

UNDERSTANDING MORAL EMPATHY

UNDERSTANDING MORAL EMPATHY: A PHENOMENOLOGICAL
EXPLORATION

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A Thesis Submitted to the School of Graduate Studies in Partial Fulfilment of the
Requirements for the Degree Master of Science

McMaster University MASTER OF SCIENCE (2019) Hamilton, Ontario (Health Science Education)

TITLE: Understanding Moral Empathy: A Phenomenological Exploration AUTHOR: Dilshan Pieris, B.H.Sc. (McMaster University) SUPERVISOR: Dr. Lawrence E. M. Grierson NUMBER OF PAGES: xi, 167

LAY ABSTRACT

Empathy—the ability to comprehend the experiences of others—is an important tool that enables physicians to build relationships with patients, which helps them provide better healthcare. Studies have shown that empathy declines during medical training due to a variety of factors. Frameworks describing the empathic response suggest that one’s inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs may be fundamental to providing clinical care with empathy. As such, the goal of this study was to explore the factors that influence these inner motivations of residents in order to gain insights about the evidence that purports residents to demonstrate less empathy as they progress in their training. To address this objective, 10 medical residents from various specialties were interviewed about their experiences, the data were analyzed by way of a descriptive phenomenological methodology, and the initial findings were presented as a verbatim theatre play as a means of member-checking the proposed results. After viewing the play, an audience of medical residents, educators, learners, researchers, and scholars provided feedback through a survey that contributed to the final conclusions of the study. In this regard, the study shows that, apart from a few factors, residents’ inner motivations to be empathic are not significantly influenced during medical training. Rather, certain factors associated with residency affect their ability to deliver on their inner motivations. This study offers insights into the role of motivation in empathic decline, assessment of empathy during medical training, and potential significance of a tension between one’s motivation to be empathic and the opportunities that they are afforded to be empathic during residency.

ABSTRACT

Background: Empathy is essential to forming strong patient-physician relationships that enable physicians to provide better healthcare. In the medical education literature, empathy consists of cognitive, affective, behavioural, and moral domains. Studies have measured declines in empathy during medical training. Researchers speculate that factors within formal, informal, and hidden curricula contribute to empathic decline. Several frameworks suggest that empathy in the moral domain (i.e., the inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs) is the most fundamental to the empathic response. Studying the factors that influence moral empathy during training is important to developing insights into the reasons for the demonstrated declines in resident empathy.

Methods: Descriptive phenomenology was used to address the research objective. Medical residents from various specialties participated in lightly structured interviews concerning their experiences. Interview transcripts were inductively and collaboratively analyzed to construct a preliminary set of factors that influence moral empathy. These factors informed the creation of a script for a verbatim theatre play that was performed for an audience of residents, educators, learners, researchers, and scholars. Following the play, audience participants completed a survey that served as a member-check of the factors that contributed to the final construction of factors.

Results: The results were constructed as three categories under which seven factors are nested. These categories are: Innate Capacity, Previous Personal Encounters, and Specific

Patient Encounters. With the exception of a few, most factors do not directly influence residents' moral empathy but rather challenge their ability to act on their moral empathy.

Discussion: These results offer unique insights into the declines in empathy that have been previously reported in the medical education literature, while also highlighting a moral-behavioural tension that has implications for competency-based medical education, the four-factor model of empathy, and the assessment of empathy in medical education. Future work may build on the results of this study to develop an assessment tool for moral empathy and to elucidate the relationships between the domains of empathy in order to arrive at a more refined conceptualization of the construct.

ACKNOWLEDGEMENTS

I would like to express my sincerest appreciation to my thesis supervisor, Dr. Lawrence Grierson, who went above and beyond to provide support for this thesis, such as by connecting me with resources, colleagues, and opportunities to facilitate my learning. Additionally, he volunteered his time to meet with me on a monthly basis and was patient with me during times when my progress on the project was sub-optimal. I am also grateful for his continued support of my endeavours outside of this thesis by providing me with opportunities to reach these goals and reminding me of the big picture.

I am also thankful to my committee members, Dr. Joyce Zazulak, Dr. Ellen Amster, and Mr. Hartley Jafine, who each provided me with unique methodological and clinical expertise that was instrumental for my successful completion of this thesis. They willingly took time out of their busy schedules to meet with me when I needed help with aspects of the project, checked-in with me over e-mail periodically, and sent me interesting articles to read that were relevant to our mutual interests.

To my friends Rahul Kapur, Payal Patel, and Amirthan Sothivannan, I express my deepest thanks for volunteering to act in the play that I developed for this thesis. Without their involvement, this critical element of my thesis would not have been possible.

Lastly, this thesis would not be possible without the support of my family and friends who have given me encouragement throughout each stage of this project. I am greatly appreciative for their unwavering support, especially during times when I was feeling particularly overwhelmed within and outside of the context of this project.

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LIST OF ABBREVIATIONS AND SYMBOLS

AP	Analytic Partner
CBME	Competency-Based Medical Education
PGY	Post-Graduate Year
PPQ	Post-Performance Questionnaire
SC	Second Coder
VTA	Verbatim Theatre Advisor

DECLARATION OF ACADEMIC ACHIEVEMENT

With guidance from my thesis supervisor, Dr. Lawrence Grierson, as well as support from my thesis committee members, Dr. Joyce Zazulak, Dr. Ellen Amster, and Mr. Hartley Jafine, I have completed the research requirements for this thesis. I conducted a review of relevant literature, devised a study protocol, applied for and acquired ethical approval, collected and analyzed data, and wrote the content contained within this thesis. Input for the data analysis was provided by Dr. Joyce Zazulak and Ms. Connie Lam, an undergraduate student.

CHAPTER 1: INTRODUCTION

Introduction

This study explores medical residents' experiences in patient care in order to characterize the impact those experiences have on their *moral empathy*; that is, their inner motivation to accept others unconditionally, commit to understanding others, and help others achieve their needs in the patient care context (Morse et al., 1992). Given that residency training involves clinical rotations that include numerous interactions with patients about their health status, moral empathy within residents is expected. In addition to providing clinical care, medical residents are also learners completing their postgraduate medical education. Importantly, resident learning experiences have been shown to impact aspects of the empathic response (Hojat et al., 2009; Jeffrey, 2016; Neumann et al., 2011; Winseman, Malik, Morison, & Balkoski, 2009). As such, they are particularly well suited to provide valuable insights regarding the developmental trajectory of moral empathy throughout medical education.

This chapter presents a literature review, which provides context for understanding the relevance of empathy in medicine and medical education. Specifically, it explores the significance of empathy in the practice of medicine, common paradigms for empathy in medical education (and which one was chosen for this study), the directionality of empathy change in medical education, and the factors that contribute to these changes. After the literature review, the chapter provides an informed statement and rationale for the research question.

Briefly, empathy improves the quality of healthcare by helping physicians foster trust, mutual understanding, better disclosure, and adherence to treatments within their patient encounters. However, despite these benefits, empathy declines during medical training due to a variety of factors. Accordingly, exploring the factors that affect moral empathy may provide insights into whether this decline is a manifestation of a lack of inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs. Further substantiating the value of this research question is the apparent gap in the literature pertaining to moral empathy. Lastly, a summary of this chapter will conclude the section.

Literature Review

Utility of Empathy in Medicine

Empathy is broadly defined as the ability to comprehend the experiences of others and is an attribute that is consistently cited as being essential to forming strong patient-physician relationships (Sulzer, Feinstein, & Wendland, 2016; Wispé, 1986). According to Adams (2012), it is necessary for conveying a deep understanding of the other individual involved in the relationship. In the medical context, this is important because patients who feel understood are more willing to trust their physicians and disclose their concerns (Bellet & Maloney, 1991). Indeed, this trust allows physicians to validate and normalize the concerns of their patients, ensuring they feel less isolated, anxious, and distressed (Derkson, Bensing, & Largo-Janssen, 2013; Ha & Longnecker, 2010). In this regard, Kim, Kaplowitz, and Johnston (2004) found that when patients perceive empathy

from physicians, they are more complicit with medical advice and feel greater satisfaction from the encounter overall.

Empathy that strengthens the patient-physician relationship has been implicated in improving various clinical outcomes (Derkson et al., 2013). Though the causal mechanism has yet to be confirmed, a popular hypothesis is illustrated in Figure 1.

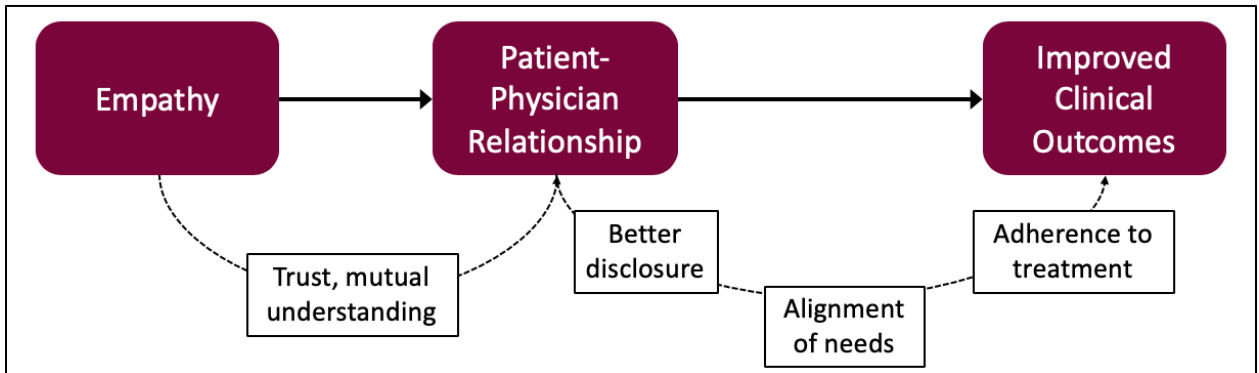


Figure 1: Hypothesized Mechanism for the Benefits of Empathy

Empathy is thought to facilitate trust and mutual understanding between patients and physicians, encouraging patients to be more forthcoming when disclosing information. This helps physicians align treatments with their patients’ needs, increasing the likelihood that patients adhere to these treatments and, thus, experience improved clinical outcomes (Del Canale et al., 2012; Derkson et al., 2013; Hojat et al., 2011). A highly cited example of empathy being associated with improved clinical outcomes is a study conducted by Hojat and colleagues (2011), which showed that patients with highly empathic doctors were more likely to have better control over their blood glucose levels (indicated by hemoglobin A1c) and low-density lipoprotein-cholesterol (LDL-C) levels. Similarly, a large-scale retrospective study conducted by Del Canale and colleagues (2012) revealed that physician empathy was negatively associated with disease complications in patients

with Type-1 or Type-2 diabetes mellitus. Beyond clinical outcomes in diabetes care, research also shows that patients with highly empathic doctors have significantly shorter durations, lower severities, and more robust immune responses for the common cold than patients with less empathic physicians (Rakel et al., 2009; 2011).

Overall, evidence suggests that empathy is paramount for medical practice. From forming relationships with patients to improving their outcomes, empathy can be a helpful means for physicians to improve their quality of care toward patients. Given this importance, many interventions have been created and implemented in medical schools to cultivate empathy in both medical students and residents (Batt-Rawden et al., 2013; Kelm et al., 2014).

Paradigms of Empathy

Although empathy can be broadly understood as the attempt to comprehend the experiences of others (Wispé, 1986), there is “*no consensus on the definition of empathy*” in the medical education literature (Dohrenwend, 2018). Indeed, empathy is a complex construct and many researchers have taken the position that it reflects a collation of multiple domains. According to a recent systematic review by Sulzer and colleagues (2016), these include cognitive, affective, behavioural, and moral domains. In this light, there are three overarching views of empathy in the medical literature.

The first paradigm is that empathy is a purely cognitive construct. Within this view, the definition by Hojat and colleagues (2004) is widely accepted; these researchers describe empathy as “*a cognitive attribute that involves an understanding of the inner experiences and perspectives of the patient as a separate individual, combined with a*

capability to communicate this understanding to the patient.” Many scholars studying empathy use this conceptualization to ground their research (Chen, Kirshenbaum, Yan, Kirshenbaum, & Aseltine, 2012; Chen, Lew, Hershman, & Orlander, 2007; Deen, Mangurian, & Cabaniss, 2010; Fernández-Olano, Montoya-Fernández, & Salinas-Sánchez, 2008; Hojat, 2009; Hojat, Mangione, Nasca, Gonnella, & Magee, 2005; Hojat et al., 2009; Kiosses, Tatsioni, Dimoliatis, & Hyphantis, 2017; Lim et al., 2013; Looi, 2008; Magalhães, Salgueira, Costa, & Costa, 2011; Tsao & Yu, 2016). Moreover, those subscribing to the cognitive view of empathy purposefully omit affect, claiming that effective physicians must understand the internal states of patients without experiencing an emotional response—a phenomenon known as “detached concern” (Batt-Rawden, Chisolm, Anton, & Flickinger, 2013; Bratek, Bulska, Bonk, Seweryn, & Krysta, 2015; Youssef, Nunes, Sa, & Williams, 2014). These authors often credit William Osler with pioneering this view in his essay, *Aequanimitas*, in which he advised doctors to care for patients objectively without sharing their suffering (Osler, 1904).

The second prevalent paradigm in the medical education literature is that empathy has both cognitive and affective domains, which are also known as “imaginative” and “vicarious” empathy, respectively. Newton, Barber, Clardy, Cleveland, and O'Sullivan (2008) describe cognitive empathy as “*an individual's [learned] ability to imaginatively take the role of another so as to understand and accurately predict that person's thoughts, feelings and actions.*” This definition resembles that of Hojat and colleagues (2004) in that it emphasizes perspective-taking and understanding inner experiences of the other. With respect to affective empathy, Newton and colleagues (2008) describe it as

“an individual’s [innate] vicarious emotional response to perceived emotional experiences of others.” Specifically, the individual’s emotion typically matches that experienced by the other person (Greenberg, Agrawal, Toto, & Blatt, 2015). Authors subscribing to the cognitive-affective paradigm argue that both components are essential in developing a trusting patient-physician relationship (Colliver, Conlee, Verhulst, & Dorsey, 2010; Zazulak, Sanaee, Frolic, Knibb, Tesluk, Hughes, & Grierson, 2017). As Hegazi and Wilson (2013) explain, cognition helps physicians comprehend the emotional states experienced by their patients and affect facilitates trust between the patient and the physician. Many researchers have adopted the cognitive-affective view of empathy for their research endeavours (Airagnes et al., 2014; Bellini & Shea, 2005; Colliver et al., 2010; Dehning, et al., 2013; Geenberg et al., 2015; Handford, Lemon, Grimm, & Vollmer-Conna, 2013; Hegazi & Wilson, 2013; Newton et al., 2008; Park et al., 2016; Quince, Parker, Wood, & Benson, 2011; Smith, Norman, & Decety, 2017; Stansfield et al., 2016; Youssef et al., 2014; West et al., 2006; West et al., 2007; Winseman et al., 2009; Zazulak, Halgren, Tan, & Grierson, 2015; Zazulak et al., 2017).

The third paradigm maintains that empathy is comprised of four components (Mercer & Reynolds, 2002; Morse et al., 1992; Stepien & Baernstein, 2006). In addition to the previously described cognitive and affective domains, this paradigm includes behavioural and moral components. *Behavioural* empathy involves verbal and nonverbal communication of understanding to patients regarding their feelings and perspectives. An example of how physicians can verbally convey understanding is by summarizing or paraphrasing the patient’s disclosures and feelings back to them. Examples of

communicating understanding nonverbally include maintaining eye contact and head nodding (Silverman, Kurtz, & Draper, 2006). Interestingly, scholars within the cognitive-only paradigm do not support the existence of a behavioural domain, advocating instead that aspects of communication are included within the bounds of cognitive empathy (Morse et al., 1992).

Moral empathy is the physician’s inner motivation or drive—an “altruistic force”—to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs (Morse et al., 1992). Importantly, Aomatsu, Otani, Tanaka, Ban, and van Dalen (2013) proposed through grounded theory qualitative analyses that these four domains of empathy are not cumulative, but instead have a hierarchical relationship that differs between medical students and residents. In medical students, moral and cognitive empathy are first-order constructs, affective empathy is second-order, and behavioural empathy is third-order. That is, development in the moral and cognitive domains is necessary in order for medical students to engage in affective empathy, and development in the affective domain is necessary for demonstrations of empathy in the behavioural domain. In residents, the proposed relationship is a little different: the moral domain is first-order, cognitive and affective domains are second-order, and the behavioural domain is third-order (Aomatsu et al., 2013). Moreover, this study also found that residents’ moral empathy is more developed than medical students and is driven by a desire to behave professionally (Aomatsu et al., 2013). While the four-factor model of empathy is less prevalent than the other two paradigms, it is nonetheless a relatively common view in the medical literature (Aomatsu et al., 2013; Bayne, 2011; Jeffrey, 2016;

Mercer & Reynolds, 2002; Morse et al., 1992; Ren et al., 2016; Stepien & Baernstein, 2006).

Assessing Empathy

Since the non-behavioural domains (i.e., cognitive, affective, or moral) of empathy can be difficult to observe, many scholars use self-report scales to assess this construct in medical students, residents, and practicing physicians. Although self-report questionnaires are common, they are not without criticism. For instance, self-reports are highly susceptible to social desirability biases, which are when participants either exaggerate their answers to be viewed more favourably or answer such that they meet social conventions and expectations (Dehning et al., 2013; Fisher & Katz, 2000). This bias is cited in many studies examining empathy in medical education and makes it difficult to distinguish honest and dishonest responders (Duke et al., 2015; Greenberg et al., 2015; Kelm et al., 2014; Quince et al., 2011; Shapiro, Rakhra, & Wong, 2016; Standfield et al., 2016). Moreover, one of the most pervasive critiques of such scales is eloquently summarized by Colliver and colleagues (2010), who write that “*empathy—like beauty—would seem to be in the eye of the beholder—the patient, not the caregiver.*” Many researchers share this view, stating that self-report measures are limited by their inability to gauge patients’ perceptions of physician empathy or assess empathic behaviour in medical trainees (Ferreira-Valente et al., 2017; Kelm, Womer, Walter, & Feudtner, 2014; Kiosses et al., 2017; Magalhães et al., 2011; Quince et al., 2011; Ren et al., 2016; Stepien & Baernstein, 2006; Stratton et al., 2016; Toto et al., 2015). Patients’ perceptions are deemed valuable because they reflect a true determinant of where

physician empathy is ultimately directed. Thus, though less common, there are also patient-report scales that rely on their observations of physicians' empathic behaviours (Mercer, Maxwell, Heaney, & Watt, 2004).

Ultimately, researchers determine their measures based on the domains they believe to comprise empathy. In this regard, the methods for assessing empathy can be categorized within the domains described within aforementioned cognitive, cognitive-affective, and four-factor paradigms of empathy.

Cognitive.

The most prominent measure of cognitive empathy is the Jefferson Scale of Empathy (JSPE), which is a self-report survey developed by Hojat and colleagues (2001). This questionnaire is comprised of 20 items that are rated on a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree), half of which are worded positively with the other half worded negatively (Hojat et al., 2009). These questions are organized into three domains: (1) "perspective taking," which measures the perceived importance of understanding the patients' feelings, experiences, and emotions, (2) "compassionate care," which assesses the perceived importance of patients showing emotions and respondents recognizing these emotions, (3) "ability to stand in patients' shoes," which measures how difficult it is for respondents to see the patient's perspective (Stansfield et al., 2016). Since its development, many studies have opted to use the JSPE in both its original version (Bond et al., 2013; Calabrese, Bianco, Mann, Massello, & Hojat, 2013; Duke, Grosseman, Novack, & Rosenzweig, 2015; Fernández-Olano et al., 2008; Hojat et al., 2009; Kiosses et al., 2017; Lim et al., 2013; LoSasso et al., 2017; Mangione et al.,

2018; Riess, Kelley, Bailey, Konowitz, & Gray, 2011; Runyan, Savageau, Potts, & Weinreb, 2016; Smith et al., 2017; Stansfield et al., 2016; Tsao & Yu, 2016) and medical student version (Bergstresser, 2017; Chen et al., 2007, 2012; Graham et al., 2016; Hegazi & Wilson, 2013; Hojat et al., 2004; Potash, Chen, Lam, & Chau, 2014; Ren et al., 2016; Youssef et al., 2014). The JSPE has also been used in other countries (Costa, Magalhães, & Costa, 2013; Khademalhosseini, Khademalhosseini, & Mahmoodian, 2014; Magalhães et al., 2011; Park et al., 2016; Tariq, Rasheed, & Tavakol, 2017).

The Reading the Mind in the Eyes Test (RMET) is another method used to assess cognitive empathy. It was initially developed to gauge how well high-functioning adults with autism could identify emotional states (e.g., happy reflection versus sad reflection, calm versus anxious) in others through observation (Baron-Cohen, Jolliffe, Mortimore, & Robertson, 1997). The original RMET is administered by showing participants 25 photographs of individuals with only their eye regions showing; participants are then asked to identify which mental state, out of two possible choices, is depicted in the photograph (Baron-Cohen et al., 1997). While the RMET was made with autism research in mind, medical education scholars saw its potential to measure cognitive empathy since the test involves recognizing and understanding patients' emotions and internal states (Dehning et al., 2013; Handford et al., 2013; Youssef et al., 2014). Using the RMET, these researchers were able to investigate the relationships between cognitive empathy and various demographic factors. For instance, Youssef and colleagues (2014) found that cognitive empathy was highest in the second year of medical school and was higher in females than in males. Furthermore, Handford and colleagues (2013) found that cognitive

empathy was higher in younger medical students (year 1-2) and practicing physicians than in older medical students (year 5-6), and Dehning and colleagues (2013) found a weak positive correlation between cognitive empathy and their number of close relationships in first-year medical students.

Overall, the JSPE represents one of the most commonly used scales in the medical education literature for the cognitive school of thought. Its international use speaks not only to the amount of research conducted with this scale but also to its ability to measure the cognitive domain in culturally diverse groups of medical students and residents. Further complimenting this scale is the RMET, whose reliance on emotional recognition and observation makes this a more objective assessment of cognitive empathy.

Cognitive and affective.

Within this paradigm, the most common assessment measure is the Interpersonal Reactivity Index (IRI), which is a self-report scale developed by Davis (1980). This survey has 28 questions that are scored using a 5-point Likert scale (0 = does not describe me well, 4 = describes me very well). These questions are organized into four domains: (1) “perspective-taking” (IRI-PT) measures the tendency to adopt others’ viewpoints, (2) “empathic concern” (IRI-EC) assesses sympathy and concern toward others, (3) “personal distress” (IRI-PD) which measures feelings of anxiousness and tension during interactions, and (4) “fantasy” (IRI-F) which assesses the tendency to use the imagination to place oneself into the emotions and behaviours of fictional characters (Davis, 1983). In particular, the IRI-PT and IRI-F measure *cognitive* empathy since they assess one’s ability to consider the views of others and use imagination to place oneself in another’s

situation; the IRI-EC and IRI-PD measure *affective* empathy because they focus on emotional reactions toward another individual. Since its development, the IRI has become increasingly prevalent in studies of empathy in the medical education literature (Airagnes et al., 2014; Avasarala, Whitehouse, & Drake, 2015; Bellini, Baime, & Shea, 2002; Bellini & Shea, 2005; Bratek et al. 2015; Greenberg et al., 2015; Handford et al., 2013; McFarland, Malone, & Roth, 2017; McFarland & Roth, 2017; Quince et al., 2011; Stratton, Saunders, & Elam, 2008; Toto, Man, Blatt, Simmens, & Greenberg, 2015; West et al., 2006; 2007; Yarnold, Bryant, Nightingale, & Martin, 1996; Zazulak et al., 2015; 2017).

Indeed, most researchers in the cognitive-affective school of thought use the IRI. Another self-report questionnaire that measures both domains of empathy is the Empathy Quotient (EQ-60) that was developed by Baron-Cohen and Wheelwright (2004). This scale contains 60 questions—40 relating to empathy and 20 fillers—that are rated on a 2-point Likert scale (1 = slightly agree/disagree, 2 = definitely agree/disagree). Aside from these two scales, there are a few others that have been used in the literature to measure affective empathy specifically. One such scale is the Balanced Emotional Empathy Scale (BEES) that was developed by Mehrabian (1996). This questionnaire consists of 30 questions—15 positively worded and 15 negatively worded—that assess responses to fictional scenarios and certain life events (Mehrabian, 1996; Newton et al., 2008). Items on the BEES are scored on a 9-point Likert scale (-4 = lowest level of agreement, 4 = highest level of agreement) (Dehning et al., 2013). Finally, the Toronto Empathy Questionnaire (TEQ) is another self-report measure that exclusively measures affective

empathy and was developed by Spreng, McKinnon, Mar, and Levine (2009); it is a single-domain scale with 16 questions that are each graded on a 5-point Likert scale (0 = never, 4 = always).

