still adhering to accreditation standards for mandatory program requirements, that allow students to participate in meaningful social events in their world including weddings, funerals and special celebrations for family members and close friends. When learners are geographically distributed, particularly if learners are sent to learning environments where they are the only learner for extended periods of time, institutions need to consider how they can foster the familial connection and support of a network during these rotations. Students may be living away from their medical school home during these rotations and, while the university does not mandate where the student stays in the community, they help facilitate the student finding appropriate housing and fund some of the costs associated with living away from home. Additional supports to students living at a distance from home for rotations might include ensuring access to internet and long-distance phone calls, placement of students with host families who are welcoming and familiar with the area and scheduled check-ins with learners throughout the rotation. We also need positive role models of preceptors talking about the time they

spend with family, how they integrate maintaining family and friendships within their busy clinical context and showing that they prioritize keeping their support systems healthy and engaged, particularly during difficult times in their careers.

Implications for Medical Education

Theory developed through this study and in other work in medical student mistreatment can help educators better understand and respond to the challenges of their students. However, in the absence of definitive action, theoretical findings will not result in concrete improvements for medical students currently in training and those that are yet to begin. Responding to the suggestions of students and finding ways to incorporate the supports they identified will be significant steps to improving the medical student journey through every institution. Preceptors can play a very important role in the journey of medical students, as identified by students in this study and reinforced through the Educational Alliance literature.

While many of the narratives shared by students in this study discussed negative experiences they had with preceptors, some were also able to relate strong positive mentoring experiences and faculty members who acted as role models and sources of inspiration for future career paths. A personal relationship or connection with preceptors led to increase ease of sharing difficult experiences or concerns by students, which is again consistent with Educational Alliance literature. In faculty orientation and development sessions, there may be a significant role for helping preceptors understand the important part they play not only in the medical knowledge translation to students but

in the professional formation and personal growth of the students they teach. Learners appreciated informal check-ins by their preceptors and the opportunity to leave clinical duties without questioning if a negative experience had occurred. While faculty hold the responsibility of ensuring the learning objectives for the rotation are met and the requisite hours of training are obtained, there needs also to be a sense of individual and organization compassion in which the preceptor demonstrates their genuine interest in the learner and appears to be invested in the success of the student. Each preceptor will have their own way of expressing this interest but, collectively, the behavior of faculty towards the students reflects the institution's values and commitment to the learners; faculty must be aware of their role in building or breaking down the existing organizational trust.

When a preceptor behaves badly towards a student, the medical school needs to consider the many factors playing into that situation and above all think ill before ill-will, meaning preceptors are more likely to be personally unwell than to have malicious intentions in how they treat students. Preceptors who are burnt out, disengaged or undergoing personal or professional challenges may not have the emotional reserve to engage with their students in a healthy and productive way. This can be assessed informally through conversations between the preceptor and their supervisor or leader in the medical school when they are first exploring the concerns brought forward by a student who felt they were mistreated. If more formal assessment or intervention is required for a physician in difficulty, the connection to support and physician assistance programs could be suggested or facilitated by the medical school leader. Preceptors also need to be encouraged to be honest with students about expectations for a given rotation,

including if there are factors that may influence their communication or teaching style during the rotation. It is the best-case scenario when preceptors are not only effective teachers but also able to connect with, advise and support students in their rotation. There may be times when preceptors have competing demands for their time or emotional attention and, in those settings, may use the teaching environment to teach efficiency, creating opportunities for the student to be more independent or integrating teaching on the fly in a busy clinical setting. Having students can be an emotional drain on preceptors, particularly if the student is in crisis or has high needs or learning difficulties. Preceptors may need more support from the institution in these situations or may need a break from having learners for a time following a draining rotation. On the contrary, many physicians speak about having students as being fulfilling and energy-giving. Organizational compassion will also require the institution to be aware of the needs of their faculty members, to equip them with the skills and resources they require to meaningfully support students and have sufficient capacity such that faculty members are able to have times when they step away from teaching responsibilities if issues in other areas of their life require their energy and attention. This may mean assigning fewer students or no learners to a preceptor when they have personal stressors they identify and providing faculty development offerings that speak to work-life integration and personal wellness in addition to increasing their teaching skills. At our regional campus we are instituting a physician mentorship program for physicians in early practice to support them in professional and personal challenges, including teaching challenges, as they transition to the region and to their practice. We cannot expect our faculty to be

compassionate and attentive towards students if we do not extend that same compassion and attentiveness to them as leaders and as an institution. Southern Illinois University School of Medicine implemented a program where students were asked to identify faculty who were the most professional and the least professional in each department and the results of this survey led to individual letters of praise from the Dean to the most professional faculty and individual meetings with the Dean for the least professional. This intervention resulted in a significant decrease in the subsequent nominations for least professional for faculty members who had met with the Dean about their behavior previously (Dorsey et al., 2014). This underlines the value and importance of feedback to faculty about their behavior. Increased attention is required to the mechanisms in place to identify faculty at low levels of poor behavior, remediation plans available for faculty members that include supports for faculty who are struggling and faculty development training in the role of the bystander in speaking up and advocating for cultural change within workplaces and learning environments. Yale School of Medicine holds an annual "Power Day" comprised of workshops, speakers and small group sessions that look at power dynamics and hidden curriculum in the medical environment (Angoff, Duncan, Roxas, & Hansen, 2016). This event served as a platform upon which changes were made in many departments including discussing power in weekly department meetings and awards were given to those who used power positively (Angoff et al., 2016). In this way dialogue is opened, positive role modelling is enforced and trainees at all levels are encouraged in their growth and development.

Students identified multiple pathways for improvement of student support at an institutional level. Awareness and accessibility of support services was a key finding and students wanted to better understand the limits of confidentiality of these services. While these services are presented to the entire student body at key times such as orientation to the medical program and transition to clerkship sessions, the discussion of student support services may need to occur much more often and in multiple ways so that students become familiar with the services available to them. Despite efforts to make information regarding mistreatment and reporting accessible to students, there remains a sense among students that they are unsure who their supports are and how to access them. Some medical schools, such as the David Geffen School of Medicine at UCLA, dedicate a specific small group workshop during transition to clerkship on mistreatment including skills to deal with potential scenarios (J. M. Fried et al., 2012). Increased awareness of individual contacts for concerns within each rotation may help students feel more connected to the resources present and find that reporting and seeking help is more accessible. Information regarding the Professionalism Office and existing polices needs to be made clearer and must be more widely disseminated in ways that are practical and easily accessed by the student population as well as the wide faculty base that is geographically very distributed and ranges from minimally involved in teaching to full-time academic positions. Some of this could be accomplished through differing faculty development strategies including case-based learning modules and on-line offerings for faculty members. While it is difficult to ensure all faculty participate fully in faculty development programming, mandatory learning modules could be linked to the faculty

appointment or reappointment process as well as the hospital credentialing system that highlighted key messages around student mistreatment and rights of learners and teachers. In addition to faculty development around student support services, broader dissemination of information about reporting mistreatment and accessing support services to faculty and students can be achieved through a variety of media including social media posts, flyers in regional hospital sites, links at multiple points on online platforms, information in tutor and preceptor training resources and pocket cards or stickers to put on the back of ID badges. If we are seeking to create an environment in which no door is the wrong door to enter when seeking help, we need to ensure that information about resources is widely available and can be accessed without barriers.

Participants in this study brought forward important ideas about ways the reporting of mistreatment process could be altered for ease of access and highest likelihood to engage with it. Students frequently mentioned the need for anonymity either in reporting or in finding out more information about the reporting process. The University of Ottawa faculty of medicine saw an increase in the reporting of mistreatment when they introduced anonymous reporting but recognized the ability of the school to respond can be limited when the complaint is anonymous and there is no way to feed back the results to the anonymous complainant (Vogel, 2018). While student support services offered at this institution are confidential, this message does not appear to be adequate for students to fully trust their ability to disclose difficult information about mistreatment and the confidentiality may need to be explained in a different way or anonymity in initial discussions be considered. Consideration should be given to ways

that students can seek opinions about experiences they, or their peers, are having while feeling they are safe from potential negative repercussions of bringing forward these ideas. There are risks to anonymous reporting or anonymous reviews of student concerns, particularly that students in unsafe settings will not be identified and moved to safe learning environments and that there are not mechanisms to provide the students with support and resources if the students are not identified. There are also risks to faculty members of not being able to know the full details of the event or potentially being named out of anger or retribution by a student who was not satisfied with an evaluation or experience. The risks of anonymous reporting should be weighed against the student concerns of repercussions from coming forward nominally and students need to be engaged in discussions of revisions to the reporting process to ensure we are creating a system that addresses their fears and concerns appropriately.

In addition, students sought more frequent opportunities to report mistreatment so that they did not wait until the end of rotation evaluations to be asked about incidents that may have occurred. While many pathways exist for students to report mistreatment at any point during their training, most of them remain student-initiated and this may represent too big a burden or risk for students in their training. The institution may wish to consider other, more accessible, ways that are triggered by the program rather than the student. These could include random subset surveys of students, sending out program-initiated prompts at key points throughout rotations and the program, debriefing interviews at the end of rotations and questions targeting witnessed mistreatment rather than just experienced mistreatment. These could serve to increase the opportunities for

students to come forward with concerns as well as encourage bystanders to be empowered to report behavior they have witnessed rather than relying on the person who has experienced mistreatment to be the source of the reporting.

Students appeared eager to give feedback and engage in discussion to improve the learning environment when they felt they had a safe opportunity to do so and did not feel it could negatively impact their evaluations or opportunities for career success. They sought formal and informal debriefing opportunities and appreciated when these were included as part of a rotation. Program assistants in each rotation and other administrative staff within the medical school were seen as safe front-line workers with whom to discuss concerns and students were more likely to speak with them than with members of the leadership team. Students were looking for opportunities to bring up concerns they had about their colleagues and found past positive experiences with administration increased their willingness to engage with administration in the future. Clerkship leaders can take time to connect with each student individually during or at the end of their rotation to solicit feedback and suggestions for improvement. Student advisors should be encouraged to be proactive in reaching out to their advisees to check in with them, particularly during challenging rotations or at key points during the academic year. Any steps the program administration can take to automate these feedback opportunities, provide reminders and build time into the learning schedule to accommodate these sessions will demonstrate a willingness to receive feedback and demonstrate the value of student input to program leaders. When feedback sessions are facilitated by someone who does not have direct responsibility for student evaluation, this

may provide a setting in which students feel more open to providing honest input. The institution can strengthen organizational trust with students by demonstrating open leadership that encourages discussion, fosters transparency and supports students in coming forward with concerns. In this way, we would hope that students feel more comfortable in reporting mistreatment and as an institution we increase our ability to confront the challenges head on.

Participants in this study spoke frequently about the desire to know the outcomes of reporting. This is a difficult area to explore because of the need for confidentiality on both the part of the student experiencing mistreatment as well as the faculty member accused of the behavior. The investigation process also varies according to the severity of the complaint, the location of the faculty and the extent to which the students wishes to be involved. It may be helpful, however, to equip students with an understanding of the kinds of behavior that would result in immediate removal of learners from the setting as well as the kinds of remediation that may be offered to faculty if they are deemed to be able to be remediated to teach in the future. Students may benefit from knowing that preceptors are removed from teaching duties in some circumstances and may also need to know about times that remediation was successful, and a preceptor went on to be a safe and effective teacher following concerns being raised. A responsiveness of the administration to student input on a variety of student concerns may increase the trust that students feel towards the institution and may make them more likely to assume that the administration will act in the students' best interest.