Four-factor model.

It is important to note that the four-factor model is essentially an expansion of the cognitive and cognitive-affective paradigms, incorporating behaviour and morality as two additional domains (Mercer & Reynolds, 2002; Morse et al., 1992; Stepien & Baernstein, 2006). As such, the previously described scales can be used to measure the cognitive (JSPE, RMET, IRI-PT, IRI-F, EQ-60) and affective (IRI-EC, IRI-PD, EQ-60, BEES, TEQ) domains in this model.

For the behavioural domain, one measure used in the literature is the Consultation and Relational Empathy Scale (CARE), which is a patient-report measure developed by Mercer and colleagues (2004). This questionnaire consists of 10 items that are scored using a 5-point Likert scale (1 = Poor, 5 = Excellent) with a sixth option to indicate if a question does not apply (Bayne, 2011; Mercer et al., 2004). Contrary to self-report measures, the CARE asks patients to rate their encounter with the physician (Bayne, 2011). This is useful for assessing the behavioural domain because patients complete the survey based on the empathic behaviours they observe in their physicians; the other three domains cannot be observed. Given its reliance on observation, the CARE is seen as a more objective assessment of empathy, allowing it to circumvent the social desirability bias that is common in self-report measures. Unfortunately, despite calls for more patient-

report measures of empathy, few researchers have used this scale in their studies (Bayne, 2011; Lafreniere et al., 2016; Riess et al., 2011).

Finally, Hogan's Empathy Scale is the only self-report measure known to assess moral empathy (Hogan, 1969). This scale contains 64 questions that are scored in a true-false format and specifically assesses individuals' tendency to consider the consequences of their actions on others' wellbeing (Greif & Hogan, 1973; Hogan, 1969; Johnson, Cheek, & Smither, 1983). An example of this would be a physician weighing the positive and negative implications of a particular treatment before prescribing it to the patient. It is also worth mentioning that apart from the works of Hogan and his colleagues, this scale is rarely used in the medical education literature with the exception of one study completed by Diseker and Michielutte (1981).

Overall, the cognitive and affective domains have many options for assessment from the cognitive and cognitive-affective paradigms. For the behavioural domain, while there is only one formal assessment tool, its reliance on observations from patients improves its validity. Indeed, since patients are the recipients of physician empathy, they are highly suitable observers of empathic behaviour from physicians. However, patients are not the only ones who can observe behaviours. In recent years, the educational climate of medicine has been shifting toward a competency-based framework that requires trainees to demonstrate acceptable levels of proficiency before advancing to the next stage of their medical careers (Iobst et al., 2010). It follows, then, that competency-based medical education (CBME) relies on medical faculty making direct observations of their trainees, deeming them entrustable on the basis of their performance of the appropriate

behaviours (Iobst et al., 2010). In CBME, these observations are made in the context of Entrustable Professional Activities (EPAs), which are tasks that doctors are expected to perform as part of their clinical duties (Lohenry et al., 2017; ten Cate et al., 2015). An example of an EPA where empathy can be assessed is breaking bad news to patients, as this task involves physicians verbally and nonverbally communicating to patients that they understand their situation with the goal of forming a meaningful connection with them (Mercer & Reynolds, 2002; Morse et al., 1992; Stepien & Baernstein, 2006; ten Cate, 2016). Importantly, the underpinnings of EPAs are largely influenced by the infamous pyramidal framework developed in 1990 by George Miller (Cruess, Cruess, & Steinert, 2016). This model holds that there are four levels of competence. The first level, “Knows,” recognizes knowledge as being a foundational aspect of competence and is thus, the base of the pyramid; competence is achieved at this level when learners *know* what is needed to act professionally (Miller, 1990). Competence at the second level, “Knows How,” is achieved when learners *know how* to use their knowledge. The third level, “Shows How,” is performative and involves learners being able to demonstrate competence in applying their knowledge while being supervised and observed; they must *show how* they use their knowledge. Lastly, the fourth level, “Does,” focuses on what the learner *does* when the training is complete. In the context of medical training, this level considers the level of trainee competence outside the context of training; this level represents the apex of the pyramid (Miller, 1990; Figure 2). Therefore, given the presence of the CARE scale, as well as the ability to assess behavioural empathy in CBME in the context of EPAs, the state of assessment for this construct can be considered satisfactory.

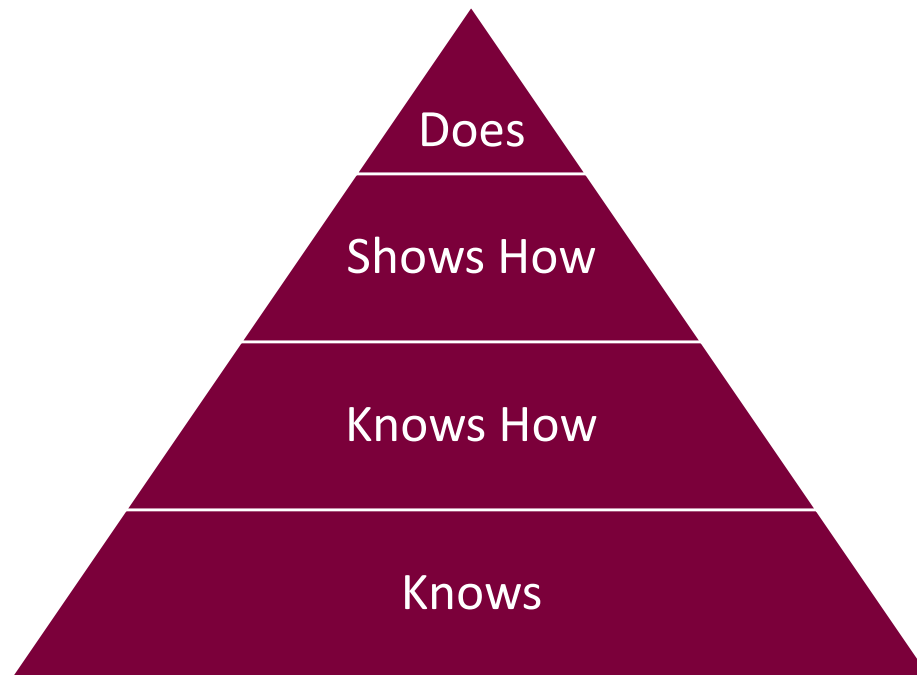


Figure 2: Miller's Pyramid

Finally, although there is one measure for moral empathy, it reduces the construct to a matter of weighing consequences with little consideration for the operational definition of moral empathy posed by Morse and colleagues (1992). In particular, Hogan's Empathy Scale (Hogan, 1969) does not assess the inner motivation to accept others unconditionally, commit to understanding others, and help others achieve their needs. Since Hogan (1969), no further attempts have been made to develop a measure for moral empathy, likely because it is considered non-measurable and has thus been disregarded in the medical education literature (Morse et al., 1992). However, it may not be that moral empathy is non-measurable, but rather that it must be qualified in a different way.

Empathy versus sympathy.

Empathy is often used synonymously with sympathy—a related, yet distinct, emotional response (Chismar, 1988). While some scholars advocate for separating the two words, others do not make this distinction clear, and even support their merger (Cuff, Brown, Taylor, & Howat, 2014). This makes differentiating between empathy and sympathy particularly difficult, which can not only detract from our understanding of the nuances that motivate these emotional responses, but also increases the risk for incorrectly interpreting and applying research findings about these two constructs (Chismar, 1988; Cuff et al., 2014). As such, an understanding of the differences between empathy and sympathy is crucial when conducting research about either and/or both of these constructs.

According to Wispé (1986), sympathy is defined as a desire to mitigate the negative emotions experienced by another person as a result of perceiving them. Those who feel sympathetic are compelled to help the subject of their sympathy because they feel moved by the suffering experienced by that individual (Chismar, 1988; Wispé, 1986). The two operative components of this definition are the increased awareness and inclination to provide assistance (Wispé, 1986). Empathy, on the other hand, is a construct that is notoriously difficult to define. In a fairly recent review of the literature, Cuff and colleagues (2014) found 43 distinct definitions and eight themes for empathy. While the plethora of conceptualizations for empathy is a testament to the body of knowledge surrounding the construct, it can also lead to confusion among researchers studying empathy (Cuff et al., 2014). Thus, a universally accepted definition of empathy

is essential in order to ground our understanding and interpretation of research relating to this construct (Sulzer, Feinstein, & Wendland, 2016).

Empathy model for this study.

Overall, there still remains confusion and ambiguity in the medical literature regarding the specific definition of empathy. Indeed, having a universally accepted conceptualization for the construct is of utmost importance for both researchers and medical educators alike. With respect to the former, Sulzer and colleagues (2016) state that sound definitions are required prior to making decisions about research methodology and are essential to understanding results. Additionally, Jeffrey (2016) purports that how medical trainees understand empathy guides how they approach patient care. Given this significance, scholars have identified this as a prevalent issue in medical education requiring more attention and research (Aomatsu et al., 2016; Jeffrey, 2016; Looi, 2008; Spencer, 2004; Sulzer et al., 2016).

Upon considering all three paradigms, this study will adhere to the four-factor model of empathy. Although it contrasts with some of the definitions of other scholars, one of the main benefits of the four-factor conceptualization is its inclusion of cognitive and affective empathy alongside other domains. That is, this is the most holistic view of empathy. The four-factor model, however, has received little attention in medical education and assessment—especially its moral component. Indeed, it is difficult to study moral empathy without being able to appropriately appraise it, making the cognitive and cognitive-affective paradigms more appealing to researchers.

Empathy Changes in Medical Education

Considerable medical education research has been focused on developing interventions to enhance empathy in medical trainees. This is due to the infamous decline in empathy—a “hardening of the heart”—purported to occur as medical learners progress through their education. Given the implications of empathy for medicine, such a decline is cause for concern among medical educators as their aim is to prepare their trainees to provide optimal patient care. As such, scholars have dedicated time to determining whether a decline exists, mostly focusing on the cognitive and affective domains of empathy.

Currently, there is more research about empathy changes in undergraduate medical students than there is for residents. In particular, many authors note a significant decline in cognitive empathy—measured by the JSPE—between pre-clinical years (limited patient interactions) and clinical years (frequent and regular patient interactions) of undergraduate medical education (Chen et al., 2007, 2012; Costa et al., 2013; Hojat et al., 2009; Khademalhosseini et al., 2014; Ren et al., 2016; Stansfield et al., 2016; Tariq et al., 2017; Youssef et al., 2014). In addition to eroding at the transition period, some studies have also shown that measures of cognitive empathy decay within the clinical years (Hojat et al., 2004; Lim et al., 2013). As for pre-clinical years, cognitive empathy has been shown to either remain stable (Hojat et al., 2009) or increase (Chen et al., 2007, 2012; Ren et al., 2016) between the first and second year of study. Overall, these studies create a compelling case for cognitive empathy decline at the transition from pre-clinical to clinical years and afterward during clinical years. However, there are some studies that

refute these findings. For instance, Handford and colleagues (2013) found that cognitive empathy (assessed by the RMET) decreased between pre-clinical and clinical years, it also decreased in non-medical control groups. This provided evidence that cognitive empathy may change in relation to age as opposed to stage of medical education.

Moreover, Calabrese and colleagues (2013) and Hegazi and Wilson (2013) found that cognitive empathy did not change significantly throughout all undergraduate years of medical training. Finally, Magalhães and colleagues (2011) and Toto and colleagues (2015) found that medical students in their final year had significantly higher cognitive empathy than those in their first year. In terms of affective empathy, one study found that it declines between pre-clinical and clinical years (Stratton et al., 2008); however, Handford and colleagues (2013) produced research that contradicted these findings. Specifically, though they showed affective empathy (measured by the EQ-60 and IRI-PD) to decline between pre-clinical and clinical years, they found it to decrease similarly in non-medical control groups. This indicated that changes in affective empathy may be related to age rather than stage of undergraduate medical training. Another study reported affective empathy to decrease during clinical years (Newton et al., 2008).

There is even less research done regarding empathy changes in residency. In terms of support for a decline in empathy, Colliver and colleagues (2010) and Neumann and colleagues (2011) reviewed the literature and found some studies that showed significant decreases in empathy during residency. Interestingly, all of these studies were longitudinal in design, measured empathy using the IRI, and focused specifically on the internal medicine specialty. In terms of cognitive empathy, one study found significant

decreases in IRI-PT and IRI-F during internship (Rosen et al., 2006); however, these findings were not supported by Avasarala and colleagues (2015), who found no significant changes to cognitive empathy (IRI-PT and IRI-F) during internship. With respect to affective empathy, four studies reported significant decreases in IRI-EC ratings during internship (Bellini et al., 2002; Bellini & Shea, 2005; Rosen, Gimotty, Shea, & Bellini, 2006; West et al., 2007). Two of these studies provided complimentary findings by showing significant declines in IRI-PD during internship (Bellini et al., 2002; Bellini & Shea, 2005). It is worth noting that Bellini and Shea (2005) was the only study to measure change over three years instead of one and found that the decreases in IRI-EC during internship persist through the following two years of residency. Taken together, these changes to IRI-EC and IRI-PD indicate worsening of affective empathy during residency—especially during the first year. That said, there are studies that did not find a decline in affective empathy during residency. Specifically, Avasarala and colleagues (2015) found no significant changes to affective empathy (IRI-EC and IRI-PD) during the internship year and Greenberg and colleagues (2015) found no significant changes to affective empathy (IRI-EC) between the first and third years of residency.

Overall, the majority of studies suggest that cognitive empathy declines in medical students as they transition from pre-clinical to clinical years, and affective empathy declines in residents during their first post-graduate year (PGY). Although many studies in undergraduate medical education are cross-sectional in design (cannot detect change), several longitudinal studies (can detect change) support these cross-sectional findings—

some even reported moderate (Hojat et al., 2004) and large (Hojat et al., 2009) effect sizes.

For postgraduate medical education, the evidence is more convincing since the studies showing significant empathy declines are longitudinal; the contrary evidence by Avasarala and colleagues (2015) and Greenberg and colleagues (2015) is cross-sectional, meaning that results could be influenced by the specific cohorts participating in the studies. Given that these findings show when empathy changes take place, many medical education scholars have called for research aiming to determine what factors contribute to these changes (Duke et al., 2015; Ferreira-Valente et al., 2017; Hojat et al., 2004, 2009; Lafreniere et al., 2016; McFarland et al., 2017; Michalec, 2011; Neumann et al., 2011; Ren et al., 2016; Shapiro, 2008; Spencer, 2004; Stansfield et al., 2016; Sulzer et al., 2016; Tavakol, Dennick, & Tavakol, 2012). It is important to note that while this research provides a comprehensive understanding of when and in what direction measures of empathy change in medical school and residency, it considers predominantly the cognitive and affective domains.

Factors Affecting Empathy in Medical Education

In their systematic review, Neumann and colleagues (2011) aimed to determine the contributors to empathy decline in both undergraduate and postgraduate medical education. This review included 18 studies (11 on medical students and seven on residents) and found that empathy declines from distress brought on by the hidden curriculum, which Hafferty (1998) describes as “*a set of influences that function at the level of organizational structure and culture.*” In other words, the hidden curriculum

comprises everything that is not taught through planned educational content (i.e., the formal curriculum) or student-faculty interactions (i.e., the informal curriculum) (Hafferty, 1998). Within the hidden curriculum, Neumann and colleagues (2011) noticed several themes pertaining to distress: mistreatment by superiors or mentors, vulnerability of the trainees, deficient social supports, intensive workload, limited contact with patients, subpar learning environment, and an idealized view of the profession due to the media. While these factors are compelling, 17 of the 18 studies did not determine them through formal investigations; rather, they were hypothesized within the discussion sections of the relevant papers (Neumann et al., 2011). The one exception is the work of Hojat and colleagues (2009), which asked medical students the following open-ended question: “*Please describe briefly events or experiences (e.g., personal, academic, role model, etc.) in the past year that have influenced (either positively or negatively) your views on the humanistic aspect of medicine (e.g., empathy toward patient, patient-physician relationship, etc.)*.” In their results, Hojat and colleagues (2009) found the following factors to erode empathy according to medical students: (1) negative role modeling from superiors, (2) realities of patient care (over-demanding or unappreciative patients, malpractice issues, insurance regulations, and restrictions to autonomy by hospital guidelines), (3) hostile environment, (4) time pressure and pressure to not make mistakes, (5) high workload, and (6) lack of sleep. Moreover, Jeffrey (2016) verified all of these factors in his meta-ethnographic study, though he also identified prioritization of the biomedical and technical model over psychosocial aspects of care, as well as the pressure to compete with others and impress superiors as being additional factors that

deplete empathy. Lastly, the concept mapping study by Winseman and colleagues (2009) found similar results in medical students and interns, highlighting the role of mentorship, negative perceptions toward patients, and educational experiences as contributing to empathic decline. They also uniquely identified *personal* connections, experiences, and beliefs to be influential.

Overall, the works of Neumann and colleagues (2011), Hojat and colleagues (2009), Winseman and colleagues (2009), and Jeffrey (2016) provide insight into the many factors that affect empathy. Although they differ in certain nuances and wordings, taken together, they converge on empathy being affected by the formal (e.g., high workload, emphasis of the biomedical model), informal (e.g., poor role models, limited exposure to patients, and negative experiences with patients), and hidden curriculum (e.g., hierarchical power dynamics, and hostile and pressuring environment). Indeed, these works are useful in understanding some of the reasons why empathy declines during medical education. However, none of these studies grounded their investigations in the four-factor model of empathy, opting instead for the cognitive (Neumann et al., 2011; Hojat et al., 2009) or cognitive-affective (Winseman et al., 2009) paradigms. As such, these authors did not investigate behavioural or moral empathy. Furthermore, although Jeffrey (2016) defines empathy using the four-factor model, only findings about the cognitive, affective, and behavioural domains were reported—not the moral domain. Therefore, these four studies are common not only in their reporting of the aforementioned factors affecting empathy but also in their omission of moral empathy. Exploring the moral domain may yield useful information into the empathic decline

during medical education. More specifically, given that moral empathy is potentially a first-order construct in relation to the other domains (Aomatsu et al., 2013), studying it would provide insights about whether the decline in measures of cognitive and affective empathy are manifestations of a loss of inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs.

Study Purpose and Rationale

Overall, this study aimed to answer the following research question: *what do residents' experiences reveal about the factors that influence their moral empathy?* This is an important question to answer because measures of cognitive and affective empathy decline during medical training due to a variety of factors, which is concerning since empathy is considered to help physicians build patient-physician relationships founded on trust and mutual understanding. Through these relationships, patients feel more comfortable disclosing sensitive information and adhering to treatment recommendations with patients, ultimately improving clinical outcomes and thus, the quality of healthcare physicians can provide. The erosion of empathy in residents is especially concerning since postgraduate medical education is epitomized by clinical rotations that involve frequent patient-physician interactions. Given the hierarchical nature of the construct of empathy, studying the moral domain would highlight whether empathic decline is a consequence of learners losing their inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs, or whether the factors contributing to empathic decline directly impact the cognitive and affective domains.

Further substantiating the need to answer this research question is the gap in the literature pertaining to moral empathy. Relative to the cognitive, affective, and behavioural domains of empathy, conceptualizations of moral empathy are challenged by a lack of empirically-supported evidence, largely because there are few methods available to measure and study this domain. Indeed, there are numerous measures for cognitive and affective empathy, making them the two most commonly studied domains. As seen in the literature review, much of the research about empathy, empathic changes, and factors that influence empathy during medical education is in the context of these two domains, making the cognitive and cognitive-affective paradigms the most prevalent in medical education literature. In addition to these two domains, behavioural empathy is also easily—and objectively—studied as it relies on direct observations made by patients through patient-report measures like CARE and medical faculty during CBME. Moral empathy, on the other hand, does not have any effective measures, making it the least studied domain of the four. Due to this scarcity of measures, moral empathy has been the most elusive domain to study, resulting in a lack of knowledge about this construct and its developmental trajectory throughout medical education.

Taken together, the importance of qualifying moral empathy and the relative absence of methods with which to do so warranted the use of an alternative means for studying this construct. Given that the research question proposed learning about the factors that influence moral empathy through exploring medical residents' subjective experiences, the chosen methodology had to be one that facilitated this exploration; in this regard, phenomenology was employed in this study. This was the most appropriate choice

since this approach is characterized by learning about the topic of study by studying the subjective experiences of the population of interest (Neubauer, Witkop, & Varpio, 2019). Indeed, exploring subjective experiences is particularly beneficial for research concerning human motivation, as is the case in this study, since behaviours are affected by what individuals perceive as being real (Flood, 2010). Importantly, although Tavakol and colleagues (2012) also conducted phenomenological investigation about empathy, their research focused on the broader construct rather than any domain in particular. In this way, the work done in this study would be building upon their findings by elucidating the factors that influence a particular domain of empathy. The phenomenological methodology, described in detail in Chapter 2, involved lightly structured interviews and analytic techniques consistent with phenomenology. Moreover, it involved using verbatim theatre to member-check the initial findings, which consists of showing results to a broader participant group to obtain their feedback about its accuracy, relatability, and resonance (Jackson, Drummond, & Camara, 2007).

Lightly structured interviews were helpful because they were a means of eliciting “self-reports” from participants about their inner motivations in a way that circumvented social desirability biases, which are when participants either exaggerate their answers to be viewed more favourably or answer such that they meet social conventions and expectations (Dehning et al., 2013; Fisher & Katz, 2000). These biases are a common challenge in many studies examining empathy in medical education, given their use of self-report questionnaires (Duke et al., 2015; Greenberg et al., 2015; Kelm et al., 2014; Quince et al., 2011; Shapiro, Rakhra, & Wong, 2016; Standfield et al., 2016). Lightly

structured interviews involve beginning the interview with an *a priori* open-ended question as a means of initiating a conversation with the participant; the remaining questions are impromptu but revolve around particular experiences relating to the phenomenon being studied. This interviewing approach provided a more effective means of studying the moral domain of empathy relative to the use of self-report questionnaires because the open, informal, and unrestrictive style facilitated the disclosure of participants' narratives and experiences while also providing a means of investigating the construct without asking about it directly. In this way, participants were able to speak more freely about their inner motivations while reducing the social desirability biases associated with self-reports.

The analytic methods that were employed were also consistent with a phenomenological approach and enabled interrogation of the residents' experiences with respect to the operational definition of moral empathy. That is, their inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs. Verbatim theatre, a humanities-relevant methodology, served as a member-checking step that allowed for a multiplicity of perspectives about the initial results to be elicited from a broader—but relevant—population group (i.e., medical residents, educators, learners, researchers, and scholars), to ultimately inform the final construction of factors influencing moral empathy. Verbatim theatre was particularly useful for this process because, contrary to traditional member-checking methods, it was a way for viewers of the play to cognitively and emotionally engage with the data while also having an experiential point of reference from which to imagine multiple variations

of the topic being studied. Through these methodological techniques, this study developed an understanding of the factors that influence medical residents' moral empathy.

Summary

In this chapter, a review of the literature pertaining to empathy in medical education was presented and served to not only summarize the current state of the field but to also highlight the gap in the literature surrounding moral empathy and the importance of exploring this topic. Based on the review, the following research question for this study was devised: *what do residents' experiences reveal about the factors that influence their moral empathy?* Chapter 2 will describe the specific approach to phenomenology taken in this study, as well as its underlying ontological and epistemological philosophies so as to contextualize the methodological decisions made in this study. Following this description, data collection and analytic procedures (including member-checking) will be explained in relation to these ideas, after which the results of the study will be presented with respect to the research question.

CHAPTER 2: PHENOMENOLOGICAL STUDY

Introduction

This study aimed to qualify moral empathy by answering the following question: *what do residents' experiences reveal about the factors that influence their moral empathy?* This question represents a gap in the literature that is important to address because while there is agreement amongst researchers about the factors that influence cognitive and affective empathy, the factors that affect moral empathy are not understood. These factors are important to know because elements of moral empathy may be deterministic with respect to demonstrations of empathy during patient care. Accordingly, this study may illuminate reasons why measures of empathy decline, highlight ways of preserving an empathic orientation to patient care through training, and inform the development of meaningful medical education assessments for moral empathy.

An overview of phenomenology, as well as a rationale for the specific approach that was chosen, begins this chapter. This is followed by a description of the methods and results of the study. Importantly, this phenomenological study was conducted with two distinct stages. The first stage was a qualitative investigation to generate a preliminary set of factors that influence moral empathy (“Stage 1”). The second stage used verbatim theatre as a member-checking step, which provided feedback to inform the final construction of factors (“Stage 2”). Since these two stages, involving distinct participants and procedures for data collection and analysis, coalesce to produce the final results, they are described together in this chapter. The verbatim theatre play used for member-checking was created based on the results of Stage 1. These procedures are presented in

Chapter 3; the script is presented in Appendix 3. The integration of the member-checking portion of the study into the results, however, is presented in this chapter. A brief discussion summary concludes the chapter.

Phenomenology Overview and Rationale

Phenomenology is both a philosophical orientation and methodological approach that translates literally as the study of phenomena; more specifically, it seeks to understand how a certain population experiences a particular phenomenon by studying their lived experiences and stories (Flood, 2010; Starks & Brown Trinidad, 2007; Tavakol et al., 2012). Like other qualitative approaches, phenomenology consists of underlying philosophies that must be adhered to when conducting research in this paradigm.

To understand these philosophies, it is useful to consider the roots of phenomenology in Kantian philosophy. In his 1781 book, *A Critique of Pure Reason*, Immanuel Kant posits that it is impossible to have knowledge of a “thing-in-itself” or of an object independent of the senses; rather, we can only have knowledge of our *experience* of a thing as perceived through the senses (i.e., a *phenomenon*) (Kant, Guyer, & Wood, 2009). Since it is only possible to know our experiences of things—objects of the senses—it follows then that our reality *is* phenomena. As Lin (2013) puts it, “*Because objects are conceivable only via human consciousness, phenomena are thus the reality of the world that we perceive.*” This view of reality (i.e., that we can only know phenomena) gives rise to the underlying ontology of phenomenology: *subjectivism*, which holds that individuals each have their own subjective realities that enable them to experience the world uniquely (Bahari, 2010; Colliver, 2002; Tavakol et al., 2012). Since individuals can

only know what is within their unique subjective realities, it follows then that they create their knowledge based on these realities. This defines the underlying epistemology of phenomenology: *constructivism*, which states that individuals use their experiences to create meanings, insights, and other knowledges (Bahari, 2010; Colliver, 2002; Tavakol et al., 2012).

While there are various approaches to conducting phenomenological research, this study opted for the descriptive tradition because its emphasis on describing phenomena lends itself to the ultimate aim of this study, which is to qualify moral empathy.

Descriptive phenomenology focuses on studying phenomena as perceived by individuals' consciousness (Flood, 2010; Lavery, 2003; Lopez & Willis, 2004; Neubauer et al., 2019; Rodriguez & Smith, 2018). Although phenomena are perceived subjectively—as per the subjectivist ontology—the descriptive approach holds that lived experiences of any given phenomenon are unified by commonly perceived features known as “universal essences” that constitute the true nature of the phenomenon. As such, the goal of descriptive phenomenology is to identify these universal essences in order to produce a generalizable description of what it means to experience the phenomenon.

Importantly, the focus of this investigation should be on the phenomenon as lived by the population being studied—not the researcher. Accordingly, researchers conducting descriptive phenomenology aim to minimize the impact of their beliefs, attitudes, biases, assumptions, and prior knowledge on the study; this ensures that the focus remains on the participants' experiences (Flood, 2010; Lavery, 2003; Lopez & Willis, 2004; Neubauer et al., 2019; Rodriguez & Smith, 2018). However, this is difficult to accomplish since

researchers are not immune to the implications of the subjectivist ontology; they also experience the world through the lens of their own subjectivity—a state known as the *natural attitude* (Neubauer et al., 2019). Thus, researchers using a descriptive phenomenological approach strive to achieve a state known as the *Transcendental I*, wherein universal essences can be grasped from participants’ lived experiences with minimal confound from the researchers’ subjectivity. Put differently, this state enables the constructivist epistemology by allowing researchers to create knowledge about the phenomenon being studied from the subjective experiences of their participants. To reach this state, researchers engage in three reductions during the data collection and analysis processes. The first is the *Transcendental Stage*, which involves reducing their natural attitude by actively setting aside their prior knowledge, understandings, and assumptions of the phenomenon (Flood, 2010; Lavery, 2003; Lopez & Willis, 2004; Neubauer et al., 2019; Rodriguez & Smith, 2018). This procedure is called “bracketing” and can be done through constant self-reflection, collaboration with multiple researchers, and eliciting multiple perspectives on the data (Neubauer et al., 2019). The second is the *Transcendental-Phenomenological Reduction* during which participants’ experiences are considered individually to construct a description of the phenomenon. In creating this description, the constructivist epistemology is enacted. The third reduction is *Imaginative Variation* wherein the description produced in the previous stage is reduced to a characterization that reflects the universal essences of the phenomenon; these essences are determined through undergoing multiple imaginations of the phenomenon (Neubauer et al., 2019). It is important to note that although there are three reductive stages, they are

not strictly sequential; rather, these reductions are ongoing processes that occur concurrently throughout the study in order to ensure maintenance of the *Transcendental I*.

Figure 3 illustrates these reductions.

Overall, phenomenology affords researchers the opportunity to learn from the subjective experiences of their participants (Flood, 2010; Laverly, 2003; Lopez & Willis, 2004; Neubauer et al., 2019; Rodriguez & Smith, 2018). Throughout this chapter, the methodological decisions for data collection and analysis will be explained in relation to parameters of descriptive phenomenology (i.e., reductions to the Transcendental I), as well its underlying philosophies of ontological subjectivism and epistemological constructivism.

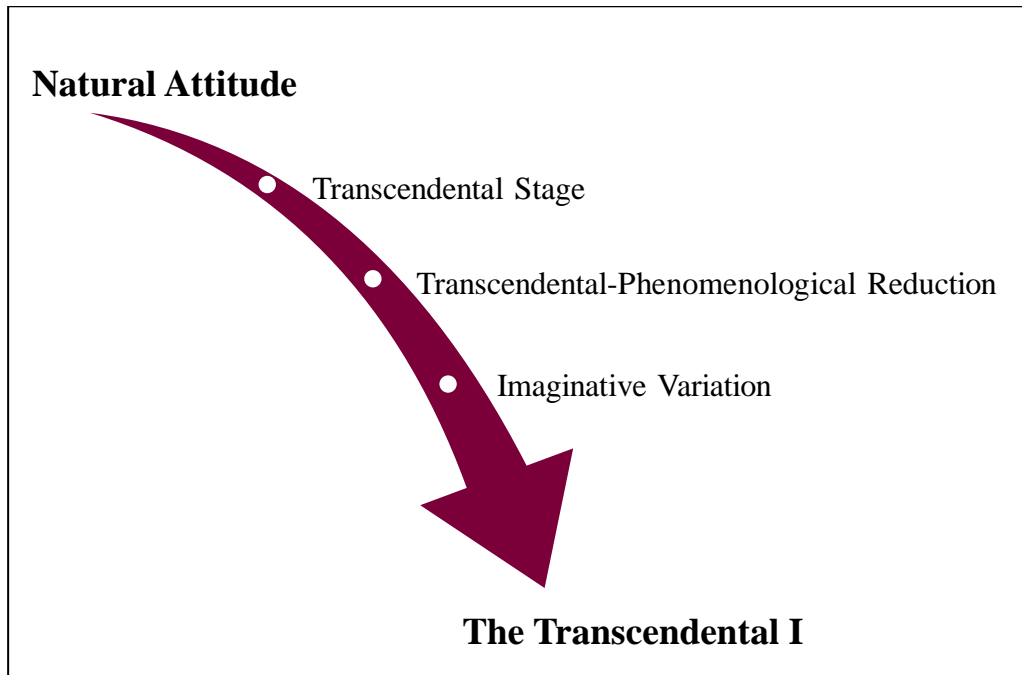


Figure 3: Reductions to the Transcendental I

Participants and Recruitment

Stage 1

Participants recruited for this stage of the project (hereby the “interview participants”) consisted of 10 residents from six specialties that were affiliated with McMaster University: Family Medicine, Psychiatry, Paediatrics, Internal Medicine, Surgery, and Obstetrics and Gynaecology. These specialties were chosen because they are the six core rotations represented in undergraduate medical education. Table 1 outlines demographic characteristics about the participants, including their specialty, year of residency, and gender. Most medical specialties had two participants except for Internal Medicine and Obstetrics and Gynaecology, which both had one; however, given that there were six specialties and 10 participants in total, this was the most even distribution of participants that could have occurred. In terms of post-graduate years of training (PGYs), there were six represented in this sample, with PGY-4 being the most represented (n=3) and PGY-1, PGY-5, and PGY-6 being the least common (n=1). Lastly, the gender distribution was slightly skewed toward females (n=6).

With respect to the underlying philosophies of descriptive phenomenology, the subjectivist ontology was honoured by recruiting participants that have had the subjective experience; the constructivist epistemology was upheld in this study by having participants engage in a data collection method that elicits their perceptions of the phenomenon of interest (i.e., moral empathy). Through studying these experiences, this study sought to elucidate the universal essences of the factors influencing their moral empathy (Neubauer et al., 2019; Starks & Brown Trinidad, 2007).

Recruitment of interview participants was done using the snowball technique, which leveraged the social networks of existing participants to increase sample size (Cohen & Arieli, 2011). More specifically, residents who have already been recruited referred other residents who were interested in taking part in this study. The snowball technique is often criticized for its non-random nature, as it limits researchers from generalizing the data obtained from the study to the population of interest (Atkinson & Flint, 2001; Cohen & Arieli, 2011). However, the benefit of snowball sampling can be understood by considering that the primary goal of qualitative studies is to develop an understanding of complex issues pertaining to the human condition (Marshall, 1996). In this regard, non-random recruitment methods, like snowballing, are more appropriate not only for their pragmatism but also because they facilitate trust between the researcher and participants. For snowballing specifically, participants are aware that they were referred to the study by a trusted other, making them feel more comfortable trusting the researcher and thus, more inclined to disclose sensitive information (Cohen & Arieli, 2011). This was particularly important for this study because information about residents' personal and professional life experiences was being elicited from them. By promoting the disclosure of this information, snowballing facilitated the creation of data pertaining to the research question; to this end, it enabled the constructivist epistemology in this study.

With respect to sample size, it is important to remember that the goal of qualitative research is to “*use rich and deep description to inform our understanding of concepts and contribute to broader theoretical understanding [of what is being studied]*” (Thompson, 1999). As such, the sample size was not determined *a priori*; rather,

interview participants were recruited to the point of theoretical saturation, which was when no new themes or information emerged from the data (Fusch & Ness, 2015; Guest, Bunce, & Johnson, 2006; Thompson, 1999). To operationalize this idea, data collection and analysis were done in conjunction with each other until recruiting new participants yielded little to no changes to the outcomes of the data analysis.

Table 1: Interview Participant Demographics

Specialty	Number of Participants (n=10)
Family Medicine	2
Internal Medicine	1
Obstetrics & Gynaecology	1
Paediatrics	2
Psychiatry	2
Surgery	2
PGY	
1	1
2	2
3	2
4	3
5	1
6	1
Gender	
Male	4
Female	6

Stage 2

Participants recruited for this stage of the project (hereby the “audience participants”) were tasked with viewing a verbatim theatre play that was created based on the results of Stage 1 (see Chapter 3 for the playwriting procedures; see Appendix 3 for the script; see Appendix 4 for event programme) and providing feedback about its accuracy, relatability, and resonance; this feedback informed the final construction of

factors for this study (Jackson et al., 2007). Since the purpose of member-checking is to elicit perspectives about the initial results from a broader participant group, it was important for audience participants to consist of more than just residents. In this regard, a total of 28 audience participants consisting of medical residents, educators, learners, researchers, and scholars for whom the topic of this study was relevant and interesting were invited to participate in the audience. Data collection at this stage was anonymous; however, audience participants were given the option to disclose their gender, PGY (if they were a resident), and/or information about their specialty or professional role. With respect to the gender distribution of the audience, the majority of respondents were female (n=18), which surpassed the number of male participants by more than double (n=8); two respondents did not disclose their gender. Furthermore, while most audience members shared their gender, most chose not to indicate their professional role, PGY, or specialty. These demographic data are summarized in Table 2.

To recruit these audience participants, an advertisement flier with the event details was circulated using the snowball method since participants were more likely to attend a theatrical production with members of their social network than alone or with unfamiliar others. In addition to snowballing, the fliers were circulated amongst students and faculty of the Bachelor of Health Sciences (BHSc) program at McMaster University since they represent a demographic of learners that are inclined toward issues in healthcare and medical education, such as those depicted in the play. As this was a member-checking stage, there were less considerations to be made with respect to sample size. However, for the purposes of booking a space for the performance, as well as printing a sufficient

number of programmes and surveys, an audience of about 50 participants was anticipated prior to recruitment.

Table 2: Audience Participant Demographics

Gender	Number of Participants (n=28)
Male	8
Female	18
Undisclosed	2
Role	
Resident	3
Medical Educator	5
Medical Student	4
Other	4
Undisclosed	13

Data Collection

Stage 1

Upon providing informed consent, participants took part in qualitative interviews, which are the primary means for collecting data for phenomenological research; the interviews were audio-recorded, transcribed, and de-identified (see “Research Ethics” for more information about de-identification) (Wimpenny & Gass, 2000). Interviews were an ideal means of collecting data because they allowed for the capture of perspectives, context, and authenticity from participants as it pertained to the topic of interest (Aomatsu et al., 2013; Starks & Brown Trinidad, 2007).

The interview structure for this study was chosen such that it aligned with descriptive phenomenology. However, the most appropriate structure was difficult to determine because there is debate over the degree of structure that is more preferable for a phenomenological orientation (Wimpenny & Gass, 2000). On the one hand, some

researchers consider semi-structured interviewing as being consistent with phenomenological studies (Starks & Brown Trinidad, 2007). Semi-structured interviews involve participants answering questions from a pre-determined list, commonly known as an “interview guide,” that represent the desired scope for the interview and guide the conversation (Doody & Noonan, 2013; Jamshed, 2014; Turner III, 2010). In addition to the planned questions, researchers are allowed to ask follow-up and probing questions based on the trajectory of the conversation, giving them some freedom to explore issues that arise spontaneously in the interview (Doody & Noonan, 2013; Turner III, 2010). Conversely, other researchers advocate for minimal structure when interviewing in research using phenomenological methods (Sorrel & Redmond, 1995). Having a light structure allows the interview to be informal or conversational, as there are little to no prompts prepared ahead of time (Doody & Noonan, 2013; Jamshed, 2014; McGrath, Palmgren, & Liljedahl, 2018). Instead, the researcher begins the interview with an open-ended question pertaining to the topic of interest and asks subsequent questions based on participants’ responses; the participants’ stories guide the conversation (Doody & Noonan, 2013). This impromptu style enables the researcher to freely explore issues that are introduced in the interview (McGrath et al., 2018).

Descriptive phenomenology seeks to characterize a particular phenomenon as experienced by participants by examining their lived experiences and narratives (Neubauer et al., 2019; Starks & Brown Trinidad, 2007; Tavakol et al., 2012). Naturally, it follows that the goal of interviews conducted within this paradigm is to elicit this information from participants (Starks & Brown Trinidad, 2007; Wimpenny & Gass,

2000). Given that their open, informal, and unrestrictive style encourages participants to share experiences and narratives more freely, lightly structured interviews were conducted in this study (Doody & Noonan, 2013; Sorrell & Redmond, 1995; Wimpenny & Gass, 2000). This was particularly important for this study because information about personal and professional life experiences was being elicited from participants. Moreover, having less structure in the interviews is particularly helpful when there is little known about a topic, as is the case with moral empathy (Doody & Noonan, 2013). Additionally, using lightly structured interviews was consistent with the philosophies underpinning descriptive phenomenology. Specifically, omission of a strict interview guide minimized the imposition of researcher prior understandings about moral empathy on the participants through *a priori* questions. This was consistent with the subjectivist ontology because it recognizes that there is no “correct” reality; participants’ subjective realities are equally correct with respect to the factors that influence moral empathy. Lightly structured interviews also enabled the constructivist epistemology by giving participants more freedom to discuss their experiences.

Given that a lightly structured interview format was chosen for this study, an interview script was not created; however, the interview always began with some version of the question, “*can you walk me through what led you to pursue a career in your specialty?*” Though the wording varied between interviews, this question served to stimulate conversation with participants and get a sense of their motivations for practicing medicine, which potentially reflected some of the inner motivations that characterize moral empathy. For the remaining questions, although participants largely guided the

conversation, care was taken to discuss certain experiences that were relevant to the factors that influence moral empathy; this ensured that the data collected would be useful in elucidating these universal essences, as per the descriptive phenomenological approach. In this regard, the following experiences were discussed in each interview: pre-clerkship, clerkship, interactions with preceptors, patient encounters, stressful situations, and their personal lives. Despite these questions being impromptu, conscious effort was taken to phrase them appropriately during the interviews by ensuring they were: (1) open-ended to allow participants to answer in their own words, (2) neutral so as to minimize the imposition of my own values on the participants, (3) asked one-by-one to ensure participants were clear about what they were answering, (4) clearly worded and in terminology familiar to the participants so that the risk of misinterpretation was minimized, and (5) constructed, for the most part, with question stems other than “why” to elicit more narrative information from participants (Turner III, 2010). Furthermore, because of the threats of social desirability biases in particular, the questions and probes that support the interview process did not ask about moral empathy directly but rather focused on eliciting information pertaining to participants’ inner motivations.

Stage 2

The results elicited from Stage 1 were used to create a verbatim theatre script that was performed as a play in front of the audience participants (see Chapter 3 for the playwriting procedures; see Appendix 3 for the script; see Appendix 4 for the event programme). After viewing the play, consenting audience participants completed a post-performance questionnaire (PPQ), which was a short questionnaire designed to elicit

feedback and impressions about theatre performances. This is a typical method for obtaining audience input in verbatim theatre (Brown, Ramsay, Milo, Moore, & Hossain, 2018; Colantonio et al., 2008; Mitchell, Jonas-Simpson, & Ivonoffski, 2006). Attached to the PPQ was a package detailing the goals of the study, research protocol, how their data would be used, risks and benefits, and a confidentiality statement. This package also explained that since the PPQ was fully anonymous, they would not be able to withdraw from the study upon submitting it; rather, their consent was implied through their submission. Since the play was written based on the themes generated in Stage 1, the audience's input about the play was likely to reflect the ways in which the themes resonated with them. As such, completing the PPQ after viewing the verbatim theatre performance was an appropriate member-checking strategy.

The significance of member-checking can be understood in terms of the subjectivist ontology taken for this study. As the researcher who conducted much of the analysis in Stage 1, it was possible that my subjective reality (i.e., natural attitude) coloured my engagement with the data throughout the process. Through member-checking, my initial results were scrutinized by a relevant participant group, thereby improving the accuracy, trustworthiness, and credibility of my results through eliciting a multiplicity of perspectives (Jackson et al., 2007; Kuper, Reeves, & Levinson, 2008).

With respect to the content of the PPQ, there is no gold standard for the specific questions that should be asked. However, several authors have used similar PPQs in previous studies, modifying them slightly to fit the goals of their respective research. For instance, the PPQ used by Mitchell and colleagues (2006) included 10 items scored on a

7-point Likert scale, though no anchors for the scale were described. Colantonio and colleagues (2008) adapted this scale by reducing the number of items to five and rewording question stems to increase their relevance to the study. Brown and colleagues (2018) went through a similar process for their scale by reworking the PPQ used by Colantonio and colleagues (2008), though their survey also had five items scored using a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). Apart from these minor differences, these PPQs were similar in that they all provided space underneath each question for respondents to provide feedback in addition to the numerical ratings. Thus, given the absence of a gold standard and flexibility in adapting PPQs, items for the PPQ in this study were borrowed from all three of the aforementioned scales—and two new items were created—to address the member-checking goals of this study. The numerical ratings for each question in this study’s PPQ were elicited using the 5-point Likert scale by Brown and colleagues (2018) and comment sections underneath each question provided an avenue for participants to provide feedback and impressions about the play. Appendix 1 shows the PPQ that was given to audience participants.

Data Analysis

Stage 1

The goal of analyzing data in descriptive phenomenological studies is to form “clusters of meaning” or categories that represent the universal essences of the phenomenon being studied (Neubauer et al., 2019; Starks & Brown Trinidad, 2007). For this study, this meant that the analytic objective was to generate factors influencing moral empathy. Throughout the analysis, it was critical to ensure that the philosophies

underpinning descriptive phenomenology were upheld. Indeed, the subjectivist ontology holds that reality is subjective, meaning that my experience of the world is unique to me; as such, my analysis of the data in this study was susceptible to my subjective lens. Since descriptive phenomenology seeks to reduce the impact of this lens, it was important for me to continuously reflect on my positionality with respect to the data by recognizing the prior knowledge, understandings, assumptions, and biases in my subjective reality that could confound the analysis (Chan, Fung, & Chien, 2013; Flood, 2010; Neubauer et al., 2019; Laverty, 2003; Lopez & Willis, 2004; Rodriguez & Smith, 2018; Starks & Brown Trinidad, 2007). This was done throughout the entire analysis by repeatedly writing reflexive memos and having discussions about my positionality with my collaborators, both of which are described in the “Reductions to the Transcendental I” section of this chapter. Moreover, these processes reflected the constructivist epistemology enacted during the analysis. Indeed, minimizing the impact of my subjectivity allowed me to focus on that of the participants; through this focus, knowledge about the factors influencing their moral empathy was constructed by analyzing their subjective experiences.

All interviews were audio-recorded and transcribed verbatim. Data analysis then occurred over a series of steps. To begin, I read all the transcripts and then engaged in several iterations of coding. Coding is a process whereby textual excerpts from the transcripts that pertain to the research question and analytic objective are labelled; the label is known as a code (Attride-Stirling, 2001). Given that there are various methods of coding, it was important to choose techniques that were consistent with descriptive

phenomenology. In this regard, the techniques that were chosen were initial and focused coding. *Initial coding* involves examining transcripts line-by-line and creating descriptive codes for any text that relates to the analytic objective (i.e., what do residents' experiences reveal about the factors that influence their moral empathy?). *Focused coding* involves distilling and categorizing the initial codes, which are then used to re-code the transcripts (Charmaz, 1996; Saldaña, 2013). These coding techniques were chosen because they enabled the constructivist epistemology to be enacted during the analysis. In particular, initial coding began the analysis as close to the data as possible through descriptive labelling, after which focused coding refined these labels at a higher level. In this way, using these coding techniques in concert facilitated the construction of knowledge from the data (i.e., inductively). (Bahari, 2010; Charmaz, 1996; Saldaña, 2013). Given the subjectivist ontology that underlies descriptive phenomenology, these inductive coding techniques allowed me to minimize the impact of my subjective reality on the development of results by ensuring my analysis of the data was not overly influenced by analytic interpretation. Although their origins are in constructivist grounded theory, these techniques can also be used in phenomenological investigations (Lin, 2013; Saldaña, 2013). Moreover, while these techniques were helpful for conducting the analysis, it was important to ensure that they were used to achieve an outcome consistent with this phenomenological study and not a grounded theory study. That is, the coding done in this study should be used to help capture the universal essences constituting the factors that influence moral empathy—not to devise a theory to explain behaviours and social processes (Charmaz, 1996; Starks & Brown Trinidad, 2007).

The development of the codebook occurred over several iterations of initial and focused coding, as well as a series of meetings with members of the research team, which included two analytic partners (APs), a second coder (SC), and me. These meetings occurred after an initial subset of three transcripts were coded and involved an in-depth review and revision of the developing codebook. This collaborative coding process served to ensure that initial codes were descriptive and based on the transcripts (and not overly influenced by analytic interpretation), resulting in an inductive (rather than a deductive) analysis (Attride-Stirling, 2001; Charmaz, 1996). For this study, engagement with the APs involved meeting at several stages throughout the analytical process in order share the transcripts, develop codes, and to incorporate their feedback on the relevance, clarity, and appropriateness of the codes devised. Specifically, one AP provided input from the perspective of a medical educator and physician, and the other contributed to the analysis through the lens of a medical education research expert. In this way, the analysis was informed by multiple perspectives (Saldaña, 2013).

Upon revision of the codebook, the original transcripts were re-coded, along with a new set of transcripts. This involved engagement of the SC (a novice researcher), who used the codebook to independently code the transcripts. Afterwards, discrepancies with codes for particular excerpts of transcripts were reconciled through discussion between the SC and me. All analysis was conducted using the NVivo software (Version 12).

As described in the “Participants and Recruitment” section, data collection and analysis were done in concert until theoretical saturation was reached. As such, the coding procedures continued until the recruitment of new participants yielded little to no

changes to the analytic categories formed in the analysis. By the end of the analysis, a finalized list of factors influencing moral empathy in medical residents was created. The results of this initial analysis were then converted into a verbatim theatre script that was presented to a separate group of participants (see Chapter 3 for the playwriting procedures; see Appendix 3 for the script). After viewing the play, participants completed a PPQ as a means of member-checking the Stage 1 results (see Stage 2 of “Data Collection”); this feedback was used to inform revisions of the results until a final amalgam of factors that influence moral empathy was constructed.