Strengths and Limitations

This study had limitations that may impact the transferability of the findings. The principal limitation is that this study was conducted at a single institution. In some ways this was a strength, ensuring that participants had experienced the same curriculum and policies and procedures surrounding student mistreatment permitted us to study the impact of those policies in depth. In some ways this was a limitation, as it did not allow us to identify the transferable aspects of student experiences. This institution has an accelerated three-year MD program which places time constraints on some aspects of the curriculum and leaves very little room for adding in additional curricular components. The experiences of learners at other medical school may vary, particularly as the policies and procedures surrounding student mistreatment and reporting vary among institutions. Next steps in research could be exploring the transfer of these findings to other institutions, particularly those that have taken other approaches to dealing with student mistreatment including those that allow anonymous reporting.

Another potential limitation is the participation of senior leaders in the medical school as co-investigators in this project, particularly the lead investigator who has held and currently holds senior leadership positions. This could have acted as a barrier to learners participating or could have influenced their willingness to share their experiences and opinions, despite the anonymity that was provided through the study design and methods. Students were given the opportunity to review their interview transcripts to ensure they did not feel they could be identified. Increasing the participation of medical students as co-investigators in research into student mistreatment may further increase the

willingness of other students to participate and the safety they feel in disclosing their experiences. There may also be opportunities for cross-institution study where collaboration between two different universities would allow for exploration of mistreatment within one university by researchers from the other. The risk to this is that the context-specific factors in examining the environment may not be fully appreciated by researchers from another discipline.

There are also inherent limitations to this research in that one faculty member is critically assessing challenges within her own institution. Researchers exploring the learning environment and mistreatment within it may also perpetuate some of the culture or mindset that limits the faculty from actively changing because they are engrained in the existing culture. The undergraduate medical leadership community within our institution is a relatively small and close-knit group and it can be difficult for someone within that community to objectively present challenging and negative findings to their colleagues and advocate for cultural change while still supporting other leaders and being seen to be a positive team member. Speaking up about concerns with current policies, process and attitudes within the organization poses a risk to those who are advocating and, if there does not appear to be willingness to change, could make it challenging to continue as a leader in that environment.

This study also had strengths in its design and implementation. While previously discussed as a challenge, there also lies significant strength in position of the principal investigator as a member of senior leadership within the institution and therefore able to act as an insider to the information and leadership of the medical school. Her

understanding of the procedures and policies that are in place as well as the lived experience of dealing with students reporting mistreatment and faculty who have been accused of mistreatment allow insight into many aspects of the journey. In addition, she sits at many leadership tables in the institution that allow her to amplify the student voice through the findings of this research as it is disseminated to leaders within the institution and at other institutions. Challenging findings can be shared, and hopefully more readily accepted, when they are presented by a member of the community who understands the culture and nuances of local leadership. Cultural change can be enacted through role modelling by leaders involved in this study and students can see, through the work being done by leaders, that this issue is a priority to leaders in the institution.

This study also provided significant safeguards for student participants, recognizing the risks and challenges they may have seen in participating. Interviews were conducted by research assistants who were not involved in the medical school in any other manner. Information about student support services was provided during and after the interview and reinforced again shortly following the interview when participants were contacted by the research assistant to reiterate supports available. Care was taken to inform the Student Affairs team at the institution about this study in detail including advising that this research may trigger difficult emotions in participants or others considering participating. The Student Affairs team was very helpful in ensuring access without barriers to contact from a team member for any study participant who experienced difficulty following their interview. Students were also given the opportunity to review their transcript to ensure anonymity and many participants chose to

make us of this with some of them requesting changes to the transcript prior to review by the research team. Research assistants discussed with every participant what potentially identifying features in the transcript might be and how their transcript would be altered accordingly to create anonymity.

Conclusion

This research allows medical educators to better understand how students experience and cope with mistreatment during medical school yet continue on within that learning environment finding ways to support themselves and move forward. Many institutions focus the energy and attention they devote to student mistreatment in the area of reporting, particularly developing anonymous reporting mechanisms and detailed policies surrounding reporting. While these may be necessary to meet accreditation requirements, the strict focus on policies and procedures fails to address the aspects of this problem that are most important to students. The results of this study show that the Deciding phase of the student journey surrounding mistreatment is not the only phase in which students struggle and have to weigh risks and benefits as they choose their course of action. Knowing the various phases that students experience and their challenges within each phase can allow energy and resources to be devoted to areas that are most likely to support students effectively rather than spending excessive time and energy simply reorganizing the reporting system. The strong message of the importance of peer support in this study highlights the importance of institutions considering how they can work to strengthen student connections to their self-identified sources of support, most

importantly, their peers. Participants in this study brought forward significant concerns in the Reporting phase as well as offering suggestions on improving the reporting process to improve the access and engagement of students in reporting mistreatment. Any modification to policies and procedures regarding reporting of mistreatment should engage students in a significant way to ensure it addresses their concerns adequately.

This study is only the beginning of important work that needs to be done to support students experiencing mistreatment currently but, more importantly, to move towards a cultural change that emphasizes organizational trust and compassion. As institutions we must seek to build trust with our students, to strengthen bystanders to intervene when they witness inappropriate behavior and to create a culture in which students and preceptors are supported, encouraged and allowed to learn and grow within a safe environment. In this way, we will keep our students engaged and passionate about their careers in medicine, we will foster a healthy environment in which they can become high caliber physicians equipped for their upcoming careers and we will end the cycle of mistreatment for the students of the future.

REFERENCES

AFMC. (2016). *Graduation Questionnaire National Report 2016*. Retrieved from https://afmc.ca/sites/default/files/documents/en/Publications/2016_GQ_National_Report_en.pdf:

AFMC. (2017). *Graduation Questionnaire National Report 2017*. Retrieved from https://afmc.ca/sites/default/files/documents/en/Publications/2017_GQ_National_Report_en.pdf:

Angoff, N. R., Duncan, L., Roxas, N., & Hansen, H. (2016). Power Day: Addressing the Use and Abuse of Power in Medical Training. *J Bioeth Inq, 13*(2), 203-213. doi:10.1007/s11673-016-9714-4

Aselage, J., & Eisenberger, R. (2003). Perceived organizational support and psychological contracts: A theoretical integration. *Journal of Organizational Behavior, 24*(5), 491-509.