Stage 2

Once the PPQs were completed, the comment data were transcribed and uploaded into NVivo. Afterward, the comments were analyzed using the template analysis method, which involves using *a priori* themes to analyze a new set of textual data (Brooks, McCluskey, Turley, & King, 2015). For this study, the template that was used was the amalgam of themes generated in Stage 1. Since member-checking was a means to verify the themes from Stage 1 with the audience participants, template analysis was an ideal analytic approach as it provided a way to identify these themes in PPQ responses (Jackson et al., 2007). Moreover, template analysis can be applied to “*open-ended question responses on a written questionnaire*,” such as the comment sections of PPQs, and can be used in two-stage studies like this one (Brooks et al., 2015). Taken together, template analysis was an appropriate method for analyzing the PPQs.

After establishing the template, the comment sections of the PPQs were read to gain familiarity with the data, after which textual excerpts that were relevant to the

analytic aim were labelled using the template (Brooks et al., 2015). That is, the comment sections of the PPQs, where possible, were coded using factors from Stage 1 as a codebook. For excerpts that reflected an idea that was relevant to the analytic objective but could not be labelled using the template (i.e., quotes describing an idea not captured in Stage 1), the template was adjusted by adding and/or changing the codebook such that the text in question was captured (Brooks et al., 2015). This process of identifying and coding relevant excerpts, as well as adjusting the template as needed, was iterative and only reached a conclusion once all data from the PPQs pertaining to the research question were assigned themes (Brooks et al., 2015).

In addition to these procedures, broader comments made in the PPQ were noted; that is, comments that did not address any factor in particular but were rather general impressions of the content depicted in play. Since the play was heavily informed by the results devised in Stage 1, these impressions would speak to the resonance of the themes with the respective audience participants. Upon completing the analysis as described, insights from the PPQs informed revisions of the results until a final list of factors influencing moral empathy was created.

Reductions to the Transcendental I

Given the descriptive approach to phenomenology taken in this study, it was important to recognize that, as the researcher, I was not exempt from the subjectivist ontology. Indeed, my experience of the world is subjective and, thus, unique to me. This worldview is known in descriptive phenomenology as the *natural attitude* (Neubauer et al., 2019). The natural attitude colours the researcher's engagement with the data, which

ultimately biases the results. Accordingly, it was important to transcend my natural attitude and reach a state known as the *Transcendental I* wherein the influence of my subjectivity on the data was minimized. In achieving this state, focus was maintained on the participants' subjective experiences, allowing these experiences to be the basis for constructing the factors influencing medical residents' moral empathy. To reach this state, three reductions were engaged: (1) Transcendental Stage, (2) Transcendental-Phenomenological Reduction, and (3) Imaginative Variation. Importantly, these reductions are not necessarily sequential and often operate concurrently. Before outlining the procedures with which these reductions were carried out, some elements of my natural attitude that required transcendence will be described to provide context for the reductions.

My Natural Attitude

There were three aspects of my natural attitude that had the greatest potential to affect the data collection and analysis: my interest in the career of medicine, my status as a novice qualitative researcher, and my propensity to conflate moral empathy with other domains of empathy or the broader construct of empathy.

My personal motivation for conducting this study emerged from my interest in pursuing a career in medicine, which stood to impact my conduct of the interviews. Specifically, my desire to be a physician manifested in the interviews as an inherent curiosity about the profession, which enabled me build rapport more quickly with participants. Since their medical education and clinical experiences were directly relevant to my career aspirations, there was more personal incentive to listen and attend to these

conversations. This degree of investment was beneficial because it motivated me to probe participants more thoroughly for further clarification about their answers, facilitating the collection of data. However, my desire to be a physician also posed a significant challenge to the interview process because the curiosity it fostered was a personal one. Indeed, throughout the interviews, it was possible to inadvertently ask questions that served to satiate my personal curiosity about the medical profession rather than to construct data that contributed to answering the research question.

Additionally, being a novice qualitative researcher was an aspect of my subjectivity that stood to influence my conduct in the study. Having never conducted an interview before, it was difficult for me to determine questions to ask participants and to probe their responses in a way that would elicit their rich narrative data. This was especially challenging in this study since the interviews were lightly structured, meaning that most of the questions were impromptu with no strict interview guide to which to refer. Moreover, my lack of experience as a qualitative researcher made me feel less comfortable during the initial interviews, which had the potential to affect the comfort level of the participants as well. In addition to the data collection process, my status as a novice qualitative researcher also stood to impact the data analysis. In particular, having never conducted qualitative analysis prior to this study, engaging in the coding process was challenged by my tendency to use interpretive rather than descriptive codes. This was a problematic aspect of my natural attitude because it would have made the analysis overly influenced by the biases associated with my subjective reality.

Lastly, my propensity to conflate moral empathy with other domains of empathy or the overall empathy construct was an element of my natural attitude that posed significant challenges to my analysis of the data in this study. Indeed, all of my knowledge about empathy was constructed from my experience of completing a comprehensive literature review about empathy in medical education (see Chapter 1). Through this review, my understanding of empathy as a construct was in terms of its four domains. Consequently, this knowledge would manifest in my analysis of the transcripts as a tendency to code excerpts relating to cognitive, affective, and/or behavioural empathy that did not relate to moral empathy. This was a significant issue because the results of the analysis would not have reflected factors that influence moral empathy and thus, not answered the research question posed in this study.

Transcendental Stage

The first reduction is the *Transcendental Stage*, which involved setting aside my prior knowledge, understandings, and assumptions in order to transcend my natural attitude—a process known as “bracketing” (Flood, 2010; Lavery, 2003; Lopez & Willis, 2004; Neubauer et al., 2019; Rodriguez & Smith, 2018). Bracketing is a process that can be done in many ways and must occur throughout the study to ensure that the previously described elements of my natural attitude were not overly influential of my data collection and analysis. In this study, bracketing was done through memo-writing, discussions with members of the research team, the initial coding technique, collaborative coding procedures, and verbatim theatre member-checking.

Throughout all stages of the study, memos were written wherein the aforementioned facets of my natural attitude were reflected upon. These memos made me aware of their impact on the data collection and analytic processes, which ultimately helped me set them aside. Transcending the natural attitude is a difficult process; by default, we all live life through our unique subjective lenses. As such, writing memos at all stages of the research process helped me continuously maintain transcendence of my natural attitude.

In terms of discussions with the research team, different members were engaged at different stages of the research process. For instance, during the data collection portion of Stage 1, a member of the research team who is an expert qualitative researcher met with me on several occasions to provide guidance and mentorship about qualitative interviewing. These discussions were a crucial element of the Transcendental Stage because it allowed me to overcome limitations of my status as a novice qualitative researcher. In these meetings, we talked about how to phrase questions in ways that would elicit more information from participants. For instance, she suggested using “Tell me about a time when...” as a question stem since it inherently encourages participants to respond with narrative data. Additionally, we discussed how to target inner motivations in the questioning without directly asking about moral empathy, as this would have increased the risk of social desirability biases in the responses of participants. For example, she recommended asking about difficult patient experiences and reasons for pursuing medicine as a means of understanding interview participants’ inner motivations. Moreover, we discussed how my “outsider” status as a non-physician and non-educator

positioned me well, not only because it would make participants feel more comfortable disclosing information, but also because my lack of clinical knowledge could be leveraged to elicit further elaboration from participants, improving the richness of my data.

With respect to coding, bracketing was done in two ways. The first involved using initial coding when analyzing the transcripts. This ensured that the coding was not overly influenced by my natural attitude through descriptively labelling excerpts of text, which provided a foundation upon which to carry out focused coding. The second way was through collaborative coding. This involved engaging APs in a series of meetings that highlighted points where my natural attitude was affecting my analysis. Specifically, discussing multiple perspectives about the coding made me cognizant of when and how my analysis was influenced by my natural attitude. For example, these meetings revealed that my tendency to use interpretive rather than descriptive codes was imposing my biases on the coding. Furthermore, the collaborative coding procedures included engagement with a SC, which helped me reduce the impact of my natural attitude on the analysis by ensuring consistency in the application of initial and focused codes to textual excerpts.

Lastly, bracketing was carried out in this study through the verbatim theatre member-checking procedures. Specifically, verbatim theatre helped with bracketing by eliciting multiple perspectives from a broader group of participants (i.e., the audience), furthering reducing the influence of my natural attitude.

Transcendental-Phenomenological Reduction

The second reduction was *Transcendental-Phenomenological Reduction* during which participants' experiences were considered individually to construct a description of the phenomenon. This is an example of how the constructivist epistemology manifests in descriptive phenomenology (Neubauer et al., 2019). In this study, Transcendental-Phenomenological Reduction was done through sequentially carrying out the following procedures: coding, writing the verbatim theatre script, and verbatim theatre member-checking.

In terms of coding, initial and focused coding techniques were done in concert to analyze each transcript individually and synthesize these data into an analytic structure reflective of the factors that influence moral empathy. These techniques were supported by collaborative coding procedures with the APs, who offered multiple perspectives on the analysis, and the SC, who ensured consistency across the coding. Taken together, coding initiated the Transcendental-Phenomenological Reduction because it allowed each participants' experiences to be considered individually and provided a framework from which to create a description of the phenomenon.

After coding, the analytic structure was used to create a verbatim theatre play. This process involved collaborating with a verbatim theatre advisor (VTA) in order to convert the results of the analysis into a verbatim theatre script (see Chapter 3 for the playwriting procedures; see Appendix 3 for the script). The Transcendental-Phenomenological Reduction was achieved through writing the script because it allowed for the analytic structure to be synthesized into a description (i.e., script) that reflected

these results. Furthermore, the feedback from audience participants prompted revisions that helped refine the results until a final description of factors influencing moral empathy was constructed.

Imaginative Variation

The third reduction was *Imaginative Variation* wherein the description produced in the previous stage is reduced to a characterization that reflects the universal essences of the phenomenon; this was done through imagining multiple variations of the phenomenon to arrive at the factors that influence medical residents' moral empathy (Neubauer et al., 2019). In this study, Imaginative Variation was achieved through verbatim theatre member-checking and iterative discussions with members of the research team.

In terms of verbatim theatre member-checking, Imaginative Variation was facilitated both during and after the performance. Specifically, when audience participants viewed the play, they were prompted to re-imagine the factors that influence moral empathy in their own way, which would differ between audience participants because they each experience the play through their own subjective lens. Moreover, the feedback they provided through the PPQ prompted me to re-imagine the results in multiple ways such that they better reflect factors that influence moral empathy.

Additionally, Imaginative Variation was carried out through a series of discussions with a member of the research team. Indeed, after creating a description of the results in accordance with Transcendental-Phenomenological Reduction, we engaged in discussions wherein this description was scrutinized with respect to the factors that were included, as well as how they were framed, described, and organized. Over the course of

these discussions, the results evolved several times until we arrived at a final construction that we felt best reflected the factors that influence moral empathy.

Research Ethics

This study has been reviewed and approved by the Hamilton Integrated Research Ethics Board (HiREB) on October 26, 2018 (see Appendix 2).

Stage 1

Before conducting this study, it was important to address ethical concerns pertaining to confidentiality and protection of information. In terms of confidentiality, given the use of the snowball recruitment strategy, there is a possibility that participants may be able to identify individuals they referred to this study, should the referred individual have agreed to participate. As such, all participants were explicitly asked at the end of their interviews to refrain from disclosing who they referred to the study to ensure confidentiality was maintained. Furthermore, to ensure that the participants' personal details would not be heard by anyone outside of the interviews, I transcribed the interviews myself, redacted any information that could reveal the participants' identities (e.g., name, age, school, etc.), and assigned each participant a unique numerical code before allowing my co-analysts to view the transcripts. With respect to the protection of information, it is critical to safely and securely store the data. For this study, all interview data (i.e., audio recordings, transcripts, and the spreadsheet containing participants' identities and their corresponding numerical identifier) was encrypted using the VeraCrypt software and stored on a hard drive that was kept in a locked institutional filing cabinet for which only my research supervisor and I have the code. All of the

aforementioned procedures were made explicit to participants both verbally in their interviews and in writing on consent forms.

Stage 2

In addition to the ethical concerns associated with Stage 1, there were additional considerations to take into account in the construction of verbatim theatre. According to Taylor, Namey, Johnson, and Guest (2017), confidentiality is of utmost importance. Given that verbatim excerpts from the transcripts were used to write the script, there was potential for Stage 1 participants to be identified based on what they said during their interviews. To minimize this risk, transcripts were de-identified of any information that could reveal their identities (e.g., name, age, school, etc.). By doing this, excerpts that were included in the script did not contain any details that could compromise the identities of these participants.

In addition to confidentiality, another ethical consideration was to respect the opinions expressed by the participants. According to Belfield (2018), “*there is a line between editing and censorship.*” In this regard, as previously described, it was essential to take great care while editing excerpts so as to not add any words, as this would have altered the meaning originally intended by the participants. Rather, the editing process was limited to trimming excerpts to reveal their overall meaning, as participants often talk around the subject (Belfield, 2018). By being careful during the editing process, the risk of censoring interview participants or manipulating their disclosures was minimized, allowing the final verbatim theatre script to tell the truth about the data—an objective of verbatim theatre (Belfield, 2018).

Lastly, protection of information was an important consideration. For Stage 2, since the PPQs were anonymous, there was less risk of audience members being identified through their responses. Nonetheless, the PPQs were transferred onto a spreadsheet and the paper copies were subsequently destroyed. The spreadsheet with the PPQ data was encrypted using the VeraCrypt software and stored on a hard drive that was kept in a locked institutional filing cabinet for which only my research supervisor and I have the code. This data storage procedure was made explicit to the audience in the package they received with their PPQ.

Results

Overview

Residents that took part in this study contributed to answering the research question, *what do residents' experiences reveal about the factors that influence their moral empathy?* Interview data were analyzed in accordance with descriptive phenomenology and member-checked with a broader participant group. Following these procedures, three categories were constructed, under which seven factors are nested. These categories are: Innate Capacity, Previous Personal Encounters, and Specific Patient Encounters.

Factors

Residents' experiences revealed factors that either influence their inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs (i.e., their moral empathy), or their ability to enact these motivations. These factors relate to their Innate Capacity, Previous Personal Encounters, and Specific

Patient Encounters. The “Innate Capacity” category was constructed based on codes suggesting moral empathy to be intrinsic to the individual; factors within the “Previous Personal Encounters” category were created from codes describing what and how residents learn about empathy; and factors within the “Specific Patient Encounters” category were developed based on codes pertaining to elements that occur within the context of a specific interaction with a patient. With the exception of a few, most factors influencing their moral empathy do not seem to affect it directly; rather, they impact the ability to *enact* their moral empathy. These factors are summarized in Figure 4.

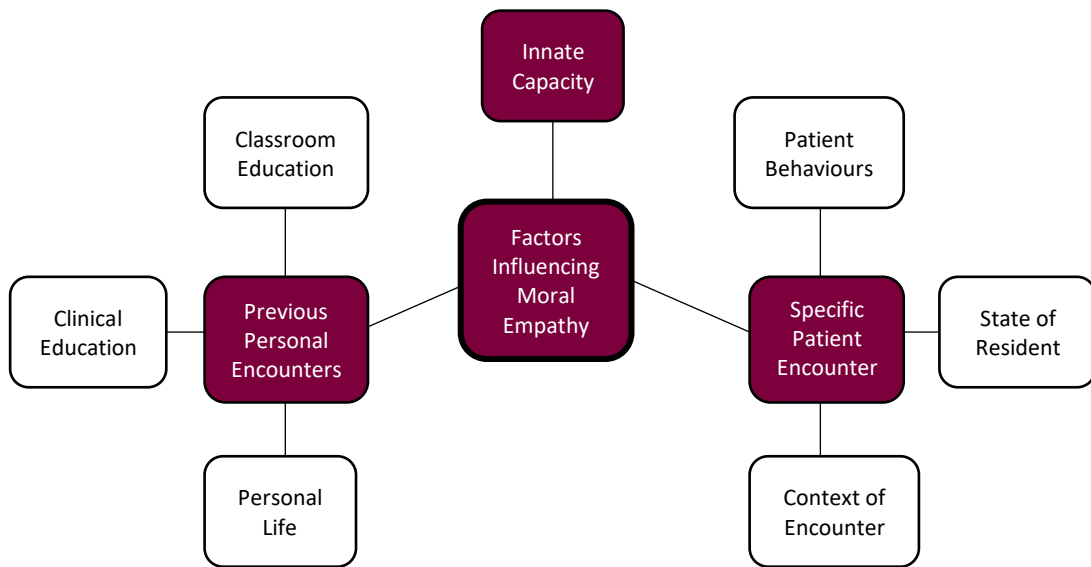


Figure 4: Factors Influencing Moral Empathy

1. Innate Capacity

Residents’ experiences revealed that innate empathic capacity is perceived to be a factor that influences their inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs. This factor was included

because it was reported by residents as being significant; however, there was not enough data to determine the way in which this factor impacts moral empathy.

Most participants believed that the construct of empathy in itself is largely an inherent characteristic that cannot be taught, and that some have it, while others do not: “*you can’t teach [empathy]. Like I don’t know, like some people inherently don’t have that*” (P3). Residents who spoke about their own innate capacity typically identified a presence of it within themselves, “*I think I’m like a decently empathic person*” (P3); however, when discussing its absence, residents never described themselves as lacking this innate capacity and spoke about it in broader terms:

“[G]iven the diversity of personalities in clinical medicine, people are just wired that way. They just have that personality to begin with and they just fundamentally lack either the social ability or emotional intelligence to appreciate people’s perspective as if it were their own.” (P7)

These results seem to indicate a degree of self-serving bias in the reporting of this innate capacity, which challenges the validity of these findings and thus, makes it difficult to determine whether an innate capacity exists. If this capacity does exist, it could be that residents’ inner motivation to accept patients unconditionally, commit to understanding patients, and help patients understand their needs is governed by this capacity.

However, since these findings were created from self-reports, it is necessary to acknowledge that it is the *perceptions* surrounding their innate capacity that matter. For instance, it could be that residents’ moral empathy is dependent on their perceived innate capacity. Additionally, some residents have the belief that they can learn to improve upon their innate capacity through experience, “*maybe you can get [empathy] through practice or lose it through practice*” (P8), or awareness of the construct, “*I think [empathy]’s also*

something that needs to be brought to your attention and learned” (P9). In this regard, residents’ moral empathy may be affected by the degree to which they believe their perceived innate capacity can be improved—and the desire to do so.

2. Previous Personal Encounters

Residents’ experiences revealed that their previous personal encounters influence their moral empathy. However, while some factors directly impact their inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs, others affect the manner in which this motivation is enacted. To this end, three factors were constructed within this category: Classroom Education, Clinical Education, and Personal Life.

2.1 Classroom Education

Classroom Education is a factor that influences residents’ inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs by affecting their awareness of patients and their experiences, perceptions about the usefulness of empathy, and perceptions about the extent to which the medical institution values empathy.

Most residents expressed that they were explicitly taught about empathy during their time in medical school. In particular, several described undergoing a particular longitudinal program that aimed to teach empathy through weekly group-based discussions. Within this curriculum, they learned about various patient populations and their lived experiences:

“I think [the longitudinal program] helped open our eyes to the fact that like we’re not the only people in the world who exist, and how you have to be mindful

of your patient interactions and what your patients are going through. [...] I think that was really helpful in terms of introducing the idea of empathy or providing insight into what others are experiencing in your community.” (P3)

Similarly, some residents described having sessions wherein patients living with chronic illnesses articulated their lived experiences: “[T]hey had a bunch of patients with like chronic diseases come in and talk about how their disease and how it’s more than just like the pathology and how it gets in the way of the rest of their lives.” (P6). In both cases, residents gained an awareness of the experiences and hardships of various patient populations, as well as an appreciation of the usefulness of empathy in connecting with these patients. In this regard, the Classroom Education factor seemed to be positively influential on residents’ inner motivation to accept patients unconditionally and commit to understanding patients—two elements of moral empathy.

Additionally, residents described having experiential sessions in medical school that involved practicing empathy in both simulated and clinical settings. Through these encounters, they had the opportunity to practice using empathy to form relationships with patients:

“[B]efore we start clerkship, we have something called Clinical Skills. And in those sessions, we get paired up with a group of other medical students as well as a pair of residents who will take you to meet patients and will observe you interact with the patient and do your first history-taking, or your first physical examination. So, for many of us, that’s where we would meet patients for the very first time, depending on if we had met with patients before starting medical school in a different kind of field.” (P4)

In these practical components, residents were able to realize the utility of empathy for forming patient-physician relationships. To this end, the Classroom Education factor was

positively influential on their moral empathy—specifically their inner motivation to commit to understanding patients and help patients achieve their needs.

Furthermore, given their “*goal of being able to be completely independent as a physician*” (P4), medical learners become more inclined to align their beliefs about what constitutes a good physician with what they perceive the medical institution values. To this end, residents’ inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs is affected by the degree to which they perceive empathy to be valued by the medical institution. On the one hand, some residents believe empathy was greatly prioritized during medical school since they were assessed on this construct frequently:

“[E]mpathy has been a huge topic throughout the entirety of my medical school education. And it’s something that we were always marked on, so we were always assessed on [...] from first year, we started having these simulated patient encounters that weren’t so much about medical knowledge, but about gathering information and learning how to examine a patient with a patient-centred focus. So, making sure that the patient is comfortable and making sure that you’re creating that trusting relationship with the patient. I think that that all relates back to empathy.” (P5)

Through frequent assessments of empathy, medical institutions convey to learners that the construct is important; this encourages learners to also value empathy, which then positively influences their moral empathy.

On the other hand, many residents believed empathy was not prioritized during medical school: “*I think empathy was almost a throw-away thing that we did at the end of our medical school*” (P1) and, “*relating to patients is undervalued in our system*” (P6).

This perception seems to stem from two sources. The first is a lack of educational sessions dedicated toward empathy: “*I don’t think that I ever had any like didactic*

sessions about empathy” (P2). This relative absence of empathy-related sessions suggests to learners that empathy is not valued by the medical institution. The second source is learning empathic techniques that they dislike:

“It’s so silly, they gave us like an acronym on how to break bad news. Because you know like again these medical-minded people, right, are like, ‘we need to study an acronym to figure out this like social skill,’ right? So, I don’t know if you’ve heard it before, it’s called ‘S.P.I.K.E.S.’ [...] they make it so cookie-cutter on how to tell someone they’re dying of cancer.” (P3)

Here, moral empathy is challenged when learners come to believe that the educational techniques that they dislike mean that their teachers do not actually value the constructs that they are teaching. In both scenarios (i.e., absence of sessions and dislike of techniques), their inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs is negatively impacted or is shifted to the elements of training that they believe are valued more highly by the profession.

2.2 Clinical Education

Clinical Education is a factor that influences residents’ inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs by affecting their perceptions about the extent to which preceptors value empathy, their responsibility over patients, and *awareness* of their privileges as physicians. This factor also influences their ability to enact these inner motivations through the advantages afforded through their privilege, and also affects the ways in which these motivations are acted upon by influencing their beliefs about what the empathic response looks like.

The perceived value of empathy seems to impact residents' moral empathy either positively or negatively depending on the nature of advice received from preceptors. Since residents want to be successful physicians, they feel inclined to follow the recommendations of their preceptors. Accordingly, when residents receive advice that discourages empathy, they perceive empathy as not being valuable to their preceptors. This negatively impacts their inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs, and shifts their focus to other areas of training that are valued more highly by preceptors. An example of such advice is as follows: *"I had one staff doctor who told me never work harder than your patients [...] Like don't put your heart and soul into something that is not going to be exactly what you want it to be.."* (P3). Conversely, advice that encourages empathy suggests to residents that this construct is important to their preceptors, which positively affects their inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs:

"[O]ne staff told me, don't let [constraints in the hospital] become your problems. Like you're a learner, you're just here to kind of help the patient. So, if you think the patient needs to be admitted, admit them. Don't worry about the bed shortages or the money or anything like that. So, I think that was really helpful." (P8)

Therefore, residents' moral empathy changes depending on the degree to which the construct of empathy is perceived as being of importance to their preceptors; this is interpreted through the advice residents receive from them.