Baldwin, D. C., Jr., & Daugherty, S. R. (1997). Do residents also feel "abused"? Perceived mistreatment during internship. *Acad Med, 72*(10 Suppl 1), S51-53.

Baldwin, D. C., Jr., Daugherty, S. R., & Eckenfels, E. J. (1991). Student perceptions of mistreatment and harassment during medical school. A survey of ten United States schools. *West J Med, 155*(2), 140-145.

Baldwin, D. C., Jr., Daugherty, S. R., Eckenfels, E. J., & Leksas, L. (1988). The experience of mistreatment and abuse among medical students. *Res Med Educ, 27*, 80-84.

Baldwin, D. C., Jr., Daugherty, S. R., & Rowley, B. D. (1998). Unethical and unprofessional conduct observed by residents during their first year of training. *Acad Med, 73*(11), 1195-1200.

Barrett, J., & Scott, K. M. (2017). Acknowledging medical students' reports of intimidation and humiliation by their teachers in hospitals. *J Paediatr Child Health*. doi:10.1111/jpc.13656

Bates, C. K., Jagsi, R., Gordon, L. K., Travis, E., Chatterjee, A., Gillis, M., . . . Gulati, M. (2018). It is time for zero tolerance for sexual harassment in academic medicine. *Academic Medicine, 93*(2), 163-165.

Becker, H. S., Geer, B., & Hughes, E. C. (1961). Strauss (1961) Boys in White: Student Culture in Medical School. *Chicago: University of ChicagoPress*.

Binder, R., Garcia, P., Johnson, B., & Fuentes-Afflick, E. (2018). Sexual Harassment in Medical Schools: The Challenge of Covert Retaliation as a Barrier to Reporting. *Academic Medicine, Publish Ahead of Print*. doi:10.1097/acm.0000000000002302

Boeije, H. (2002). A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality and quantity, 36*(4), 391-409.

Bowling, N. A., & Beehr, T. A. (2006). Workplace harassment from the victim's perspective: a theoretical model and meta-analysis. *Journal of Applied Psychology, 91*(5), 998.

Bursch, B., Fried, J. M., Wimmers, P. F., Cook, I. A., Baillie, S., Zackson, H., & Stuber, M. L. (2013). Relationship between medical student perceptions of mistreatment and mistreatment sensitivity. *Med Teach, 35*(3), e998-1002. doi:10.3109/0142159X.2012.733455

CACMS. (2015). *CACMS Standards and Elements*.

Charmaz, K. (2014). *Constructing grounded theory*: Sage.

Chavez-Rivera, A., Ramos-Lira, L., & Abreu-Hernandez, L. F. (2016). [A systematic review of mistreatmen in medical students]. *Gac Med Mex, 152*(6), 796-811.

Chiovitti, R. F., & Piran, N. (2003). Rigour and grounded theory research. *Journal of advanced nursing, 44*(4), 427-435.

Cook, A. F., Arora, V. M., Rasinski, K. A., Curlin, F. A., & Yoon, J. D. (2014). The prevalence of medical student mistreatment and its association with burnout. *Acad Med, 89*(5), 749-754. doi:10.1097/ACM.0000000000000204

Cortina, L. M., & Magley, V. J. (2003). Raising voice, risking retaliation: Events following interpersonal mistreatment in the workplace. *Journal of occupational health psychology, 8*(4), 247.

Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the workplace: Incidence and impact. *Journal of occupational health psychology, 6*(1), 64.

Costa, A. C., Ferrin, Donald L. & Fulmer, C. Ashley. (2018). Trust at Work. In The SAGE Handbook of Industrial, Work & Organizational Psychology (pp. 435-467). 55 City Road, London: SAGE Publications Ltd. Retrieved from http://sk.sagepub.com/reference/the-sage-handbook-of-industrial-work-and-org-psychology-vol2. doi:10.4135/9781473914957

Coyle-Shapiro, J. A.-M. P., Marjo-Ritta. (2008). The SAGE Handbook of Organizational Behavior: Volume I - Micro Approaches. In J. C. Barling, C. (Ed.), (pp. 17-34). London: SAGE Publications Ltd. Retrieved from http://sk.sagepub.com/reference/hdbk_orgbehavior1. doi:10.4135/9781849200448

Dirks, K. T., & Ferrin, D. L. (2001). The role of trust in organizational settings. *Organization science, 12*(4), 450-467.

Dorsey, J. K., Roberts, N. K., & Wold, B. (2014). Feedback matters: the impact of an intervention by the dean on unprofessional faculty at one medical school. *Acad Med, 89*(7), 1032-1037. doi:10.1097/ACM.0000000000000275

Dyrbye, L. N., Thomas, M. R., & Shanafelt, T. D. (2005). *Medical student distress: causes, consequences, and proposed solutions.* Paper presented at the Mayo Clinic Proceedings.

Dyrbye, L. N., Thomas, M. R., & Shanafelt, T. D. (2006). Systematic review of depression, anxiety, and other indicators of psychological distress among US and Canadian medical students. *Academic Medicine, 81*(4), 354-373.

Estes, B., & Wang, J. (2008). Integrative literature review: Workplace incivility: Impacts on individual and organizational performance. *Human Resource Development Review, 7*(2), 218-240.

Fleit, H. B., Iuli, R. J., Fischel, J. E., Lu, W. H., & Chandran, L. (2017). A model of influences on the clinical learning environment: the case for change at one U.S. medical school. *BMC Med Educ, 17*(1), 63. doi:10.1186/s12909-017-0900-9

Fnais, N., Soobiah, C., Chen, M. H., Lillie, E., Perrier, L., Tashkhandi, M., . . . Tricco, A. C. (2014). Harassment and discrimination in medical training: a systematic review and meta-analysis. *Acad Med, 89*(5), 817-827. doi:10.1097/ACM.0000000000000200

Frank, E., Carrera, J. S., Stratton, T., Bickel, J., & Nora, L. M. (2006). Experiences of belittlement and harassment and their correlates among medical students in the United States: longitudinal survey. *BMJ, 333*(7570), 682.