As part of their clinical education during residency, residents become more responsible over their patients and decisions that govern their patients' wellbeing fall on their shoulders. Indeed, being responsible for patients brings with it a degree of pressure

to make the right choices, feelings of uncertainty, and “imposter syndrome”. However, despite these feelings, being responsible for patients positively influences residents’ inner motivation to help patients achieve their needs so that they can ensure the best interests of the patient are met: *“you feel responsible for the patients that you’re dealing with. And sometimes you have to figure out how you’re going to best serve your patients” (P1)*. In addition to gaining responsibility over patients, medical learners also acquire the privilege associated with their role as physicians upon entering residency. Indeed, one of the biggest privileges of being a resident is that patients inherently trust their physicians. Although building trust within the encounter is important, the physician role itself affords residents a certain level of built-in trust, which allows them to ask deeply personal questions without necessarily having a pre-established relationship with the patient: *“[Medicine]’s like the only field where you can literally ask someone anything and people will be the most personal with you [...] there’s no other job where you can pry so much, and it’s not seen as prying” (P3)*. In this regard, the privilege residents gain upon entering residency enhances their ability to act on their inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs. Furthermore, while this privilege itself helps residents enact their moral empathy, their *awareness* of this privilege positively influences the construct itself. Indeed, through becoming more cognizant of their privilege as a central support figure for patients, they feel more motivated to help patients achieve their needs:

“I think knowing that I’m the central person that is coordinating someone’s care and knowing how important it is [...] to have someone who knows you and who can connect you to the right resources. I think that’s what motivates me. I think knowing that it’s not just my responsibility but also my privilege to be that person.

It's incredible. It's difficult and it's challenging, but it's incredible to be that person for someone.” (P5)

Furthermore, while the privilege gained through entering residency provides a level of inherent trust, it also establishes a power differential between patients and physicians. Aware of this divide, residents' inner motivation to commit to understanding patients is positively affected as a means of bridging this divide: *“I have so much power in the relationships I have with my patients where it's important for me to recognize where they're coming from” (P2).*

Lastly, role modeling—regardless of whether it is good or bad—does not seem to influence moral empathy, as medical learners have the inner motivation. Rather, the quality or nature of the role modeling changes what learners believe the empathic response looks like and thus, how they behave when trying to deliver on this inner motivation. Indeed, given their desire to act in the best interests of the patient and be a successful physician, medical learners strive to emulate the example set by their preceptors. For instance, through observing good role models, residents adopt elements, such as empathic phrases, that they then incorporate into their delivery of empathic responses in subsequent patient encounters: *“I think at the beginning of training, you kind of pick up on what other people are saying. So, what does your preceptor say that is empathic, and then you learn like, ‘okay, that worked, I'm going to say that next time’” (P4).* Similarly, when observing bad role models, learners would inevitably adopt their poor conduct: *“[I]f ... you're shadowing an obstetrician who just has terrible bedside manner, then that's the bedside manner you're going to be taught, you know?” (P2).*

Thus, when considering both good and bad role modeling, residents' inner motivation to

accept patients unconditionally, commit to understanding patients, and help patients achieve their needs is not impacted; rather, role modeling affects the manner in which this inner motivation manifests in their empathic response.

2.3 Personal Life

Personal Life is a factor that affects residents' inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs by fostering a desire to either repeat or rectify the actions of physicians they have previously encountered. This factor also influences residents' ability to enact their moral empathy by providing a foundation on which to relate to patients in the clinical context.

Many residents, in their past, have been involved with encounters with physicians, either personally or through individuals close to them, that have positively impacted their moral empathy in one of two ways. The first is that residents have had previous encounters wherein physicians have improved the quality of care through demonstrating empathy. In this scenario, residents' inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs is positively affected from a desire to provide a similar quality of care to their patients upon becoming a physician. The second way is the opposite scenario in which residents' prior encounters involved physicians who did not provide empathic care. In this case, residents' moral empathy is also positively influenced because they feel driven to provide their patients with the empathic care they did not previously receive. Both scenarios are described as follows:

“I think for me at least, the root of empathy comes from past experiences and a desire to [...] retrospectively, learn from those experiences and, if you find

yourself on the other side, do things either differently or in accordance with what was done to you. Because you found it was well-done, or it was not well-done, and you don't want other people to feel like the way you felt or the way your loved one felt. So, I think it comes from a desire of [...] either wanting to rectify that if you're on the other side and make patients feel more comfortable, or reinforce the positive things that were said to you or done to you, so that you can make people feel as good as you felt because you had a very caring and empathetic care provider.” (P7)

Additionally, the degree to which residents can relate to patients does not seem to influence moral empathy; the inner motivation is already present. Rather, it affects the relative difficulty of delivering on this inner motivation. On the one hand, when residents can find a degree of similarity between their lives and the patient's, they can leverage relevant emotions based on their personal experiences to help them understand those particular patients. Even when there are no *direct* parallels to their personal lives, residents find empathy easier when they believe patients' circumstances to be feasible occurrences in their own lives. In this regard, their ability to execute their moral empathy is enhanced:

“Sometimes [...] a person comes in, they're girlfriend broke up with them, or they got fired from their job, or someone close to them died. Things that [...] may not have happened to you, but things that are reasonable to understand and they may have happened to you. So, it's really easy to build empathy in those situations, because these are kind of normal, real-life situations.” (P8)

On the other hand, when residents have trouble relating to patients, their ability to act on their moral empathy is challenged, despite already having the inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs: *“I think sometimes it can be [difficult to empathize] when you really can't put yourself in the other person's shoes. You've never truly experience what they're going through. And yeah, if it's hard to relate to that person” (P4).* In both cases, regardless of

the relatability of the patient, residents' inner motivation is not affected. Instead, their ability to enact this inner motivation changes depending on this relatability. Moreover, it is not unlikely that there may be a relationship between this factor and the Innate Capacity factor, which would provide a potential explanation for understanding the latter. Specifically, it is possible that residents may be perceiving their relatability with patients based on their previous experiences (i.e., before medical school) as an innate empathic capacity. If this is the case, it would further challenge the existence of an innate capacity, instead supporting the idea that empathy is cultivated through experiences.

3. Specific Patient Encounters

Residents' experiences revealed that aspects of their specific patient encounters influence their moral empathy. As with the Previous Personal Encounters category, some factors directly impact their inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs, while others affect the ability to deliver on these inner motivations. To this end, three factors were constructed within this category: Patient Behaviours, State of Resident, and Context of Encounter.

3.1 Patient Behaviours

Residents interact with numerous patients during their clinical rotations who exhibit different behaviours within their respective encounters. Depending on the nature of these behaviours, residents' moral empathy can be impacted directly, or their ability to enact these inner motivations may be affected. Specifically, pleasant patients positively impact moral empathy through being appreciative of their care. They make it easier for residents to act upon their moral empathy by being trusting and willing to engage in their

care. Difficult patients, on the other hand, negatively impact moral empathy when they place minimal effort into their care or when they are disrespectful. Difficult patients challenge residents' ability to act on their moral empathy when they want residents to be minimally involved or when they trigger countertransference in the residents.

In terms of pleasant patients, residents' moral empathy is positively influenced when they encounter patients that are grateful of their care. Given the large volume of patients they see on a daily basis, residents desire appreciation from their patients for the time they dedicate to the encounter. Accordingly, when residents sense this appreciation from patients, they experience an inner motivation to commit to understanding these patients and to help them achieve their needs, which manifests as an intentional effort to spend more time with them:

“I think to a degree we're all biased in the sense that if you have a particularly pleasant patient who's, you know, very appreciative [...] inherently you direct yourself to spend more time with them because you are all much more invested in how they feel about that encounter.” (P7)

Additionally, residents perceive patients who are trusting and invested in their own care as being pleasant. However, for these patients, residents' inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs is not directly impacted. Rather, their ability to deliver on these inner motivations is facilitated by patients who are both trusting and willing to actively engage in their own care: *“I think what makes [empathy] easier is when [...] I can sense that the patient is, you know, in the office looking for help and ready to trust me and my recommendations” (P5).*

In terms of difficult patients, residents often encounter patients who place minimal effort into their own care. This challenges their inner motivation to commit to understanding these patients and to help them achieve their needs because they feel as though there is no point investing their full effort into patients who are not willing to do the same:

“You spend thirty minutes talking to a patient about smoking cessation, they come back three weeks later, and they’re still smoking the same amount, you know? So, this idea that like, don’t work harder than your patients. Like don’t put your heart and soul into something that is not going to be exactly what you want it to be.”
(P3)

In addition to patients who invest minimal effort into their care, residents’ inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs is challenged when they perceive disrespect from patients. For instance, one resident described having many experiences where patients undermined their status as a physician because of their gender:

“It’s particularly hard being a woman in medicine. [...] Never a doctor, always a nurse. Like it doesn’t matter, I could say, ‘hi my name is doctor [name]. I’m the resident physician who’s working with you today.’ They’ll be like, ‘oh nurse, like can you change this, or this side or the other.’ That does make it hard to be empathic because [...] it raises my like tailfeathers as like a sign of disrespect.”
(P3)

Moreover, patients who are reluctant to engage in care challenge residents’ ability to deliver on their inner motivation to accept patients unconditionally, commit to understanding them, and help them achieve their needs. Contrary to the patients who invest minimal effort into their care, these patients do not necessarily demonstrate a lack of effort but are hesitant for other reasons. For instance, they may “*have had bad*

experiences with the medical system. Sometimes it's hard to turn that around" (P5) or do not feel comfortable disclosing certain information:

"[Y]ou ask them as much as you can, but at the end of the day, if they don't want to tell you, that's their right. You kind of have to explain to them like, 'that's fine that you don't want to tell me this, that's you're right to keep things private. But it may limit our assessment and may limit kind of the treatments we go down and might make things less accurate and less efficacious.' But, you know, that's up to the patients. You don't want to force them to tell you things that might be uncomfortable to them." (P8)

In any case, residents still have the inner motivations characteristic of moral empathy but are unable to act upon them because the patient is reluctant to engage in the healthcare process. Furthermore, patients are also considered difficult when they trigger countertransference in residents, which was described as experiencing an emotional reaction as a result of the patient's emotional state. Given the fear of experiencing the strong emotions associated with a countertransference response, residents emotionally distance themselves from patients: *"I want to make sure when they start crying, I don't start crying [...] you have to put a bit of a boundary up every once in a while..." (P6).* Although they still have the inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs, these protective boundaries hinder their ability to act on these inner motivations.

3.2 State of Resident

Residents' experiences revealed that their state during patient encounters is a factor that influences their ability to enact their moral empathy. More specifically, the physical and emotional burden associated with the long hours and numerous roles

associated with residency do not directly impact their inner motivations to practice with empathy but it, again, makes it difficult for them to act upon these motivations.

Residents experience significant burnout during residency as a result of the long hours they work. Although burnout is a constant issue throughout all of residency, it becomes particularly heightened during overnight call shifts: “[I]t’s a little bit draining I think to work. Especially if you’re on call, say three times a week, so it’s like a 120-hour work week” (P3). Indeed, due to the long hours brought on by these shifts, residents feel tired to the point where it becomes difficult to provide care to their patients: “there are days where you’re tired and you’re on call and you’re struggling to care because you’re just so tired” (P6), and “[Y]ou’re sleep deprived and upset and hungry. So, those times are when it’s kind of tough to build empathy” (P8). Yet, despite the rigorous demands of overnight call shifts leaving them physically burnt out, residents are still determined to connect with patients:

“[S]ometimes [empathy] can be really hard when it’s like four A.M. and you’ve been working for like twenty something hours [...] I think sometimes being truly empathic can be difficult, but it’s trying to be in the moment and being tuned in to what’s going on in front of you. I think that’s the only way to get past that.” (P4)

Apart from the long hours, residents are also driven to burnout as a result of having to navigate several roles by virtue of being residents. Indeed, residents are not only medical learners that are constantly being evaluated; they are also physicians that independently provide healthcare to patients, educators who teach and evaluate junior learners in classroom and clinical settings, and researchers who are expected to contribute to academia. Given the expectations imposed on them to fulfil these roles, residents struggle to find balance, further contributing to their burnout:

“[W]e’re expected to be kind of exceptional clinicians and professional, which I think is important. But we’re also expected to do research and expected to do teaching and expected to attend class on time and expected to get evaluated and also evaluate other people. So, there’s lot of stuff other than just being a clinician that kind of piles on. I think that’s the tough part, is balancing all those different expectations.” (P8)

Taken together, residents still have the inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs; however, their ability to act on these motivations is challenged by exhaustion.

In addition to physical burnout, residents also experience emotional exhaustion from witnessing particular patient encounters. For instance, when patients undergo significantly difficult circumstances, residents experience a depletion of their emotional resources because of the emotional weight of the encounter:

“[I]t’s another thing to like work a hundred-and-twenty hours a week and like see someone miscarry, or like have a still birth [...] And be present for that. Like it’s not even the hours, it’s also like the weight and the heaviness I think of a lot of the stuff we see.” (P3)

Indeed, when residents witness encounters of this nature, they vicariously feel the emotions of the respective patient, which ultimately depletes the emotional resources they have available for subsequent encounters:

“I have one patient in my practice. [...] it was exhausting for me because I lived through kind of vicariously the same issues that he was living through every week. And I felt like I wasn’t able to dedicate the same mental and emotional resources to the rest of the patients that I would be seeing that day or that week because there would always be a new thing kind of to deal with for this one patient alone.” (P5)

However, although residents’ emotional capacity suffers, they still desire to connect with patients. To this end, their inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs is maintained.

Importantly, residents are aware of the effects of physical and emotional burnout on their ability to provide care, which influences them to prioritize their work-life balance. To this end, taking care of themselves may be a way for them to deliver on their inner motivations because it allows them to return with the energy to provide empathic care: *“I was able to come back with a clear mind and a fresh attitude and kind of ready to take on the next challenge” (P5).*

3.3 Context of Encounter

Residents’ experiences revealed that the context within which the clinical encounter is happening affects residents’ ability to act on their moral empathy. Specifically, residents are faced with pressures on their time as a result of having such high patient loads. These pressures represent another set of factors that make it difficult for residents to act upon a maintained inner motivation to practice empathically.

Residents feel that time is a significant pressure they experience during their training; they feel as though they do not have enough time to see each patient because of the high patient loads they need to complete: *“right now I’m on a rotation where we have, let’s say like twenty inpatients that all need to be seen and assessed” (P2).*

Although they want more time for their encounters, they are unable to control the lengths of their appointments with patients, meaning that each encounter is limited to the small timeslot within which it is scheduled. Further exacerbating this time pressure is that residents need to address their patients’ concerns, which are often unrealistic: *“patients expect things that are completely unreasonable” (P3)*, as well as complete the associated paperwork for that patient—all within the brief window of time they are given for each

encounter. Given these time constraints and high patient loads, residents are forced to prioritize efficiency in their encounters. Consequently, they are unable to spend time engaging in empathic practices, such as listening to patients' stories: "*as a medical student, [patient interactions are] really exciting like, you know, you want to hear the story. But as a resident it's sort of like, 'okay, like onto the next one. We have a lot of work to do.'*" (P3). However, although these time pressures challenge their ability to provide empathic care, they still have a desire to provide it to their patients:

"I think people should know that we work really hard and we're all trying really, our like real best to provide the best possible care [...] if it ever feels like we're cutting you short or being kind of abrupt in the way that we're asking questions, it's not because we don't care. It's just that sometimes there are twenty other things that are happening [...] I think that there's definitely times where I'm sure that patients feel like we don't sit with them in their sorrow and we don't, kind of honour their anxieties, and it's hard to be able to always do that. But I think most of us try really hard to be able to." (P2)

In this regard, residents' inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs is not impacted by the pressures on time. Instead, these pressures on time place residents in a position in which delivering on these inner motivations is challenging.

Summary

This study asked the question, *what do residents' experiences reveal about the factors that influence their moral empathy?* To answer this question, 10 medical residents were recruited using the snowballing recruitment strategy to take part in a descriptive phenomenological investigation. Upon providing informed consent, lightly structured interviews were conducted with these participants, which were subsequently audio-recorded, transcribed, and analyzed inductively using initial and focused coding

techniques and in collaboration with members of the research team. After completing the analysis, the generated factors were converted into a verbatim theatre script (see Chapter 3 for the playwriting procedures; see Appendix 3 for the script) that was performed for an audience of medical residents, educators, learners, researchers, and scholars. Upon viewing the play, audience participants completed a PPQ that served as a member-check that provided feedback to ultimately inform the final construction of factors that influence moral empathy.

CHAPTER 3: VERBATIM THEATRE MEMBER-CHECKING

Introduction

This study examines medical residents' experiences in patient care in order to capture the essence of moral empathy. In particular, the research question that was asked is: *what do residents' experiences reveal about the factors that influence their moral empathy?* To answer this question, this phenomenological study was conducted in two stages. The first was a qualitative stage that served to generate factors that influence residents' moral empathy. The second stage used verbatim theatre to member-check the factors developed in Stage 1 to inform the final amalgam of factors.

This chapter begins with a description of verbatim theatre, its educational benefits, and an explanation of why it was particularly beneficial for member-checking in this study. Afterward, the process for writing the play from the factors generated in Stage 1 will be described, followed by the data collection, analysis, and results of the member-checking study. A brief discussion will conclude this chapter.

Verbatim Theatre Overview and Rationale

Verbatim theatre involves dramatizing findings from qualitative interviews to be performed for an audience (Paget, 1987). The defining characteristic of verbatim theatre is that only the exact words of the participants are used in the script; excerpts are chosen from interview transcripts and trimmed and organized to provide context and construct a cohesive narrative (Liehr, Morris, Leavitt, & Takahashi, 2013; Paget, 1987). By using literal words from the participants, their voices are maintained in the script, making the audience more likely to perceive the script and performance as authentic and believable

(Mienczakowski, 1995). Once written, the script is performed for a relevant audience that provides input about their impressions of the play after viewing it by completing a PPQ (Paget, 1987).

The benefits of verbatim theatre and its educational value bear parallels to those of facilitated debriefing in the context of simulation-based education. As Fanning and Gaba (2007) explain, “*Adults learn best when they are actively engaged in the process, participate, play a role, and experience not only concrete events in a cognitive fashion, but also transactional events in an emotional fashion.*” Through simulation, learners are given the opportunity to engage with these processes (Fanning & Gaba, 2007). In other words, they are immersed in an experience that is both cognitively and emotionally stimulating. After the simulation itself, a facilitated debriefing process promotes reflection and critical thinking in the learner regarding the experience (Fanning & Gaba, 2007). Similarly, through its use of participants’ actual words, verbatim theatre portrays lived experiences in a cognitively and emotionally engaging way that promotes knowledge acquisition, understanding, and reflection in audience members regarding the subjective realities depicted in the play (Leavy, 2015; Madsen, 2018; Nimmon, 2007). Additionally, the PPQ that is completed after viewing the play consists of questions that prompt further reflection about the contents of the play.

Given its ability to disseminate information, while also cognitively and emotionally engaging audiences and stimulating critical reflection, verbatim theatre was used as a means of member-checking the results created in Stage 1. Member-checking consists of showing participants study results and obtaining their feedback about its

accuracy, relatability, and resonance (Jackson et al., 2007). The significance of member-checking can be understood in terms of the subjectivist ontology taken for this study. Indeed, given my subjective reality (or natural attitude) as the researcher, the data analysis in Stage 1 was at-risk of being overly influenced by my subjective interpretations, which would have compromised the results constructed from the data. Specifically, had there been no member-checking, the factors influencing moral empathy that were generated may have been, at least partially, reflective of *my* experience of the participants' realities rather than a description of the factors as they experience them. Through member-checking, my analysis was scrutinized by a relevant participant group, thereby improving the accuracy, trustworthiness, and credibility of the results (Jackson et al., 2007; Kuper et al., 2008). More specifically, verbatim theatre was used as a medium for presenting the Stage 1 results to an audience consisting of medical residents (the population being studied), as well as individuals who were likely to have insights, perspectives, and experiences with the population/topic of study to balance my subjectivity (i.e., medical educators, learners, researchers, and scholars). Their insights were critical to reworking the factors generated in Stage 1 to ensure they addressed the research question. Ultimately, gathering feedback from the audience about their resonance with the factors was not unlike the concept of “cooperative exploration”, which holds that member-checking is a means for the researcher and participants to collaboratively examine the topic of interest (Bradbury-Jones, Irvine, & Sambrook, 2010). In this study, input from the audience helped me recalibrate my results and thus, influenced the final presentation of factors that influence moral empathy.

While the data could have been member-checked by simply showing participants thematic descriptions of the data, using verbatim theatre was particularly beneficial in light of the descriptive phenomenological approach taken in this study. Verbatim theatre performances are both cognitively and emotionally engaging, which created a unique experience for audience participants that could not have been captured in traditional academic prose, allowing verbatim theatre to facilitate deeper understanding of the contents of the play amongst the audience (Leavy, 2015; Madsen, 2018). Through this experience, audience participants were able to have an experiential point of reference from which to imagine the factors influencing moral empathy in various ways. In this way, verbatim theatre facilitated the reductions to the *Transcendental I* required in descriptive phenomenology—the approach taken in this study. Through the perspectives elicited from this broader group of participants, verbatim theatre helped achieve the *Transcendental Stage* by highlighting areas where my natural attitude overly affected the analysis, which helped me to correct for these influences. Moreover, the *Transcendental-Phenomenological Reduction* was achieved in the script-writing process since it was a means of distilling Stage 1 results into a description (i.e., script) that reflected these results, as well as from the feedback provided by audience participants since it prompted me to revisit the analysis and re-engage with my codes until a final description of the factors influencing moral empathy was constructed. Lastly, *Imaginative Variation* was facilitated during the play by prompting the audience to imagine the results in different ways, as well as after the play since the feedback obtained from the audience prompted me to re-imagine the factors.

Apart from facilitating these reductions, verbatim theatre also had the benefit of being a time-efficient means of eliciting many perspectives about the data. Indeed, traditional member-checking methods involve showing participants descriptions of results that are typically lengthy and detailed, making them time-consuming to read. Conversely, the verbatim theatre methodology used in this study involved audience participants viewing a short play (approximately 20 minutes) and completing a PPQ of just eight questions. In this way, the member-checking process was considerate of the audience participants' time while still allowing for their feedback about the Stage 1 results to be obtained.

Creating the Play

Actors and Runtime

Rather than writing the script and then recruiting actors afterward—the typical chronology of theatrical performances—actors were recruited *before* the script-writing began. This was a logistical consideration; by knowing how many actors were able and willing to perform in the show and attend rehearsals, the play was created to accommodate for that many actors. The three actors who took part in this play were current students and alumni from the BHSc program at McMaster University who had an interest and prior experience in theatre and performance. This was an appropriate population from which to recruit actors because not only do the targeted students have acting experience through elective courses offered by the program, but they have also learned about verbatim theatre in several courses. As such, they had the prerequisite knowledge and experience to not only deliver a compelling theatrical performance but

also to understand and appreciate the methodological significance of performing this play, giving them a greater sense of purpose with respect to their role in the research process.

In addition to determining the actors that would perform the play, it was important to establish the runtime of the play since the Stage 1 results ultimately had to be presented within this time constraint. Given that the audience was to be comprised of medical residents, educators, learners, researchers, and scholars, a runtime of about 20 minutes was determined so as to be considerate of their busy clinical, academic, and personal schedules.

Script-Writing Procedures

The script-writing process involved a series of meetings wherein the script was created in close collaboration with a verbatim theatre advisor (VTA), who was a member of the research team with prior experience in verbatim theatre, at all stages of the process. Through these meetings, the Transcendental-Phenomenological reduction associated with descriptive phenomenology was achieved; iterative discussions about the results and their integration within the script enabled them to be distilled into a description (i.e., script) reflective of these results. Further underscoring the importance of collaborating with the VTA was the absence of standardized methods for constructing verbatim theatre plays.

The first step of writing the script was to determine the excerpts that would appear in the play; these had to be compelling, so as to produce an entertaining theatre piece, as well as reflective of the results developed in Stage 1. To do this, the codebook produced in Stage 1 was reviewed and verbatim quotes that fit the aforementioned criteria were identified. Importantly, *“people often talk around the subject (especially if it is an*

emotional one)” (Belfield, 2018). This was a common occurrence for the excerpts in this study as well; interview participants often discussed tangential content while attempting to convey particular ideas. In this regard, distilling excerpts down to their core ideas by removing these tangential details is permissible in verbatim theatre (Belfield, 2018). Thus, excerpts selected for the verbatim theatre script in this study were distilled accordingly— as needed.

After identifying the excerpts, it was important to develop the characters, since they are the primary focal point of the play and thus, a locus of meaning (Leavy, 2015). Although casting was limited to three actors, there were numerous possibilities for *how* they could be cast or what roles they would play. Given that this study employed descriptive phenomenology, which involves learning from the subjective experiences of the population being studied, it was decided that the characters would simply be medical residents (Neubauer et al., 2019). In this way, the verbatim theatre experience would feel more authentic for audience participants since “residents” would be conveying their subjective experiences in relation to the factors influencing moral empathy, thereby facilitating the member-checking process.

After determining the quotes and characters, the manner in which the quotes would be delivered to the audience was decided and individual scenes were written. This involved determining how these quotes would be arranged and delivered, while also ensuring that one of the main tenets of verbatim theatre was honoured: “*Theatre’s primary goal is to entertain—to entertain ideas and to entertain for pleasure*” (Saldaña, 2003; 2005; 2016). Indeed, the scenes should be written in a way that finesses a balance

between staying true to the data (i.e., education) and captivating the audience through an engaging piece of theatre (i.e., entertainment). To this end, careful consideration was given to the use of monologues and dialogues, since they often differ in purpose and content (Leavy, 2015).

According to Saldaña (2003), monologues are “*extended passages of text spoken by one character.*” They can also be described as “*portraits in miniature*” because they reveal key elements of the character and their story (Saldaña, 2003; 2016). Though they vary in length, monologues typically contain motivations, perspectives, obstacles or tensions, and strategies (Leavy, 2015; Saldaña, 2003; 2016). Using monologues, detailed content (e.g., experiences with patients) was packaged into thick descriptions that would be more easily digested by audience participants. In terms of *how* monologues are delivered, characters can speak directly to the audience or themselves. When a character speaks to the audience, the goal is to form an emotional connection with them; this technique was employed because it facilitates the previously described educational benefits of verbatim theatre (i.e., increased knowledge, understanding, reflection, and awareness through emotional engagement) (Madsen, 2018; Saldaña, 2016). Examples of monologues can be seen in scenes two, three, five, and six wherein pleasant and challenging patient experiences, pressures, inner desires, and tensions are conveyed (see Appendix 3 for the script). In addition to monologues, excerpts can also be presented as dialogues, which are when “*two or more characters exchange thoughts or confront an interpersonal conflict*” (Saldaña, 2003).

Dialogues are typically used to offer multiple perspectives on a given issue, allowing for diverse viewpoints to be compared and contrasted in the scripts by embedding them into conversations had by the characters (Saldaña, 2003). Furthermore, dialogues also allow the audience to witness reactions to each other's statements, which was useful for communicating through the script how participants felt about certain ideas that were brought up in the interviews (Leavy, 2015). Examples of dialogues can be seen in scenes one and four to convey multiple perspectives about interview participants' understanding and education around empathy (see Appendix 3 for the script). In addition to navigating the use of monologues and dialogues, consideration was given to the use of off-stage voicing, which provides a means of highlighting the broader circumstances (e.g., social, cultural, or political contexts) surrounding the character that remains on-stage (Saldaña, 2016). This technique was employed in scene five wherein the on-stage actor and off-stage voicing served to highlight the tensions experienced between residents' inner motivations and the pressures limiting their ability to act on them (see Appendix 3 for the script). By the end of these processes, the individual scenes were written.

Lastly, the broader arrangement of the scenes was considered such that the play was cohesive and conveyed the desired tone of the data. In this regard, verbatim theatre often employs a positive-to-negative tonal trajectory to promote a degree of discomfort in the audience that not only facilitates engagement in the piece, but also prompts them to critically reflect on the play and inspires dialogue about the topic presented (Leavy, 2015; Saldaña, 2003; 2005; 2016). Given that the objective of the verbatim theatre play in this

study was to member-check the Stage 1 results—which involves critically reflecting on the data—employing this positive-to-negative shift in tonality was favourable.

Member-Checking Data Collection

The results elicited from Stage 1 were used to create a verbatim theatre script that was performed as a play in front of the audience participants (see Appendix 3 for the script; see Appendix 4 for the event programme). After viewing the play, consenting audience participants completed a PPQ, which was a short questionnaire designed to elicit feedback and impressions about theatre performances; this is a typical method for obtaining audience input in verbatim theatre (Brown et al., 2018; Colantonio et al., 2008; Mitchell et al., 2006). Attached to the PPQ was a package detailing the goals of the study, research protocol, how their data would be used, risks and benefits, and a confidentiality statement. Since the play was written based on the themes generated in Stage 1, the audience's input about the play was likely to reflect their resonance with the themes. As such, completing the PPQ after viewing the verbatim theatre performance was an appropriate member-checking strategy.

The significance of member-checking can be understood in terms of the subjectivist ontology taken for this study. As the researcher who conducted much of the analysis in Stage 1, it was possible that my subjective reality (i.e., natural attitude) coloured my engagement with the data throughout the process. Through member-checking, my initial results were scrutinized by a relevant participant group, thereby improving the accuracy, trustworthiness, and credibility of my results through eliciting multiple perspectives (Jackson et al., 2007; Kuper et al., 2008).

With respect to the content of the PPQ, there is no gold standard for the specific questions that should be asked. However, several authors have used similar PPQs in previous studies, modifying them slightly to fit the goals of their respective research. For instance, the PPQ used by Mitchell and colleagues (2006) included 10 items scored on a 7-point Likert scale, though no anchors for the scale were described. Colantonio and colleagues (2008) adapted this scale by reducing the number of items to five and rewording question stems to increase their relevance to the study. Brown and colleagues (2018) went through a similar process for their scale by reworking the PPQ used by Colantonio and colleagues (2008), though their survey also had five items scored using a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). Apart from these minor differences, these PPQs were similar in that they all provided space underneath each question for respondents to provide feedback in addition to the numerical ratings. Thus, given the absence of a gold standard and flexibility in adapting PPQs, items for the PPQ in this study were borrowed from all three of the aforementioned scales—and two new items were created—to address the member-checking goals of this study. The numerical ratings for each question in this study's PPQ were elicited using the 5-point Likert scale by Brown and colleagues (2018) and comments sections underneath each question provided an avenue for participants to provide feedback and impressions about the play. Appendix 1 shows the PPQ package that was given to audience participants.

Member-Checking Data Analysis

Once the PPQs were completed, the comments were transcribed and uploaded into the NVivo software. Afterward, the PPQ comments were analyzed using the template

analysis method, which involves using *a priori* themes to analyze a new set of textual data (Brooks et al., 2015). For this study, the template that was used was the amalgam of themes generated in Stage 1, as these were the results that needed to be member-checked with audience participants. Since member-checking was a means to verify the themes from Stage 1 with the audience participants, template analysis was an ideal analytic approach as it provided a way to identify these themes in PPQ responses (Jackson et al., 2007). Moreover, template analysis can be applied to “*open-ended question responses on a written questionnaire*,” such as the comment sections of PPQs, and can be used in two-stage studies like this one (Brooks et al., 2015). Taken together, template analysis was an appropriate method for analyzing the PPQs.

After establishing the template, the comment sections of the PPQs were read to gain familiarity with the data, after which textual excerpts that were relevant to the analytic aim were labelled using the template (Brooks et al., 2015). That is, the comment sections of the PPQs, where possible, were coded using factors from Stage 1 as a codebook. For excerpts that reflected an idea that was relevant to the analytic objective but could not be labelled using the template (i.e., quotes describing an idea not captured in Stage 1), the template was adjusted by adding and/or changing the codebook such that the text in question was captured (Brooks et al., 2015). This process of identifying and coding relevant excerpts, as well as adjusting the template as needed, was iterative and only reached a conclusion once all data from the PPQs pertaining to the research question were assigned themes (Brooks et al., 2015).

In addition to these procedures, broader comments made in the PPQ were noted; that is, comments that did not address any factor in particular but were rather general impressions of the content depicted in play. Since the play was heavily informed by the results devised in Stage 1, these impressions would speak to the resonance of the themes with the respective audience participants. Upon completing the analysis as described, insights from the PPQs informed revisions of the results until a final list of factors influencing moral empathy was created.

Member-Checking Results

Overview

Medical residents, educators, researchers, learners, and scholars took part in viewing the verbatim theatre play and completing a PPQ to member-check the factors that were developed in Stage 1. Through analyzing the PPQ data in accordance with the template analysis technique, feedback about the factors that influence moral empathy was collected and ultimately contributed to generating the final results of the study. This section describes the feedback that was elicited from this member-checking stage to inform the revision and final presentation of factors that influence moral empathy in the “Results” section.

Post-Performance Questionnaire Feedback

Table 3 summarizes the number of respondents for each respective question. The comment sections provided explanations, insights, and perspectives with which the factors created in Stage 1 could be scrutinized. Within the commentary, audience participants spoke about their resonance with the play as a whole and with specific

themes, as well as certain ideas they felt were missing from the play. As per the purpose of member-checking, the PPQ data influenced the final construction of the results of this study. However, my understandings and final presentations of the factors were informed differently depending on the type of commentary provided by the survey respondents.

Feedback Suggesting Resonance with Factors

There were audience participants that provided feedback about their overall resonance with the play as a whole. These were comments that did not offer discussion about any specific factors but rather spoke to the truthfulness of the play more broadly based on either their personal experiences or stories they have heard from others.

Examples of commentary based on first-hand experiences are as follows: *“I have experienced similar moments to the participants” (P7)*, *“++ Agree. I personally have experienced all of these” (P17)*, and

“I really liked [the play] and related to the experiences a lot” (P25). Examples of audience participants speaking about stories they have heard previously are: *“best friend just graduated from medical school and she tells me the same things. So you did a great job in presenting common problems and experiences” (P9)*, *“Very consistent with what I already hear from residents” (16)*, and *“I have heard these stories off hand” (P26)*. Thus, the comment data indicated that the audience resonated with the content of the play as a whole. From a member-checking standpoint, since the play was constructed from the results of Stage 1, these findings provided a degree of reassurance that the factors embedded in the play were not completely misrepresentative, though they were not able

to verify specific factors in particular or suggest factors that were potentially missing from the Stage 1 results.

In addition to commentary about the overall resonance of the play, there were some comments that highlighted specific ideas that were congruent with factors that were developed in Stage 1. For instance, there were several comments that spoke about the way empathy is taught in medical education, with a particular focus on shortcomings of classroom education and the significance of role modeling. With respect to classroom education, audience members resonated with the inadequacies of formulaically teaching empathy, which was an idea that was captured in the initial Stage 1 results:

“The segment about making empathy + relationships “formulaic” (eg. SPIKES for bad news) was notable to me... Thinking about how we teach + learn these things, and implement them... They can be tools to save as touchstones for navigating tough situations, but when people use them as recipes, mere checklists, recite these lines, they miss the point! Important to teach these approaches as tools, not scripts.” (P1)

In terms of role modelling, several comments reflected the significance of setting a good example of empathy for learners. For example, one audience member was *“reminded of the importance of positive role modeling in terms of demonstrating empathy” (P19)*. This was an idea that was present within the initial analysis. In addition to the educationally-relevant comments, some audience participants related to portions of the play depicting burnout, which verified my discussions of burnout within the results: *“Burnout and their associated feelings really resonated with my personal feelings” (P11)*. Lastly, time pressure was an idea that was captured in a few comments that was congruent with content captured in the Stage 1 results. As one audience member succinctly put it, *“TIME is such a big factor” (P17)*.

Overall, audience participants broadly resonated with the ideas shown in the play, specifically highlighting the value of classroom education, role modelling, burnout, and time pressure—all of which were consistent with results from Stage 1.

Feedback Prompting Revision of Factors

There was some commentary from audience participants introducing ideas that prompted me to revisit and reframe the factors developed in Stage 1. For example, one participant expressed that they believed that the play was less about moral empathy and more about building relationships with patients overall: *“I’m not convinced this is all about moral empathy -- to me it was about the challenges of establishing relationships with patients. Trust + empathy were features of those relationships”* (P3). This comment prompted me to review the results generated in Stage 1 to see if there were any that did not align the research question: *what do residents’ experiences reveal about the factors that influence their moral empathy?* To this end, it became apparent that a category of factors from the initial results called “Understanding of Empathy” did not address the research question. Indeed, rather than containing factors that influence moral empathy, this category represented a conflation of moral empathy with the affective and behavioural domains by including factors like “Empathic Behaviours”, “Empathic Conversation”, and “Emotional Empathy”. Thus, this category and its constituents were deleted from the results. Additionally, upon revisiting the Stage 1 results on the basis of feedback provided in the aforementioned comment, it was evident that most of the Stage 1 results were framed as experiences rather than factors (e.g., “Educational Experiences”, “Personal Experiences”, “Experiences with Patients”, “Pressures”). This framing was

problematic because it did not address the aim of the research question, which was to construct factors that influence moral empathy based on the experiences of residents rather than conveying the experiences themselves. As such, this prompted me to revisit the Stage 1 results and imagine variations of the factors that influence moral empathy—as per the *Imaginative Variation* reduction in descriptive phenomenology—until a final amalgam of factors was created. This imaginative process was done alongside another member of the research team to ensure the final presentation of results was informed by multiple perspectives.

Feedback Influencing Descriptions of Factors

Finally, there were also PPQ data that did not lead to changes in the themes themselves but instead influenced how I articulated the thematic descriptions for the final results. These comments described areas of confusion regarding certain ideas conveyed in the play, which prompted me to revise the “Results” section accordingly to ensure that these issues of clarity were resolved. For instance, although some audience participants understood the concept of moral empathy, there were several comments suggesting that it was unclear from the play as to the definition of this construct. Some of the comments expressing this sentiment were as follows: *“I’m still not sure what moral empathy (as opposed to other dimensions of empathy) is” (P2)* and *“I don’t have a good sense of what moral empathy is. Exploring that at the beginning would have helped set the stage” (P12)*. In addition to confusion surrounding the construct of moral empathy, there was one participant who commented that the themes in the play spoke more to the resident experience as a whole rather than moral empathy in particular.

From a member-checking standpoint, these two criticisms did not necessarily offer specific guidance in terms of modifying the themes generated in Stage 1. However, they prompted me to revisit the descriptions for the factors to ensure they were being related to the operational definition of moral empathy. Indeed, given that many aspects of residency were captured in these factors, there was a risk of discussing them broadly and not outlining their relation to the topic of study. Thus, through feedback from the PPQ, the descriptions of the factors were altered to more clearly relate back to moral empathy.

Table 3: Post-Performance Questionnaire Scores

Items	Number of Responses (n=28)
1. I have learned something new about the moral empathy experience.	26
2. I have an enhanced understanding of the moral empathy experience.	26
3. I feel that the knowledge I gained from this play will impact the way I interact with other residents.	24
4. This creative experience has changed my understanding of residents.	26
5. I feel my practice will change based on my new understandings emerging from the play.	21
6. I have experienced, or witnessed someone else experience, some or all of the scenarios depicted in the play.	26
7. As a medical educator, I learned something new that I can incorporate into my educational practices (for medical educators only).	7
8. As a medical educator, I learned something important relating to medical education (for medical educators only).	6

Discussion

Overall, the verbatim theatre process was a beneficial aspect of this study in light of the descriptive phenomenological approach. Specifically, verbatim theatre added value

to this study by providing a unique and cohesive methodology for facilitating all three reductions to the *Transcendental I*. These reductions are critical in descriptive phenomenology because they ensure that the researcher's subjective reality (i.e., natural attitude) is minimally intrusive on their engagement with the data at all stages of the study (Neubauer et al., 2019). Furthermore, there are no standardized methods for facilitating these reductions, resulting in researchers often having to borrow various practices from other qualitative methods in order to achieve the Transcendental I (Neubauer et al., 2019). Verbatim theatre was uniquely beneficial in this regard because it provided a streamlined approach to undergoing all three reductions.

Verbatim theatre helped achieve the *Transcendental Stage* through member-checking with the PPQ, which involved eliciting a multitude of perspectives on the results of my initial analysis of the interview transcripts. On the one hand, there was feedback that provided verification for certain elements of my initial results (e.g., classroom education, role modeling, burnout, and time pressure) which justified their inclusion in the final results. Indeed, in receiving this verification, it was reasonable to conclude that my analysis was not overly influenced by my natural attitude, since others had also arrived at these elements. On the other hand, feedback obtained from the verbatim theatre process also highlighted areas wherein my natural attitude *was* overly influential on my analysis, which enabled me to subsequently bracket this subjectivity. For instance, one element of my natural attitude that was difficult to overcome was my tendency to conflate the domains of empathy; this was brought to my attention through certain comments given in the PPQ. Additionally, verbatim theatre helped achieve the *Transcendental-*

Phenomenological Reduction through the script-writing process since it enabled each participant's experiences to be considered individually in order to create a cohesive description (i.e., script) of the initial results. Indeed, the script-writing process required the transcripts to be individually reviewed in order to gather quotes that were representative of the results as a whole. Lastly, verbatim theatre facilitated the *Imaginative Variation* reduction both for the audience and for me. In terms of the former, when the play was being performed, audience participants were afforded a cognitively and emotionally engaging means of scrutinizing my initial results (Leavy, 2015; Madsen, 2018; Nimmon, 2007). Herein lies a unique benefit of verbatim theatre: through cognitive and emotional engagement, the audience was able to *experience* the residents' experiences. This was particularly useful because this experiential point of reference provided a means of stimulating the audience participants' imaginations, thereby enhancing their ability to consider multiple versions of the phenomenon and report these insights in the PPQ. In terms of how verbatim theatre prompted *my* Imaginative Variation, feedback from the PPQ provided many comments and opinions that made me consider the phenomenon in new ways.

Based on these experiences, it is evident that verbatim theatre is a useful methodological technique in descriptive phenomenology. Indeed, the value of verbatim theatre is its unique ability to facilitate the three necessary reductions for descriptive phenomenology: Transcendental Stage, Transcendental-Phenomenological Reduction, and Imaginative Variation. By undergoing these reductions in the context of verbatim

theatre, the influence of my subjective reality could be reduced such that the investigation of the research question focused on the *interview participants'* experiences—not mine.

Summary

This study asked the question, *what do residents' experiences reveal about the factors that influence their moral empathy?* To answer this question, residents from various specialties were interviewed about their experiences and the transcripts from these interviews were inductively analyzed to produce factors that influence moral empathy. These initial results informed the construction of a verbatim theatre play that was performed for a broader audience to gather their feedback about the factors; this feedback contributed to the final construction of factors influencing moral empathy. This chapter discussed benefits of verbatim theatre for member-checking and the procedures for writing the verbatim theatre play (which was done in close collaboration with a VTA). The script-writing process included the following steps: choosing quotes that were both compelling and reflective of the factors generated in Stage 1, determining the characters that would be portrayed in the play, arranging monologues and dialogues from the chosen quotes, incorporating off-stage voicing, and considering the tonal trajectory of the scenes. Afterward, the procedures for data collection and analysis were described, followed by the member-checking results and a brief discussion about what was gained from the verbatim theatre process.

CHAPTER 4: DISCUSSION

Introduction

The purpose of this study was to investigate *what residents' experiences reveal about the factors that influence their moral empathy*. Through a descriptive phenomenological investigation, medical residents were interviewed about their experiences. The transcripts from these interviews were analyzed inductively and member-checked using a verbatim theatre methodology, which ultimately contributed to the final construction of three categories under which seven factors are nested. These categories are: Innate Capacity, Previous Personal Encounters, and Specific Patient Encounters. Overall, the results revealed that most of the factors influencing moral empathy did not directly impact residents' inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs. Instead, these factors affected the ways in which this motivation was acted upon, as well as the available opportunities to do so.

In this chapter, potential implications of the results of this study will be discussed and connected to the broader literature. Afterward, study limitations will be explained, and potential future research directions will be explored.

Moral Empathy and the Empathic Decline

In the medical education literature, many studies have measured declines in empathy that occur during medical training. In particular, affective empathy has been shown to decline in residents during PGY-1 (Bellini et al., 2002; Bellini & Shea, 2005; Rosen, et al., 2006; West et al., 2007). Researchers have discussed the factors

contributing to these declines, converging on elements of the formal, informal, and hidden curriculum (Hojat et al., 2009; Jeffrey, 2016; Neumann et al., 2011; Winseman et al., 2009). Moreover, given that Aomatsu and colleagues (2013) found the moral domain to be the most fundamental form of empathy relative to the other domains, it is possible that the factors contributing to empathic decline may facilitate the decay of affective empathy by negatively influencing the moral domain.

Jeffrey (2016) suggested that prioritization of the biomedical model over psychosocial aspects of care (e.g., empathy) contributes to empathic decline by implying to learners that the medical institution does not value empathy. This is consistent with the findings of the current study, which revealed that residents' inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs (i.e., their moral empathy) is negatively impacted when the perceived institutional value of empathy is low. According to this study, this occurs in medical school when there is an absence of educational sessions dedicated toward teaching empathy or when learners are taught empathic techniques they dislike. In residency, this happens when preceptors give residents advice that discourages empathy. In both cases, the construct of empathy is not given priority, which shifts learners' motivations to aspects of education valued more highly by the profession. In this regard, the results of this study illuminate the findings of Jeffrey (2016) by providing evidence to support that the factor posed in his study may contribute to empathic decline through the moral domain.

Furthermore, Neumann and colleagues (2011) and Winseman and colleagues (2009) both reported that negative perceptions toward patients contribute to the decline in empathy experienced during medical education. This aligns with the results of this study that suggest that moral empathy is negatively influenced by patient behaviours—particularly those perceived as being unpleasant as a result of either being disrespectful or investing minimal effort into their own care. Indeed, through encountering such patients, residents experience negative perceptions that challenge their inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs.

Additionally, this study produced findings regarding an innate capacity for empathy as being a factor that impacts moral empathy (see also Tavakol et al., 2012). In this regard, it is important to acknowledge that the findings pertaining to this factor were interpreted and presented with respect to the principles of the descriptive phenomenological approach taken in this study. Indeed, we recognize that the method's focus on participant perceptions leads this "Innate Capacity" factor to be included in the results, despite the presence of other findings from this study that seem to challenge this idea; in particular, those associated with perceiving empathy as a learnable construct. However, while it seems as though an innate capacity for empathy is in conflict with an ability to develop empathy through training, it is possible that the former may be, to a degree, deterministic of the extent to which the latter can occur. This is supported by literature suggesting the presence of an interplay between what is innate to the individual

and their environmental influences (Kandler & Zapko-Willmes, 2017; Sasaki & Kim, 2017). Kandler and Zapko-Willmes (2017) summarize this relationship as follows:

“[I]ndividuals make their own choices and environments based upon their heritable personality characteristics. These environments in turn can reinforce or even change the individuals’ personality traits. Moreover, environments provide the range and variety of developmental opportunities, in which people develop differently depending upon their genetic sensitivity to environmental influences”

In light of this relationship, a potential explanation emerges to support a complimentary nature between innate empathic capacity and the ability to cultivate empathy.

Specifically, individuals may enter medical education with an inherent capacity for empathy; save for the mandatory aspects of training, this capacity may influence the experiences with which individuals choose to engage. Depending on the quality of these experiences, as well as individuals’ inherent sensitivity to environmental influence, further development of empathic ability beyond the innate capacity may either be nurtured or challenged. Therefore, it is possible that innate capacity and the ability to learn empathy are not mutually exclusive but are rather interactional in nature.

In any case, while the “Innate Capacity” factor is accompanied by ambiguity with respect to its role in empathic development, the consistent reporting of a perception of innate capacity warrants consideration about what this may mean for educating empathic responses. For one, it may lead learners or educators to believe that their own or their students’ ability, respectively, to develop as empathic physicians is pre-determined. In this regard, it may be helpful to screen medical school applicants for moral empathy at the time of admissions decisions. That said, this line of thinking has the potential to obscure

the role of learning in developing empathy and, in turn, absolve the medical education system of an educational responsibility to teach empathy.

Overall, it seems as though the measured decline in affective empathy in residents may be a partial manifestation of negative changes to the moral domain brought on by a low perceived institutional value accrued during medical education, as well as unpleasant patients encountered during clinical care. Thus, it is important to consider ways in which intrinsic motivations can be reinforced during medical education (Swarna Nantha, 2013). Although little can be done in terms of unpleasant patients, perceived institutional value is an aspect that deserves greater focus and may be a useful target for instilling moral empathy into learners. The results of this study suggest that low perceived institutional value occurs in pre-clerkship when learners sense an absence of educational activities and assessments focusing on the construct of empathy. While this would suggest that perceived institutional value can be enhanced by introducing a greater number of such activities and assessments, it may not be feasible to add more to an already demanding and rigorous curriculum. Instead, medical institutions may be able to target perceived institutional value by highlighting empathy in existing activities and assessments. Furthermore, this study also provides evidence to support that perceived institutional value is challenged when learners are taught empathic techniques that they dislike, suggesting that perceived institutional value can be improved by encouraging a fondness of these techniques. However, this may be difficult to achieve since “enjoyment” is an experience that is unique to the individual.