Fried, J. M., Vermillion, M., Parker, N. H., & Uijtdehaage, S. (2012). Eradicating medical student mistreatment: a longitudinal study of one institution's efforts. *Acad Med, 87*(9), 1191-1198. doi:10.1097/ACM.0b013e3182625408

Fried, J. M., Vermillion, M., Parker, N. H., & Uijtdehaage, S. (2012). Eradicating medical student mistreatment: a longitudinal study of one institution's efforts. *Academic medicine: journal of the Association of American Medical Colleges, 87*(9), 1191.

Gagyor, I., Hilbert, N., Chenot, J. F., Marx, G., Ortner, T., Simmenroth-Nayda, A., . . . Himmel, W. (2012). Frequency and perceived severity of negative experiences during medical education in Germany--results of an online-survery of medical students. *GMS Z Med Ausbild, 29*(4), Doc55. doi:10.3205/zma000825

Gan, R., & Snell, L. (2014). When the learning environment is suboptimal: exploring medical students' perceptions of "mistreatment". *Acad Med, 89*(4), 608-617. doi:10.1097/ACM.0000000000000172

Giacomini, M. (2010). Theory matters in qualitative health research. *The Sage handbook of qualitative methods in health research*, 125-156.

Gillon, R. (2000). White coat ceremonies for new medical students. *Journal of Medical Ethics, 26*(2), 83-84.

Haviland, M. G., Yamagata, H., Werner, L. S., Zhang, K., Dial, T. H., & Sonne, J. L. (2011). Student mistreatment in medical school and planning a career in academic medicine. *Teach Learn Med, 23*(3), 231-237. doi:10.1080/10401334.2011.586914

Hershcovis, M. S. (2011). "Incivility, social undermining, bullying… oh my!": A call to reconcile constructs within workplace aggression research. *Journal of Organizational Behavior, 32*(3), 499-519.

Hershcovis, M. S. a. J. B. (2009). Towards a Multi-Foci Approach to Workplace Aggression: A Meta-Analytic Review of Outcomes from Different Perpetrators. *Journal of Organizational Behavior, 31*(1), 24-44.

Heru, A., Gagne, G., & Strong, D. (2009). Medical student mistreatment results in symptoms of posttraumatic stress. *Academic Psychiatry, 33*(4), 302-306.

Heru, A. M. (2003). Using role playing to increase residents' awareness of medical student mistreatment. *Acad Med, 78*(1), 35-38.

Iftikhar, R., Tawfiq, R., & Barabie, S. (2014). Interns' perceived abuse during their undergraduate training at King Abdul Aziz University. *Adv Med Educ Pract, 5*, 159-166. doi:10.2147/AMEP.S62890

Kanov, J. M., Maitlis, S., Worline, M. C., Dutton, J. E., Frost, P. J., & Lilius, J. M. (2004). Compassion in organizational life. *American Behavioral Scientist, 47*(6), 808-827.

Karim, S. D. (2014). Intimidation and Harassment in Residency: A Review of the Literature and Results of the 2012 Canadian Association of Inters and Residents National Survey. *Canadian Medical Education Journal, 5*(1), e50-e57.

Kassebaum, D. G., & Cutler, E. R. (1998). On the culture of student abuse in medical school. *Acad Med, 73*(11), 1149-1158.

Kulaylat, A. N., Qin, D., Sun, S. X., Hollenbeak, C. S., Schubart, J. R., Aboud, A. J., . . . Han, D. C. (2017). Perceptions of mistreatment among trainees vary at different stages of clinical training. *BMC Med Educ, 17*(1), 14. doi:10.1186/s12909-016-0853-4

Laschinger, H. K. S. (2014). Impact of workplace mistreatment on patient safety risk and nurse-assessed patient outcomes. *Journal of Nursing Administration, 44*(5), 284-290.

Lau, J. N., Mazer, L. M., Liebert, C. A., Bereknyei Merrell, S., Lin, D. T., & Harris, I. (2017). A Mixed-Methods Analysis of a Novel Mistreatment Program for the Surgery Core Clerkship. *Acad Med, 92*(7), 1028-1034. doi:10.1097/ACM.0000000000001575

Lizzio, A., Wilson, K., & Hadaway, V. (2007). University students' perceptions of a fair learning environment: A social justice perspective. *Assessment & Evaluation in Higher Education, 32*(2), 195-213.

Lutgen-Sandvik, P. (2003). The communicative cycle of employee emotional abuse: Generation and regeneration of workplace mistreatment. *Management Communication Quarterly, 16*(4), 471-501.

Mavis, B. (2014). Measuring mistreatment: honing questions about abuse on the Association of American Medical Colleges Graduation Questionnaire. *Virtual Mentor, 16*(3), 196-199. doi:10.1001/virtualmentor.2014.16.03.stas1-1403

Mavis, B., Sousa, A., Lipscomb, W., & Rappley, M. D. (2014). Learning about medical student mistreatment from responses to the medical school graduation questionnaire. *Acad Med, 89*(5), 705-711. doi:10.1097/ACM.0000000000000199

Mays, N., & Pope, C. (1995). Rigour and qualitative research. *BMJ: British Medical Journal, 311*(6997), 109.

Munayco-Guillen, F., Camara-Reyes, A., Munoz-Tafur, L. J., Arroyo-Hernandez, H., Mejia, C. R., Lem-Arce, F., & Miranda-Soberon, U. E. (2016). [Characteristics of mistreatment in medical students of a public university in Peru]. *Rev Peru Med Exp Salud Publica, 33*(1), 58-66.

Nagata-Kobayashi, S., Maeno, T., Yoshizu, M., & Shimbo, T. (2009). Universal problems during residency: abuse and harassment. *Med Educ, 43*(7), 628-636. doi:10.1111/j.1365-2923.2009.03388.x

Ogden, P. E., Wu, E. H., Elnicki, M. D., Battistone, M. J., Cleary, L. M., Fagan, M. J., . . . Jennings, M. S. (2005). Do attending physicians, nurses, residents, and medical students agree on what constitutes medical student abuse? *Academic Medicine, 80*(10), S80-S83.

Oser, T. K., Haidet, P., Lewis, P. R., Mauger, D. T., Gingrich, D. L., & Leong, S. L. (2014). Frequency and negative impact of medical student mistreatment based on specialty choice: a longitudinal study. *Acad Med, 89*(5), 755-761. doi:10.1097/ACM.0000000000000207

Peres, M. F., Babler, F., Arakaki, J. N., Quaresma, I. Y., Barreto, A. D., Silva, A. T., & Eluf-Neto, J. (2016). Mistreatment in an academic setting and medical students' perceptions about their course in Sao Paulo, Brazil: a cross-sectional study. *Sao Paulo Med J, 134*(2), 130-137. doi:10.1590/1516-3180.2015.01332210

Porto, G. a. L., Richard (2006). Disruptive Clinician Behavior: A Persistent Threat to Patient Safety. Retrieved from https://www.psqh.com/analysis/disruptive-clinician-behavior-a-persistent-threat-to-patient-safety/

Rancich, A. M., Fernanda-Merino, S., Valicenti, M. C., Lopez-Prieto, M. B., Donato, M., & Gelpi, R. J. (2017). [Morally incorrect incidents perceived by third year medical students in 2009 and 2015]. *Gac Med Mex, 153*(1), 36-43.

Rautio, A., Sunnari, V., Nuutinen, M., & Laitala, M. (2005). Mistreatment of university students most common during medical studies. *BMC Med Educ, 5*, 36. doi:10.1186/1472-6920-5-36

Richardson, D. A., Becker, M., Frank, R. R., & Sokol, R. J. (1997). Assessing medical students' perceptions of mistreatment in their second and third years. *Acad Med, 72*(8), 728-730.

Richman, J. A., Flaherty, J. A., Rospenda, K. M., & Christensen, M. L. (1992). Mental health consequences and correlates of reported medical student abuse. *JAMA, 267*(5), 692-694.

Robinson, G. E., & Stewart, D. E. (1996). A curriculum on physician-patient sexual misconduct and teacher-learner mistreatment. Part 1: content. *CMAJ, 154*(5), 643-649.

Rosenberg, D. A., & Silver, H. K. (1984). Medical student abuse: an unnecessary and preventable cause of stress. *JAMA, 251*(6), 739-742.

Rosenstein, A. H., & O'daniel, M. (2008). Invited Article: Managing disruptive physician behavior Impact on staff relationships and patient care. *Neurology, 70*(17), 1564-1570.

Rotenstein, L. S., Ramos, M. A., Torre, M., Segal, J. B., Peluso, M. J., Guille, C., . . . Mata, D. A. (2016). Prevalence of depression, depressive symptoms, and suicidal ideation among medical students: a systematic review and meta-analysis. *JAMA, 316*(21), 2214-2236.

Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee responsibilities and rights journal, 2*(2), 121-139.

Rousseau, D. M., & Tijoriwala, S. A. (1998). Assessing psychological contracts: Issues, alternatives and measures. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 19*(S1), 679-695.

Schilpzand, P., De Pater, I. E., & Erez, A. (2016). Workplace incivility: A review of the literature and agenda for future research. *Journal of Organizational Behavior, 37*(S1).

Schulich, S. o. M. a. D. Procedure to Report Incidents of Student Mistreatment or Unprofessional Behaviour for MD Students. Retrieved from https://www.schulich.uwo.ca/learner-equity-wellness/equity_professionalism/reporting/ProceduretoReportIncidentsofStudentMistreatmentandUnprofessionalBehaviourMD.pdf

Scott, K. M., Berlec, S., Nash, L., Hooker, C., Dwyer, P., Macneill, P., . . . Ivory, K. (2017). Grace Under Pressure: a drama-based approach to tackling mistreatment of medical students. *Med Humanit, 43*(1), 68-70. doi:10.1136/medhum-2016-011031

Shanafelt, T. D., Boone, S., Tan, L., Dyrbye, L. N., Sotile, W., Satele, D., . . . Oreskovich, M. R. (2012). Burnout and satisfaction with work-life balance among US physicians relative to the general US population. *Archives of internal medicine, 172*(18), 1377-1385.

Shanafelt, T. D., Bradley, K. A., Wipf, J. E., & Back, A. L. (2002). Burnout and self-reported patient care in an internal medicine residency program. *Annals of internal medicine, 136*(5), 358-367.

Sheehan, K. H., Sheehan, D. V., White, K., Leibowitz, A., & Baldwin, D. C., Jr. (1990). A pilot study of medical student 'abuse'. Student perceptions of mistreatment and misconduct in medical school. *JAMA, 263*(4), 533-537.

Shem, S., & Updike, J. (1978). *The house of God*: Delta Trade Paperbacks New York.

Shoukat, S., Anis, M., Kella, D. K., Qazi, F., Samad, F., Mir, F., . . . Naqvi, H. (2010). Prevalence of mistreatment or belittlement among medical students--a cross sectional survey at a private medical school in Karachi, Pakistan. *PLoS One, 5*(10), e13429. doi:10.1371/journal.pone.0013429

Siller, H., Tauber, G., Komlenac, N., & Hochleitner, M. (2017). Gender differences and similarities in medical students' experiences of mistreatment by various groups of perpetrators. *BMC Med Educ, 17*(1), 134. doi:10.1186/s12909-017-0974-4

Silver, H. K. (1982). Medical students and medical school. *JAMA, 247*(3), 309-310.