Importantly, conveying to medical learners that empathy is valued by the profession should not be limited to pre-clerkship education; since preceptor values are reflective of institutional values, the advice they give to learners during residency may also impact moral empathy. To this end, preceptors may wish to frame the advice they give to residents such that it encourages empathic practices. This is consistent with the recommendations of Tavakol and colleagues (2012), who suggested that “*clinical teacher role models should value the importance of empathy in the context of patient care*” and “*provide inspiration and encouragement to students acquiring empathic skills.*”

Apart from the influence of these factors, residents’ inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs does not seem to be negatively impacted during residency. Rather, their ability to deliver on these motivations through providing empathy is challenged by constraints they experience during patient care. For instance, given their high patient loads, residents are faced with immense constraints on their time, making it difficult for them to provide empathy to their patients; these constraints are exacerbated by unrealistic expectations brought to the encounter by patients. This tension between inner motivations (what they *want* to do) and constraints on acting (what they are *able* to do) is a trend seen within several of the factors and represents a frequent struggle experienced by residents during patient care. Accordingly, it is possible that the challenge of navigating this tension may be a driver of burnout, which is an element that this study has suggested to be yet another source of this tension. Indeed, while residents have the inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs,

the burnout they experience during residency leaves them in a state wherein their exhaustion hinders their ability to deliver on these motivations. Consequently, this also fosters the moral-behavioural tension in medical learners. This is potentially even more concerning as burnout is also implicated as a contributor to empathic decline (Hojat et al., 2009; Jeffrey, 2016; Neumann et al., 2011; Winseman et al., 2011). Thus, in addition to fostering moral empathy during medical education, it may be just as important to address systematic elements that contribute to forming the tension between inner motivations and the inability to act on them.

Moral Empathy in Competency-Based Medical Education

In recent years, assessment in medical education has shifted toward a competency-based framework in which learners' readiness for additional independence in practice is gauged based on faculty observations of their behaviours in the context of professional tasks (i.e., EPAs) (Iobst et al., 2010). Given the emphasis placed on behaviour, it follows that assessments of empathy in CBME focus predominantly on its *behavioural* domain. An example of an EPA where empathy may be assessed is breaking bad news to patients, as this involves physicians verbally and nonverbally communicating to patients that they understand their situation with the goal of forming a meaningful connection with them (Mercer & Reynolds, 2002; Morse et al., 1992; Stepien & Baernstein, 2006; ten Cate, 2016). However, the results of this study suggest that assessments of professional behaviour, though important, are not sufficient.

The findings in this study underscored a tension between moral and behavioural empathy across several factors. Indeed, despite residents having the inner motivation to

accept patients unconditionally, commit to understanding patients, and help patients achieve their needs, they often cannot deliver on these motivations because of contextual limitations (e.g., time). This tension highlights the presence of a relationship between inner motivations and actions—the former is fundamental to the latter. Given its reliance on solely behavioural assessments, it follows, then, that CBME operates under the assumption that the behaviours performed by learners are necessarily reflective of their inner motivations. While this may be true in some cases, the moral-behavioural tension found in this study suggests that medical learners cannot always behave in accordance with their inner motivations. This is particularly concerning in the context of CBME because assessments of behaviour alone cannot detect this dissonance between motivation and behaviour. In this regard, behavioural assessments (i.e., CBME) that make judgements about underlying motivation in contexts that constrain the performance of what have been deemed appropriate behaviours may lack validity and are potentially unfair to trainees. To address this limitation, medical institutions may benefit from assessing the inner motivations (i.e., moral empathy) that antecede empathic behaviours *in addition* to the behaviours themselves. Al-Eraky and Marei (2016) share this view, stating that the “*assessment of professionalism should extend beyond observable behaviours to explore the individual’s underlying attitudes, values and beliefs that drive (un)professional behaviours.*”

From an assessment perspective, Miller’s model (and in turn, CBME) assesses learners on their ability to *act* professionally rather than *be* professional; this behavioural focus is problematic insofar as it does not allow for assessments of moral empathy to map

onto any of the levels of Miller’s framework (Cruess et al., 2016). However, an appealing revision to this model was made by Cruess and colleagues (2016) and circumvents this limitation by including a fifth level, “Is,” as the apex. Competence at the “Is” level is achieved when learners have fully transitioned into being physicians—that is, when they have formed their professional identities (Cruess et al., 2016; Holden, Buck, Clark, Szauter, & Trumble, 2012). Within this professional identity, learners integrate and apply personal and professional moral principles, attitudes, values, and beliefs in clinical practice (Cruess et al., 2016; Holden et al., 2012). Through addition of the “Is” level, assessments of moral empathy become significant because this construct is embedded within a key element of professional identity formation—moral development (Holden et al., 2012). The “Is” level is beneficial because it is the only level that gives learners the opportunity to integrate elements of their true self into a professional identity that guides their clinical practice. By allowing learners to incorporate personal motivations, attitudes, values, and beliefs into their professional identity, the “Is” level affords them more authenticity to behave in accordance with their moral empathy. Specifically, learners with an established professional identity may feel more willing to challenge the contextual constraints that make behaving in line with their moral empathy difficult. This is in contrast to Miller’s original framework; its sole behavioural focus teaches learners to perform behaviours solely because they have been deemed desirable by the institution, irrespective of their motivations. Taken together, the absence of authenticity as a result of not having developed a professional identity may be one of the drivers of the moral-behavioural tension.

Furthermore, although the revised version of Miller’s framework is to be commended for its inclusion of the “Is” level, the present study raises questions about the positioning of this level within the pyramid. As it stands, the model places the “Is” level above “Does,” which implies that learners must perform the actions that constitute professionalism *before* they acquire non-behavioural components of their professional identity (Cruess et al., 2016). Due to its previously described relevance in moral development, moral empathy represents one such non-behavioural element. Given that this study shows evidence that moral empathy drives behavioural empathy, it may contest the current organization of the pyramid by providing support for a non-behavioural element presupposing professional behaviour. Thus, it is speculated based on the results of this study that this model may require a revision such that the “Is” level precedes “Does”. This re-organization aligns with the hierarchical conceptualization of empathy provided by Aomatsu and colleagues (2013), who suggested that moral empathy is the most fundamental domain and precedes behavioural empathy. In other words, development in the moral domain (“Is”) is necessary for valid demonstrations of empathy in the behavioural domain (“Does”).

Implications for the Four-Factor Model

In the medical education literature, the four-factor model holds that empathy consists of cognitive, affective, behavioural, and moral domains (Mercer & Reynolds, 2002; Morse et al., 1992; Stepien & Baernstein, 2006). Cognitive empathy is the ability to identify and understand the feelings and perspectives of patients; affective empathy is the ability to share the emotional states of patients; behavioural empathy is the ability to

communicate to patients an understanding of their perspectives and feelings; and moral empathy is the inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs. Although Aomatsu and colleagues (2013) produced evidence of these four domains existing in a hierarchical framework, the four-factor model is often defined in a way that presents the domains as discrete (Bayne, 2011; Jeffrey, 2016; Mercer & Reynolds, 2002; Morse et al., 1992; Ren et al., 2016; Stepien & Baernstein, 2006). Given this discrepancy, research contributing to understanding the relationship between these domains—or lack thereof—is warranted. To this end, the findings of this study provide support for an interactional model.

The factor “Clinical Education” revealed that role modeling of empathy from preceptors, rather than directly affecting residents’ moral empathy, impacts the ways in which residents behave when trying to deliver on their inner motivations. For example, residents adopt empathic phrases from their preceptors that they use in subsequent encounters to enact their moral empathy. This finding was significant because it alluded to a relationship between inner motivations and behaviours (i.e., moral and behavioural empathy). Additionally, several factors that were constructed in this study affected residents’ ability to deliver on their inner motivations rather than directly influencing moral empathy. For instance, as seen in the “Context of Encounter” factor, residents are motivated to give more time to their patients (a behavioural activity); however, this is impossible to do because of the time pressures brought on by their high patient loads. These factors highlighted a tension that residents experience when they are intrinsically

motivated but unable to enact behaviours to fulfil these motivations, further supporting the presence of a relationship between inner motivations and behaviour.

Taken together, although these findings cannot determine directionality, they allude to an interactional nature between residents' moral and behavioural empathy wherein the former influences the latter. Moreover, when considered against the conceptual model of empathy in residents by Aomatsu and colleagues (2013), these findings also raise questions about the nature of this relationship. Their model holds that moral empathy influences its behavioural counterpart through the cognitive and/or affective domains (Aomatsu et al., 2013). However, given that a cognitive and/or affective element was not apparent in the findings from this study suggestive of a moral-behavioural relationship, the current study supports the possibility of such a relationship existing independently of the other domains. This is not to say that cognitive and/or affective empathy are not involved or that the model by Aomatsu and colleagues (2013) is incorrect. Rather, it raises the possibility of there being an *additional* relationship that is not currently captured in their model—one that directly links moral and behavioural empathy.

Assessment of Moral Empathy in Medical Education

This study highlighted the presence of a moral-behavioural tension wherein medical learners have the inner motivations but are faced with contextual limitations that challenge their ability to act on these motivations. In terms of CBME, assessments of behaviour that occur in contexts that prevent learners from performing the desired actions can potentially result in judgements about inner motivation that lack validity. To address

this limitation, it may be beneficial for medical education to supplement behavioural assessments with assessments of moral empathy in both formative and summative contexts.

Formative assessments are delivered to learners with the objective of facilitating their learning (Epstein, 2007). To this end, the results of this study suggest that moral empathy can be identified through examination of the moral-behavioural tensions that learners experience in the clinical setting. Assessments of moral empathy may involve a composite approach that consists of observing behaviour across a variety of contexts with facilitated conversations during which educators probe learners to determine the underlying reasons for the observed behaviour (Fanning & Gaba, 2007). This is analogous to the practice of “facilitated debriefing” that occurs in simulation-based education wherein the facilitator guides learners through reflection and critical analysis of their experiences in the simulation (Fanning & Gaba, 2007). In terms of moral empathy, these facilitated debriefs could help educators identify and explore the moral-behavioural tensions experienced by learners. Over the course of several iterations, educators would presumably begin to be able to characterize learners’ inner motivations and the contexts in which they struggle to act on them. Given this role in guiding learners through reflections on their performances, facilitators of the debriefs would be assuming the role of a “coach” (Lefroy, Watling, Teunissen, & Brand, 2015). In addition to facilitating reflection, coaches provide formative feedback in order to fostering learning; for moral empathy, this feedback should not only influence learners’ inner motivations but also teach them how to deliver on these motivations (Holmboe et al., 2011; Lefroy et al.,

2015). The results of this study suggest that moral empathy may be positively influenced by advice that encourages empathic practices, as well as advice that enhances learners' awareness of patient populations, the usefulness of empathy, and their privileged role as physicians. In order to teach learners how to deliver on their moral empathy, coaches should strive to demonstrate a good empathic response to their learners.

Formative assessments of moral empathy done in this fashion may have remedial applications in the context of lapses in professional behaviour (e.g., behavioural empathy), which are reported to occur, in part, as a consequence of burnout (Sharpiro, Whittemore, & Tsen, 2014; West & Shanafelt, 2007). Indeed, by instilling in learners the inner motivation characteristic of moral empathy and demonstrating to them how to act upon these motivations, coaches may be able to identify and give the appropriate remediation to students as a preventative step in addressing unprofessional behaviour.

Summative assessments are delivered to learners with the objective of making judgements about competence (Epstein, 2007). For moral empathy, summative assessments could involve appraisal by competence committees of a coach's narrative field notes, which are open-text forms completed by preceptors to provide feedback regarding learners' observed performance (Gofton, Dudek, Barton, & Bhanji, 2017). In CBME, appraising narrative field notes contributes to decisions made by competence committees about learners' readiness to independently practice medicine. However, the current manner in which narrative field notes are used is problematic because they often contain feedback from a variety of clinical preceptors who do not necessarily have longitudinal relationships with learners and who focus only on observed behaviours with

no information about moral-behavioural tensions (Gofton et al., 2017). By reviewing narrative field notes from *coaches* who have relationships with learners and have come to understand their moral empathy through facilitated debriefing sessions, competence committees can circumvent the limitations of CBME (i.e., inability to detect moral-behavioural tensions) and make valid and fair judgements about learners' fitness to practice.

In addition to the residency level, summative assessments of moral empathy may have utility for screening prospective students for medical school admissions. Indeed, screening for moral empathy at medical admissions may ensure that the incoming class has a strong moral foundation from which they can develop their professional identities. To do this, an analogous process to summative assessment in CBME can be done through reviewing reference letters. Specifically, just as coach's narrative field notes may be reviewed by a competence committee to qualify moral empathy, referee's letters of recommendation may be reviewed by an admissions committee to characterize moral empathy. However, the caveat with this approach is that referees may believe that moral-behavioural tensions will be negatively perceived by admissions committees, which may compel them to provide an inflated view of applicants' moral empathy to optimize their chances of admission.

Limitations

Although the descriptive phenomenological approach employed in this study provided a comprehensive description of the factors influencing moral empathy, it is not without limitations. For instance, one limitation of this approach is that, due to the

subjectivist ontology, it is possible that my natural attitude still had some influence over the data collection and analysis. In descriptive phenomenology, researchers are expected to transcend their natural attitude in order to achieve a state known as the *Transcendental I*, wherein participants' experiences can be studied in order to glean the universal essences of the phenomenon without confounding from the researchers' subjectivity (Neubauer et al., 2019). This is done through bracketing, which involves reflecting on and actively setting aside one's biases with respect to the phenomenon being studied (Flood, 2010; Lavery, 2003; Lopez & Willis, 2004; Neubauer et al., 2019; Rodriguez & Smith, 2018; Starks & Brown Trinidad, 2007; Tavakol et al., 2012). Although bracketing was done for particular aspects of my natural attitude that stood to colour my engagement with the data (i.e., interest in the career of medicine, status as a novice qualitative researcher, and tendency to conflate the domains of empathy), it is not possible for me to bracket the facets of my subjective reality that are beyond my awareness. Indeed, an essential aspect of the bracketing process is reflecting on one's biases; however, in order to reflect on a bias, an awareness of the bias must be present. In this regard, despite my attempts to bracket my subjectivity, the influence of my natural attitude on the data could not be eliminated.

The influence of the natural attitude on the investigation becomes especially pronounced given the topic being investigated in this study. In particular, phenomenology seeks to understand a phenomenon through exploring the subjective experiences of participants. In this regard, it is essentially a practice of empathy (Ratcliffe, 2012). Accordingly, empathy is a fundamental characteristic of phenomenology that cannot be

bracketed by the researcher (Finlay, 2005; Nissim-Sabat, 1995; Ratcliffe, 2012). This represents a limitation of phenomenology that may be particularly pronounced in this study.

Another limitation faced in this study is that descriptive phenomenology relies on articulations of participant perceptions as the primary source of data. This is a notable shortcoming because it raises the risk of social desirability biases, thereby challenging the validity of the results reported in this study. Social desirability bias is when participants either exaggerate their answers to be viewed more favourably or answer such that they meet social conventions and expectations (Dehning et al., 2013; Fisher & Katz, 2000). For example, the results of this study showed that, despite having the inner motivation (i.e., moral empathy), burnout makes it difficult to deliver empathic behaviours to patients. However, it is possible that residents' inner motivations actually *do* change, but in an effort to be viewed more favourably, they may have been compelled to exaggerate the impact of burnout on their *ability* to enact their moral empathy and downplay the impact of burnout on the motivations themselves. This bias was also seen in reports of the “Innate Capacity” factor. Indeed, since empathy is considered a desirable construct and is commonly associated with the medical profession, participants may have felt inclined to report having an innate empathic capacity—being empathic people—rather than admitting to the contrary. In both cases, it was possible for participants to skew their articulations away from their honest perceptions.

An additional limitation of descriptive phenomenology is that, when undergoing the Imaginative Variation reduction, it is impossible to know whether the phenomenon

has been sufficiently re-imagined prior to finalizing the universal essences with which to create the generalizable description of the phenomenon (Neubauer et al., 2019). Indeed, the process of Imaginative Variation involves researchers continuously reflecting on different versions of the phenomenon being investigated until they arrive at its universal essences (Neubauer et al., 2019). It follows, then, that certainty about the universal essences that are arrived at is contingent on the researcher having considered a sufficient number of variations of the phenomenon; however, it is difficult to know how many possible variations there are for any given phenomenon. Therefore, it may be possible that the number of imagined variations considered before settling on the factors presented in Chapter 2 was insufficient, bringing a degree of uncertainty to the results.

Lastly, the snowballing method that was used to recruit participants was a potential shortcoming of the study. Indeed, the primary objective of descriptive phenomenology is to produce a generalizable description of the phenomenon based on its universal essences (Flood, 2010; Lavery, 2003; Lopez & Willis, 2004; Neubauer et al., 2019; Rodriguez & Smith, 2018). Since snowball sampling relies on leveraging the social networks of pre-existing participants, it was possible that the resultant sample may not have been representative of the broader population being studied, which challenges the generalizability of the descriptions produced in the results (Atkinson & Flint, 2001; Cohen & Arieli, 2011). However, given the sensitive nature of the topic being studied, the increased trust fostered through the snowballing strategy outweighed the potential risk of losing some generalizability (Cohen & Areili, 2011).

Future Research Directions

This study provided a comprehensive description of the factors that influence moral empathy; through these results, areas of future research become apparent. As described previously, moral empathy is implicated in the moral development process required for professional identity formation. In this regard, it may be beneficial to assess this construct during medical education and to screen for at medical admissions. In the literature currently, Hogan's Empathy Scale (Hogan, 1969) is the only measure that aims to assess a moral domain of empathy. Yet, it falls short in that it does not account for the operational definition of the moral empathy. That is, the inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs. Given the importance of assessing moral empathy, along with the absence of methods with which to do so, it is suggested that future research focus on using the results of this study to develop an assessment tool for moral empathy. For instance, the instrument could be comprised of multiple sections based on two of the analytic categories developed in this study: "Previous Personal Encounters" and "Specific Patient Encounters". Although "Innate Capacity" was also a result in this study, it is recommended that researchers refrain from including this factor as part of a tool to measure moral empathy until there is more evidence to support the existence and/or nature of such a capacity. Additionally, the two aforementioned sections can be further divided into sub-sections based on their constituent factors. Specifically, "Previous Personal Encounters" can have the sub-sections of "Classroom Education," "Clinical Education," and "Personal Life"; similarly, the "Specific Patient Encounters" section can

have sub-sections of “Patient Behaviours,” “State of Resident,” and “Context of Encounter”. Nested within these factors would be any questions created based on the descriptions provided in the results of this study. Importantly, any questions that are created for this tool should be blueprinted, or mapped, onto the operational definition of moral empathy to ensure that each question targets a particular aspect of the construct (i.e., inner motivation to accept patients unconditionally, commit to understanding patients, and help patients achieve their needs) (Hamdy, 2006). Additionally, as described previously, moral empathy may be an important construct to assess during medical admissions; given the high-stakes associated with the admissions process, it is important for this tool to undergo validation after it has been created to ensure that any decisions made based on the results of this tool are trustworthy and defensible (Cook, Brydges, Ginsburg, & Hatala, 2015; Kane, 2013a; 2013b). This validation process would involve collecting and interpreting evidence about the instrument’s validity, or its ability to assess what it is intended to assess (Cook et al., 2015; Kane, 2013a; 2013b; Wass, Van der Vleuten, Shatzer, & Jones, 2001).

Additionally, the findings in this study that were suggestive of a moral-behavioural interaction raised questions about whether this relationship can occur independently of the cognitive and/or affective domains of empathy, as in the model by Aomatsu and colleagues (2013). In other words, this study brought to light the possibility of a direct moral-behavioural connection that is not currently captured their model. In this regard, it is suggested that future research explore the relationships between the four domains of empathy. To do this, researchers may consider employing a grounded theory

study design. While its ontological and epistemological lenses resemble those of the descriptive phenomenological approach taken in this study, grounded theory differs in its objectives. Rather producing a generalizable description of a phenomenon, grounded theory aims to develop a theory to explain *how* social processes happen in a particular context (Kuper et al., 2008; Saldaña, 2013; Starks & Brown Trinidad, 2007; Winpenny & Gass, 2000). In this regard, grounded theory is useful because it allows researchers to understand *how* the empathic response happens in the patient care context, which would elucidate the ways in which the domains of empathy interact to allow for an empathic response to occur. In doing this, a better understanding of the interconnectedness of the domains can be gleaned. This would ultimately contribute to forming a more robust conceptualization of empathy that can be universally adopted by medical educators and researchers.

Conclusion

This study intended to answer the question, *what do residents' experiences reveal about the factors that influence their moral empathy?* To do that, a descriptive phenomenological approach was used, which employed lightly structured interviews, inductive coding methods, and member-checking through a verbatim theatre methodology. Upon completing the study, the following categories of factors were constructed: Innate Capacity, Previous Personal Encounters, and Specific Patient Encounters. The factors within these categories either impacted residents' moral empathy directly, their ability to act on their moral empathy, or the ways in which they deliver on their moral empathy. These results offer unique insights into the declines in empathy that

have been previously reported in the medical education literature. Specifically, this study provides evidence to suggest that certain factors implicated in empathic decline may exhibit their effects, in part, through negative changes to the moral domain. Furthermore, challenges to delivering on moral empathy were explored in this study, which highlight a tension between motivations and behaviour that may contribute to burnout and further declines in empathy. Implications of this study on empathy assessment are also examined and suggestions for future research directions based on the findings of this study are provided.

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APPENDICES

Appendix 1: Post-Performance Questionnaire

Understanding Moral Empathy: A Verbatim Theatre Exploration

Investigators:

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Purpose of the Study

You are invited to take part in this study on empathy in medical education. I am doing this research for my master's thesis. Empathy is an essential skill to forming trusting relationships with patients, which can improve the likelihood of positive health outcomes. Empathy can be understood as having four domains: cognitive, behavioural, affective, and moral. The moral component is poorly understood. As such, I want to better characterize this domain of empathy and improve the overall understanding of its role in the resident experience. I am hoping to learn how residents in specialties that rely more heavily on forming relationships with patients (e.g., family medicine, paediatrics, psychiatry, critical care) experience moral empathy, while also highlighting the influence that medical education has on this experience. I also hope to find out how medical educators can incorporate this knowledge in their curricula to improve education about empathy for medical trainees.

Procedures involved in the Research

You will be asked to complete this short survey after viewing the play here at the David Braley Health Sciences Centre (DBHSC) that will be analyzed both numerically and for themes, with your permission. Viewing the performance and completing this survey should take a total of about 60 minutes. The survey will be asking you questions about your perspectives and understanding of the contents of the play.

With your permission through completion of this survey, the findings from these surveys will be used to better understand your perspectives and understanding of the contents depicted in the play in relation to the topics of empathy and patient interactions. I will also ask you for some demographic/background information like your gender, level of education, and role.

Potential Harms, Risks or Discomforts:

The risks involved in participating in this study are minimal. You may feel uncomfortable with certain questions asked in the survey. You do not need to answer questions that you do not want to answer or that

make you feel uncomfortable. Although these surveys are completed anonymously, it is possible that others in the audience may observe you filling it out due to their close proximity to you. Please keep this in mind as you complete the survey. I will describe below the steps I am taking to protect your anonymity.

Potential Benefits

The research will not benefit you directly. We hope to learn more about the moral component of empathy. We hope that what is learned as a result of this study will help us to better understand the broader construct of empathy as experienced by medical residents. This could help contribute to improvements in educating and assessing empathy in following years.

Confidentiality

You are participating in this research anonymously. No one including me will know that you have participated unless you choose to tell them. To protect your anonymity, the survey will not ask for your name and any other information that may be identifiable to you (e.g., your name, names of relatives, other personal information). We are often identifiable through the stories we tell. Please keep this in mind in deciding what to disclose in this survey. Also, as described above, others completing the survey in your proximity may be able to observe how you answer. Please keep this in mind while completing the survey. Once the study has been completed (estimated to be June 2019), the data will be destroyed.

Participation and Withdrawal

Your participation in this study is completely voluntary. However, given the anonymous nature of your participation, I will not be able to remove your data from the study if you decide to change your mind. This is because the surveys do not ask for any information that is uniquely identifiable to you, meaning that I will not know whether or not you participated, or which survey is yours. Please keep this in mind before deciding to complete this survey. If you do not want to answer some of the questions you do not have to, but you can still be in the study. Your decision whether or not to be part of the study will not affect your relationship with McMaster University or otherwise cause a loss of benefits to which you might otherwise be entitled, nor will it affect your assessments, treatment, or employment status in any way.

Information about the Study Results

I expect to have this study completed by approximately June 2019. If you would like a brief summary of the results, please let me know how you would like it sent to you.