Smith-Coggins, R., Prober, C. G., Wakefield, K., & Farias, R. (2017). Zero Tolerance: Implementation and Evaluation of the Stanford Medical Student Mistreatment Prevention Program. *Acad Psychiatry, 41*(2), 195-199. doi:10.1007/s40596-016-0523-1

Tanne, J. H. (2012). Medical students still suffer mistreatment by faculty, resident doctors, and nurses, US report says. *BMJ, 345*, e7069. doi:10.1136/bmj.e7069

Telio, S., Ajjawi, R., & Regehr, G. (2015). The "educational alliance" as a framework for reconceptualizing feedback in medical education. *Academic Medicine, 90*(5), 609-614.

Telio, S., Regehr, G., & Ajjawi, R. (2016). Feedback and the educational alliance: examining credibility judgements and their consequences. *Medical education, 50*(9), 933-942.

Tepper, B. J. (2007). Abusive supervision in work organizations: Review, synthesis, and research agenda. *Journal of management, 33*(3), 261-289.

Thomas, M. R., Dyrbye, L. N., Huntington, J. L., Lawson, K. L., Novotny, P. J., Sloan, J. A., & Shanafelt, T. D. (2007). How do distress and well-being relate to medical student empathy? A multicenter study. *Journal of general internal medicine, 22*(2), 177-183.

University of British Columbia. UBC Faculty of Medicine Learner Mistreatment Concerns and Complaints. Retrieved from http://med-fom-faculty.sites.olt.ubc.ca/files/2015/06/Flow-Chart-Mistreatment-Concerns-and-Complaints.pdf

University of Toronto. (2011). University of Toronto Medical student procedure to report incidents of concern. Retrieved from http://www.md.utoronto.ca/sites/default/files/Mistreatment%20Flowchart%20-%20revised%20aug%202016.pdf

Vanstone, M. (2018). Theoretical Foundations of Qualitative Research. *HLTHPOL 747: Qualitative and Conceptual Methods, emodule 1.3*. Retrieved from Avenue to learn website: https://avenue.cllmcmaster.ca/d2l/le/content/229048/viewContent/1880357/View?ou=229048

Vogel, L. (2018). Medical trainees want benefit of doubt when reporting harassment. In: Can Med Assoc.

West, C. P., Huschka, M. M., Novotny, P. J., Sloan, J. A., Kolars, J. C., Habermann, T. M., & Shanafelt, T. D. (2006). Association of perceived medical errors with resident distress and empathy: a prospective longitudinal study. *JAMA, 296*(9), 1071-1078.

Williams, E. S., Konrad, T. R., Scheckler, W. E., Pathman, D. E., Linzer, M., McMurray, J. E., . . . Schwartz, M. (2001). Understanding physicians: Intentions to withdraw from practice: The role of job satisfaction, job stress, mental and physical health. In *Advances in Health Care Management* (pp. 243-262): Emerald Group Publishing Limited.

Williams, E. S., & Skinner, A. C. (2003). Outcomes of physician job satisfaction: a narrative review, implications, and directions for future research. *Health care management review, 28*(2), 119-139.

Woolley, D. C., Paolo, A. M., Bonaminio, G. A., & Moser, S. E. (2006). Student treatment on clerkships based on their specialty interests. *Teach Learn Med, 18*(3), 237-243. doi:10.1207/s15328015tlm1803_9

Appendix 1: Interview Guide: Mistreatment & Abuse

For the purpose of the recording, I would like to state that today is *(date)* and this is my *(time)* interview with *(participant number).*

Thank you for participating in this research project. This study is part of a larger program of research about professionalism, mistreatment and abuse.

Because I am a researcher, I will not disclose any information you share with me today. You should understand that this means that talking to me is not the same as anonymously reporting mistreatment or abuse you may have experienced from one of your preceptors. Because I'm not a physician and not involved in the administration of the Undergraduate MD program, I am not able to initiate remediation or do anything administrative with the information you share with me today. If reporting or sharing information with the program anonymously is something you are interested in, I can help you figure out how to do this, but I want to be clear that this is a research interview and not a way to anonymously report mistreatment or abuse.

Does that make sense? If at any time you would like to discuss the topic of confidentiality or reporting further, just let me know. We can stop the tape and talk off the record. If you want to talk about it after the interview is over, you can always call me or send an email. *(In person interview, with current students: I have brought some resources about some of the supports available to you today, so I'll give those to you now. These can all be found on MedPortal, so they might not be new to you, but I figured that having a hard copy to look at wouldn't hurt. On the top page you will see the contact information for Student Affairs. This is a group of physicians who are available to support students through tough experiences, including mistreatment or abuse. They are your first point of contact at McMaster- you can talk to them without formally reporting, and they can help you figure out how you want to proceed.)* Do you have any questions or anything you want to discuss before we start the interview? Ok, let's begin.

1. Could you tell me about your medical training so far?
   1.1. *(If medical student)* How much clinical exposure have you had?
   1.2. *(If medical student)* What types of clinical learning environments have you experienced? Large or small, specialties, urban or rural, et cetera.

2. As you know, we are concerned about the mistreatment and abuse that medical learners might face in a clinical environment. Could you tell me what mistreatment or abuse means to you? How would you recognize mistreatment?

3. You might face behaviour that's not mistreatment or abuse, but also isn't ideal, kind or productive. Can you think of an example of this type of behaviour? We might call it unprofessional or erosive.
   3.1. *(Clarify if this is a hypothetical example or something they experienced. If hypothetical)* Can you think of a time that you either experienced or witnessed something like that?
   3.2. Why don't you think this is mistreatment?
   3.3. What would have to change to make it mistreatment?
   3.4. Can you think of a "grey area" that someone might perceive as mistreatment or abuse and someone else does not?
   3.5. What I'm trying to get at here is what is the difference between mistreatment and abuse and behaviour that is simply unprofessional or unproductive. From what you've said, we might consider [reiterate previous conversation]. Any other factors?