Questions about the Study

If you have questions or need more information about the study itself, please contact me at: pierisdi@mcmaster.ca or (519) 990-7550. You can also contact the Local Principal Investigator at: griersle@mcmaster.ca or (905) 525-9140 ext. 22738.

This study has been reviewed by the Hamilton Integrated Research Ethics Board (HiREB). The HiREB is responsible for ensuring that participants are informed of the risks associated with the research, and that participants are free to decide if participation is right for them. If you have any questions about your rights as a research participant, please call the Office of the Chair, HiREB, at 905.521.2100 x 42013.

Date: _____

Gender: _____

Thank you for participating in this voluntary survey. By completing this questionnaire, you are consenting to participate in this survey. The information that you provide will be fully confidential.

If resident, please choose: PGY1 PGY2 PGY3 PGY4 Other: _____

If medical educator, indicate specialty: _____

Please choose the option that best fits your feeling about the statement provided. Use the following scale for your answers.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I have learned something new about the moral empathy experience.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					
I have an enhanced understanding of the moral empathy experience.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

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I feel that the knowledge I gained from this play will impact the way I interact with other residents.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Comments:

This creative experience has changed my understanding of residents.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Comments:

I feel my practice will change based on my new understandings emerging from the play.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Comments:

I have experienced, or witnessed someone else experience, some or all of the scenarios depicted in the play.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					
As a medical educator, I learned something new that I can incorporate into my educational practices.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>*for medical educators only</i>					
Comments:					
As a medical educator, I learned something important relating to medical education.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>*for medical educators only</i>					
Comments:					



Appendix 2: HiREB Ethics Approval

Oct-26-2018

Project Number:5110

Project Title:Understanding Moral Empathy: A Verbatim Theatre Exploration

Student Principal Investigator: Mr. Dilshan Pieris

Local Principal Investigator:Dr. Lawrence Grierson

We have completed our review of your study and are please to issue our final approval.

You may now begin your study. The following documents have been approved on both ethical and scientific grounds:

Document Name	Document Date	Document Version
Audience questionnaire for	Oct-01-2018	2
HiREB_v2_clean Audience recruitment flyer	Oct-01-2018	1
Budget_v2_clean	Oct-01-2018	2
Consent form for Interview	Oct-01-2018	2
Group_v2_clean Interview questions for	Oct-01-2018	2
HiREB_v2_clean Proposal for		
HiREB_v2_clean		

The following documents have been acknowledged:

Document Name	Document Date	Document Version
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tcps2_core_certificate-Grierson	Sep-10-2018	1
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Any changes to this study must be submitted with an Amendment Request Form before they can be implemented.

This approval is effective for 12 months from the date of this letter. Upon completion of your study please submit a **Study Completion Form**.

If you require more time to complete your study, you must request an extension in writing before this approval expires. Please submit an **Annual Review Form** with your request.

PLEASE QUOTE THE ABOVE REFERENCED PROJECT NUMBER ON ALL FUTURE CORRESPONDENCE

Good luck with your research,



Kristina Trim, PhD, RSW

Chair, HiREB Student Research Committee McMaster University

The Hamilton Integrated Research Ethics Board (HiREB) represents the institutions of Hamilton Health Sciences, St. Joseph's Healthcare Hamilton, Research St. Joseph's-Hamilton and the Faculty of Health Sciences at McMaster University and operates in compliance with and is constituted in accordance with the requirements of: The Tri-Council Policy Statement on Ethical Conduct of Research Involving Humans; The International Conference on Harmonization of Good Clinical Practices; Part C Division 5 of the Food and Drug Regulations of Health Canada, and the provisions of the Ontario

Personal Health Information Protection Act 2004 and its applicable Regulations; for studies conducted at St. Joseph's Healthcare Hamilton, HIREB complies with the Health Ethics Guide of the Catholic Alliance of Canada

Appendix 3: “Trial by Fire” Script

SCENE 1

RESIDENT 1, RESIDENT 2, and RESIDENT 3 are sitting beside each other such that RESIDENT 2 is on the audience’s left, RESIDENT 1 is in the middle, and RESIDENT 3 is on the right.

RESIDENT 1: A lot of empathy’s in—

RESIDENTS 1, 2, 3: soft skills.

RESIDENT 2: Body language, peripheral cues, tone, rate of speech, check-ins with the patient, knowing when to grab someone’s hand.

RESIDENT 2: Being there and knowing when to not speak. Through seeing good and bad examples in preceptors, listening is often one of the most important things. It’s so important to see what the patient is going through and give them the space to go through that.

RESIDENT 3: Showing inherent concern to how the patient and the family would have felt. And expressing that concern, not for the sake of expressing it, but because you genuinely care.

RESIDENT 1: You have to dedicate time and try and make sure the patient is validated, heard, and comfortable. Sometimes spending time with the patient just to spend time with them helps people understand how invested you are. Time is really all it takes to build good relationships.

RESIDENTS 1, 2, 3: conversation.

RESIDENT 2: Trust comes from transparency and putting control in the hands of the patient. Not blowing them off. Taking time to explain things in a way that patients understand.

RESIDENT 1: Reassuring them. Trying to make sure that the patient hears, in some part in their brain, that this isn’t anything that they did or caused.

RESIDENT 3: Being able to communicate with someone as if you were in their shoes. But without actually putting yourself in the patient’s shoes. Trying to understand what that would feel like on an—

RESIDENTS 1, 2, 3: emotional level.

RESIDENT 1: It's hard to fake that feeling. It has to be something that you actually are experiencing to be truly empathic.

RESIDENT 2: You try, right? You try as hard as you can and if you can't feel what you're supposed to feel, what can you do?

RESIDENT 1, RESIDENT 2, and RESIDENT 3 stand up, still side-by-side.

RESIDENTS 1, 2, 3: Either you have it, or you don't.

RESIDENT 1: Sometimes you just have to put a smile on and fake it until you make it.

RESIDENT 1, RESIDENT 2, and RESIDENT 3 fake a smile to the audience...

SCENE 2

RESIDENT 1, RESIDENT 2, and RESIDENT 3 begin off-stage. When the scene starts, RESIDENT 1 walks on-stage and delivers his lines. He paces slowly and uses hand gestures as he relays his accounts to the audience.

RESIDENT 1: I have an elderly patient who I see often because of complex medical issues. Every time he comes in, he asks me for my genuine opinion. Everything I suggest, he's willing to try. Everyone I connect him with, he's willing to see. I think that's what makes it easier to form relationships. Off-the-bat, I can sense that the patient is looking for help and ready to trust me and my recommendations. If the patient feels comfortable under my care, it puts me at ease knowing that I'm meeting their goals or interests. What's even more remarkable is the appreciation I know he has for the time that I'm spending with him.

RESIDENT 1 pauses in place with his chin up. RESIDENT 2 walks on-stage and delivers his lines in similarly...

RESIDENT 2: From the patient's side, what would be perfect is to understand that we're not going to be able to solve their problems 100%. I had a patient who actually suffered a consequence of an angiogram and eventually was left with very severe end-stage heart failure. And over the years, I would see her time to time when she got re-admitted. I remember the day she was discharged, she gave me a card thanking me despite the fact that she had suffered a complication. A year and a half later, I was at a different hospital, she saw me and gave me a hug and was very grateful for her care. I think that that makes for a really great relationship between myself as the provider and her as the patient. It's nice to feel appreciated.

RESIDENT 2 pauses in place with his chin up. RESIDENT 3 walks on-stage and delivers her lines similarly...

RESIDENT 3: I was with a teenager who had a new diagnosis of cancer that was picked up overnight. I gave the diagnosis as well as what the next like couple of days, weeks, months, years, would look like to the patient and family. You are giving this crushing diagnosis but at the same time, it's so rewarding to do that in a way that you feel like you've made a difference. You provided care to a patient in a successful way in that the patient suffered less and the family suffered less. It's rewarding because you're able to help, even if it's just by connecting him with resources... with other professionals that are better equipped to help him. I think that's what motivates me.

RESIDENT 2: Patients really trust their physicians. We're asking such personal and intimate details of their lives. It's a privilege that patients come to see you and tell you information that they've probably never told anyone before. You can pry so much, and it's not seen as prying. It's a privilege for them to feel comfortable enough to do that and trust

that you're going to do the right thing with that information. I don't know any other profession that can feel that way. That's really a privilege.

RESIDENT 3: We're often people's first or only supports in a lot of things, which makes it particular valuable. I think that's what motivates me, knowing the strength of that relationship. I think knowing that it's not just my responsibility but also my privilege to be that person. It's incredible. It's incredible to be that person for someone.

SCENE 3

RESIDENT 1, RESIDENT 2, and RESIDENT 3 begin off-stage. When the scene starts, RESIDENT 1 walks on-stage and delivers his lines. He paces slowly and uses hand gestures as he relays his accounts to the audience.

RESIDENT 1: It's tough to build empathy. I have one patient in my practice that is not interested in what I have to say beyond what's kind of contractually expected of me. They have one question and just want the answer to that question and don't want to talk to me anymore, **[annoyed]** so... fine. It's hard because I think you really have to know who they are. Getting to know them is the most important thing. That's the biggest step in building empathy. If you're not connected with the patient, they don't feel like they can trust you. If you don't trust your therapist, are you really going to open up about what you're experiencing and feeling? Probably not. I wouldn't.

RESIDENT 1 pauses in place with his head down. RESIDENT 2 walks on-stage and delivers his lines in similarly...

RESIDENT 2: I have one patient that I've seen ten times before, come back in for the same thing. You have to tell them the same things over and over again, the patient's saying the same thing, and nothing's helped so far. It's frustrating because I can't just ignore this person, I need to try my best to make sure that the patient doesn't feel neglected and their concerns are addressed. But you're like, **[unenthusiastically]** 'what'd we talk about last time? What happened?' And you can't do anything. There's no good way to help them. It's a broken record.

RESIDENT 2 pauses in place with his head down. RESIDENT 3 walks on-stage and delivers her lines similarly...

RESIDENT 3: I have patients that are reluctant to engage in care or have had bad experiences with the medical system. It's hard to turn that around. Building trust is the most important thing. People do better when they trust their doctors, and people trust people they know. **[sighs]** It's really frustrating because despite my best effort, I will not connect with everyone. You ask them as much as you can, but the relationship has to be somewhat developed to elicit a response to questions. You don't want to force them to tell you things that might be uncomfortable.

RESIDENT 3 pauses in place with her head down. RESIDENT 1 un-pauses...

RESIDENT 1: I think the big thing is to sort of realize when you can no longer help. There's a limit to advocacy and communication. People always talk about physicians doing no harm and you can do a lot of harm in how you communicate. So, you say the pitch, show them the resources, and appreciate that they don't want to hear about this at the moment. In those cases, you do the bare minimum because the patient doesn't want any more.

RESIDENT 2 un-pauses...

RESIDENT 2: One staff doctor told me never work harder than your patients. Like don't put your heart and soul into something that is not going to be exactly what you want it to be. Now that I think about it, it's a very anti-empathic sort of philosophy [**laughs**]. But that's how we save ourselves from patient expectations. You cannot work harder than someone at changing something in their lives. It's unrealistic.

RESIDENT 3 looks up at the audience...

RESIDENT 3: [**sighs**] Patients drive me crazy.

SCENE 4

RESIDENT 1 and RESIDENT 2 are seated on opposite sides of the stage, facing each other and the audience. RESIDENT 3 is off-stage.

RESIDENT 1: Empathy has been a huge topic throughout the entirety of my medical school education.

RESIDENT 2: Empathy was almost a throw-away thing that we did at the end of our medical school. It wasn't directly taught.

RESIDENT 1: We had a curriculum dedicated to ethics, patient interviewing, empathy, professionalism, and forming relationships with patients. We learned things about income stability, housing stability, poverty, LGBTQ community, the social aspects of a disease. Empathy was fostered into that.

RESIDENT 2: I don't know what the hardships of someone are. I don't. We can discuss it all we want but it really doesn't make sense until you actually start talking to patients and they tell you their life stories.

RESIDENT 1: It's something that we were always assessed on. From first year, we started having these simulated patient encounters that were about creating that trusting relationship.

RESIDENT 2: It's so silly, they gave us an acronym on how to break bad news. Because you know these medical-minded people are like, [mockingly] 'we need to study an acronym to figure out this social skill,' right? It's called 'SPIKES.' Set the stage, get the patient's perspective is the 'P,' invitation for bad news is the 'I,' 'K' is giving knowledge, and 'E' is empathic response.

RESIDENT 1: Even before clerkship, we have clinical skills. We get paired up with a group of medical students and residents who observe you interact with the patient. That's where we meet patients for the very first time.

RESIDENT 2: We're taught phrases that we can use [laughs] like it's so cookie-cutter. It's like, [sarcastically] go through the acronym and make sure you do the 'E' part, like make sure. So, something like... [repeat x4] 'I can't imagine what you're going through.' They make it so cookie-cutter to tell someone they're dying.

RESIDENT 3 walks into the scene.

RESIDENT 3: Having a good mentor be on call with you or chat with you really makes a big difference. You try to emulate people you want to become, mentors that have done things properly with good patient outcomes and good bedside clinical manner. Then you

seek them out in terms of advice. I wish within the medical curriculum we had more safe places to practice these things or the opportunity to shadow physicians who are actually good at it. To learn from people who have empathic skills engrained in them as opposed to being thrown on the wards to figure out how to navigate tough situations.

SCENE 5

RESIDENT 3 is sitting alone at centre-stage. She is feeling tense and uneasy. RESIDENT 1 and RESIDENT 2 are off-stage on either side.

RESIDENT 3: When you were medical student, you always had someone to review and have backup. But when you're a resident, you're given a lot of freedom. For the first time ever, are signing your own prescriptions, you're signing your own notes. But autonomy comes at a cost. When you are more autonomous, you are more by yourself.

RESIDENT 1 and RESIDENT 2 whisper from off-stage...

RESIDENT 2: Nobody's watching over your shoulder.

RESIDENT 1: You need to be better.

RESIDENT 2: There's no one to hold your hand.

RESIDENT 1: Be the best.

RESIDENT 2: There's no one to bail you out.

RESIDENT 1: The stakes are higher.

RESIDENT 3: It can be quite scary and intimidating because for the first time ever, you are a physician. An actual doctor. There's so much inherent responsibility in that. You have a lot of expectations of you. You have a lot of roles.

RESIDENT 1: Physician.

RESIDENT 2: Learner.

RESIDENT 1: Service provider.

RESIDENT 2: Teacher.

RESIDENT 1: Researcher.

RESIDENT 3: I wish people had more of an idea that we're trying our best, but we will make mistakes, or not say the best thing sometimes. Yes, you're a resident and you're

learning, but you can't hide behind the fact that you're learning. You're also a doctor and you're teaching junior learners. Whenever I have medical students, I want to make a good impression and model to them how you can build that therapeutic alliance. So, I feel like we should know everything about everything all the time and it's really hard. I'm not sure I can live up to that. You're constantly being assessed.

RESIDENT 2: Exceed expectations.

RESIDENT 1: Push yourself.

RESIDENT 2: Be an empathic person.

RESIDENT 1: Competence.

RESIDENT 2: Be impressive.

RESIDENT 1: Get a good evaluation.

RESIDENT 3: [sighs] I have a lot of imposter syndrome when I see patients. I feel like there's always the risk of messing something up. You want to make sure you're doing the right thing every step of the way. You're always second-guessing yourself and I feel afraid that I may be making the wrong decisions. I fear I'm not going to be able to provide them the care they deserve.

RESIDENT 1 and RESIDENT 2's whispers begin overlapping a little more...

RESIDENT 1: Am I doing this okay?

RESIDENT 2: Not reaching success.

RESIDENT 1: Not meeting expectations.

RESIDENT 2: Am I making the patient feel supported?

RESIDENT 1: Don't know the answers.

RESIDENT 2: What's my role going to be?

RESIDENT 1: Out of my depth.

RESIDENT 2: Gaps in knowledge.

RESIDENT 1: Lack of experience

RESIDENT 2: Don't miss anything.

RESIDENT 1: Gaps in comfort.

RESIDENT 2: Don't leave anything to chance.

RESIDENT 1: Don't mess up.

RESIDENT 2: What's the safest decision for their wellbeing?

RESIDENT 3: I find myself taking a deep breath before going into their room [takes a breath]. You're responsible for these patients. You feel obligated. The anxiety hovers over your head, and that anxiety drives you to do something. To keep on doing it until you get it done for the patient. [pauses] But it's hard. You don't have the time to spend with patients. So, you try to do things as efficiently as possible within the like three to five minutes I have available for them. But that's just not realistic.

RESIDENT 1: Long waitlists.

RESIDENT 2: Large volumes.

RESIDENT 1: High flow.

RESIDENT 2: Constraints on time.

RESIDENT 1: Busy clinic.

RESIDENT 2: You're running behind.

RESIDENT 1: You have other patients to see.

RESIDENT 3: Patients expect things that are completely unreasonable and have preconceived notions about what their care should look like. Patients think we're miracle workers or that we're going to make them better in one visit. But I can't wave a magic wand and make things happen.

RESIDENT 1 and RESIDENT 2 come on-stage, slowly creep toward RESIDENT 3, and circle around her. Their whispers grow louder and more chaotic.

RESIDENT 1: We hope we can ask you more questions.

RESIDENT 2: I can't make this choice

RESIDENT 1: Why can't I see a specialist sooner?

RESIDENT 2: You're taking away my rights.

RESIDENT 1: Why did it take three hours for my blood work to come back?

RESIDENT 2: Make things happen.

RESIDENT 1: Give your full undivided attention.

RESIDENT 2: Go above and beyond.

RESIDENT 1: Every little problem is going to be solved.

RESIDENT 2: Manage all the issues in the same half hour.

RESIDENT 1: I want to talk about this.

RESIDENT 3 (explodes): I don't want to talk to you!

The voices continue softly and fade out as RESIDENT 1 and RESIDENT 2 retreat off-stage. RESIDENT 3 sighs, then looks down.

SCENE 6

RESIDENT 1, RESIDENT 2, and RESIDENT 3 begin off-stage. When the scene starts, RESIDENT 2 walks on-stage and delivers his lines. He paces slowly and uses hand gestures as he relays his accounts to the audience.

RESIDENT 2: I'm constantly a ticking time bomb. You want to be involved in a lot of things, you say yes yes yes yes, and then you get burnt out. It surprised me how easily you can burn out in residency. It demands your time in a disproportionate way that you will never experience before. You will be challenged physically, mentally, emotionally, and constantly.

RESIDENT 2 sits down on a chair. RESIDENT 3 walks on stage...

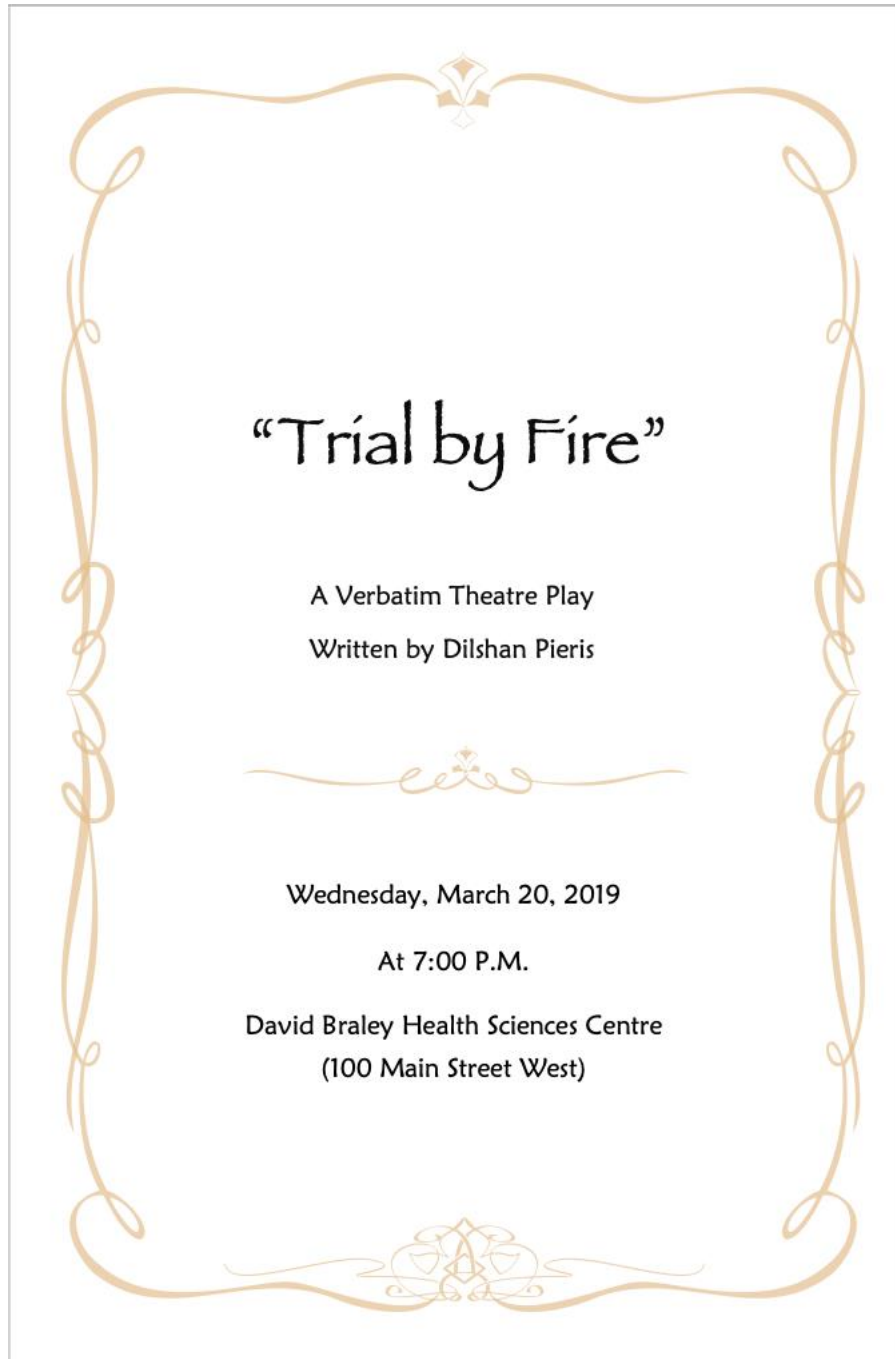
RESIDENT 3: It makes me feel like a chicken with its head cut off. I feel pressured to tackle issues within the same visit. And sometimes I'd run an hour behind and that's so difficult because then you're not being fair to all the other patients. So, yeah, it made me feel like I was under extreme pressure to think fast and be as time-efficient as I can. You're sleep deprived and upset and hungry. If you don't have time to eat, you don't have time to eat. If you don't have time to sleep, you're not sleeping. It can really wear on you.

RESIDENT 3 sits beside RESIDENT 2. RESIDENT 1 walks on stage...

RESIDENT 1: I don't think I expected how tough the overnight shifts could be. It's really hard when it's like 4 A.M. and you've been working for like twenty something hours. There are days where you're on call and you're struggling to care because you're just so tired. Being up all night and seeing all sorts of patients, it takes a lot of emotional resources out of me and throws my entire day off. That's exhausting. I wish people had more of an idea of where we're coming from when we're seeing you at 4 A.M. on the twenty-third hour of our shift.

RESIDENT 2: You're going to have to give up social things, the gym, going to visit your family, parties, weddings, vacation... You're going to have to miss some things sometimes, and that sucks. But you have to do that, or you don't get to be a doctor. That's part of being a doctor. [sighs] Residency is a giant juggling act. You are pretty proficient at juggling and all the balls stay in the air. Sometimes a ball nearly hits the floor [pauses] but it doesn't. You constantly juggle with that uncertainty of not meeting other people's expectations. I wish I could tell patients to understand how burnt out a lot of us are. To have some empathy for us.

Appendix 4: “Trial by Fire” Event Programme





Welcome!

My name is Dilshan Pieris, and I am a second-year MSc student in the Health Science Education program at McMaster University. I would like to thank you for attending this performance of “Trial by Fire” and I am so excited to share this play with you.

“Trial by Fire” tells a story of how medical residents’ experiences influence their willingness and ability to connect with patients. The play brings to light the thoughts, opinions, insights, reflections, and perspectives of medical residents from various specialties that are not always heard by others. This play is a Verbatim Theatre piece, which means that the script was devised using solely excerpts from interviews conducted with study participants. In other words, the script only contains words spoken by medical residents interviewed for this project.

As the playwright, I did not to manipulate their words or introduce text that were not present in the interviews. Rather, my role was to select, trim, and arrange excerpts to tell a story that reflects themes that were developed from the interviews.

With that said, I hope you enjoy “Trial by Fire”.

-- Dilshan Pieris