4. Ok- let's talk about mistreatment and abuse specifically. We know from the Canadian Medical Student Graduation Questionnaire that about half of all medical students have experienced some kind of mistreatment or abuse. Have you experienced mistreatment or abuse?
   4.1. *(If yes)* If you feel comfortable, could you tell me what happened?
   4.2. *(If no)* Move to question 9.

5. I'd like to ask some specific questions about your experience. The intent of these question is to understand what the program could do to prevent these experiences in the future, or to help students who have these types of experiences. Some of these questions might seem very specific, but I'm not intending to judge or offer advice, just to understand what you experienced. [some of these probes may have been answered above]
   5.1. Who did this behaviour?
   5.2. Was anyone else there, did anyone else witness this? How did they act? Did they intervene or provide support? At the time? Later? Over the course of the rest of the rotation?
   5.3. How did it affect you?
   5.4. How did you react? At the time? Later? Over the course of the rest of the rotation?
      5.4.1. Did you ever speak to the person who did this about how you felt?
      5.4.2. Was there any follow up after what happened?
   5.5. Did you tell anybody about it? Who? Probe: Are there any faculty members you felt comfortable discussing with?
   5.6. Did you report it formally? Why or why not?
   5.7. Was this an isolated incident? Have you experienced other types of mistreatment? (if yes, repeat probes)

5.8. Was there anything that helped you cope with this situation? (strategies, people, previous experience)
5.9. Have you had any role models in how to handle a difficult situation such as this?

6. We know that when medical students experience mistreatment or abuse, there are a whole bunch of consequences they might experience. Has anything changed for you since this incident?

7. When you moved on to your next rotation, did you do anything differently because of this experience?

8. Do you talk about this with your classmates? What do you talk about?
   8.1. Are they able to offer support?
   8.2. Is your experience atypical?

9. (*if multiple stories of M & A: I'd like to talk about the idea of reporting now. I'll ask you some general questions about reporting- feel free to refer to any of the incidents you described. It's very useful to us to understand if there were factors that changed your thinking about reporting from incident to incident*) Did you consider reporting and then decide not to? How did you make this decision?
   9.1. Is there anything the program could do to make reporting easier?

10. What type of rotation did you experience this on? For example, was it at a big academic hospital in an urban centre? Was there a large team of trainees?
    10.1. How do you think that setting affected your experience?
    10.2. What if it was *(change variables...EG: You knew the preceptor better, there were fewer trainees)*

11. Thanks for sharing that story, I'm really sorry to hear that you experienced that. The Undergraduate MD program really wants to improve the experiences of medical students and is working to make sure that this type of behaviour doesn't continue. What could the program do to prevent future students from having the same experience as you?

12. What about reporting- is there anything that would make you more likely to report, or make it easier for you to report?
    12.1. If you were to report, what would you hope would happen?
    12.2. What kind of process do you think should be initiated when a faculty member is reported for unprofessional or abusive behavior? By this I mean, how do you think the MD program should respond?

13. Outside of reporting, do you think there are any other strategies or supports the MD programme could offer to help you ***address*** these experiences? For instance, these could include more general training in conflict resolution, or specific information about strategies to address your concerns with your supervisors.
    13.1. Why do you think these other strategies might or might not be helpful?
    13.2. Can you think of any role models or experiences you have had that were very supportive or gave you skills that allowed you to deal with these situations?

14. Are there any other resources that the program could offer to help support you through experiences like this?
    14.1. Peer support?
    14.2. Mentorship or a formal program linking you to an experienced physician?
    14.3. Accessed how?

15. Before we close, I'd like to reiterate the MD program's commitment to improving this situation. What messages would you like them to hear? How can they make things better for you?

16. Ok, that's all the questions I had. Anything else you want to share? Anything I didn't ask you about?

17. Thanks for your time today. If we have any follow up questions, may we contact you again? What's the best way to reach you? What's the best email for you to receive the money transfer with your honorarium with?

Appendix 2: Resource Lists for Interview Participants

Mental Health Resources (Waterloo)

Michael G. DeGroote
SCHOOL OF MEDICINE

Participating in this research study may have stirred up some emotions, and you may wish to talk to somebody about what you experienced or how it is making you feel. Here are some resources available through the MD program, McMaster, and your local community. All of these resources are available on MedPortal.

If you ever feel you are at risk of harming yourself or others, please seek help at the closest Emergency Room, or call 911.

If you feel distressed and would like support, the following resources are available to you:

Student Affairs is a private and confidential service that can refer you to appropriate resources (e.g. counselor, psychiatrist etc.) Contact: Dr. Margo Mountjoy (mountjm@mcmaster.ca) or 226-971-2940

Dr. Tom Ruttan is a psychologist who is available for medical student support. He offers appointments at both Waterloo Regional Campus and UWaterloo for complete confidentiality. You may contact him directly to book an appointment: truttan@waterloo.ca, 519-888-4567 x33121

In acute crisis, you may contact Crisis Services Waterloo at 1-866-366-4566 or your local Emergency Department.

Mental Health Resources (Niagara)

Michael G. DeGroote
SCHOOL OF MEDICINE

Participating in this research study may have stirred up some emotions, and you may wish to talk to somebody about what you experienced or how it is making you feel. Here are some resources available through the MD program, McMaster, and your local community. All of these resources are available on MedPortal.

If you ever feel you are at risk of harming yourself or others, please seek help at the closest Emergency Room, or call 911.

If you feel distressed and would like support, the following resources are available to you:

Student Affairs is a private and confidential service that can refer you to appropriate resources (e.g. counselor, psychiatrist etc.)
Contact: Dr. Amanda Bell (bellam@mcmaster.ca)

Brock University's Counselling services is located at the Student Development Centre on Brock Campus. They can schedule a triage appointment immediately and offer an appointment with a counselor within 5 working days of a request. Call 905-688-5550 x4750 or visit www.brocku/sdc/counselli

In acute crisis, you may contact COAST Niagara (24 hours a day) at 1-866-366-4566 or your local Emergency Department.