It's a Tough Balance: The Lived Experiences of Resilience in Emergency Room Physicians

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Abstract

This study explored resiliency through the lived experiences of emergency room (ER) physicians. Previous research focused primarily on stress and burnout among physicians (de Boer, Lok, Verlatt, Duivenvoorden, Bakker, & Smit, 2011; Iannello & Balzarotti, 2014; Laposa & Alden, 2001; Wrenn, Lorenzen, Jones, Zhou, & Aronsky, 2009), with less attention devoted to how physicians, specifically those who continue to work in the intense ER environment, experience resiliency in their professions. To address this disparity in knowledge, this study explored the lived experiences of resilience in six ER physician participants. In accordance with an interpretive phenomenological analysis (IPA) approach, semi-structured, person-centered interviews were conducted with all six participants. Analysis revealed the overarching theme of Building Resilience, which encompassed six main themes related to how participants' experienced resilience in their professional roles. These included: managing the workload by making a mental plan and approaching work as a challenge; experiencing confidence as a dynamic and evolving process; deriving meaning from past traumatic life experiences; controlling what you can by externalizing inevitable suffering, setting boundaries, and creative problem-solving; emotional processing both within and outside of the ER; and fostering the energy to continue working by feeling grateful for what is, and actively seeking ongoing support from external resources. The findings of this study are broadly consistent with existing research on resilience in primary health professionals, while adding new knowledge and a unique perspective on the lived experiences of resiliency in ER physicians.

Findings may be used to further education and research, inform theory and practice, and promote systemic support and understanding of the lived experiences of resilience in ER physicians.

Keywords: stress and coping in physicians, resilience in primary health care, physician satisfaction, ER physician longevity, emergency physicians and resilience, physician wellness, resilient physicians

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Chapter 1: Introduction

Emergency room (ER) physicians are medical professionals trained to work in acutely stressful situations. Hospital emergency wards are environments where workplace demands are high due to frequent interactions with patients and families in crisis. ER physicians have described their profession as fast-paced, challenging, unpredictable, exciting, overwhelming, exhausting, and rewarding (Johnston, Abraham, & Greenslade, 2016). Aspects of the profession identified as desirable include caring for patients with complex conditions, dealing effectively with traumas, feeling a sense of responsibility and autonomy in the workplace, and working closely with colleagues. These same aspects have been identified as contributing to the high levels of stress reported by physicians working in the ER (Reiter, 2011). A large body of research has been devoted to investigating stress, burnout, and secondary trauma among physicians. Although stress associated with the profession cannot be ignored, there are many ER physicians who continue to work in this field and report satisfaction with their careers. How is this possible? What are the lived experiences of resiliency among these physicians? Exploration of strength-based human functioning has evolved over the past 20 years within an area known as *positive psychology*, defined as, "the study of the conditions and processes that contribute to the flourishing or optimal functioning of people, groups, and institutions" (Gable & Haidt, 2005, p. 103). Those interested in positive psychology seek to find answers to the question *what is right with people and how can we cultivate and nurture it*, rather than *what is wrong with people and how can we fix it?* Resilience is closely related to strength-based functioning and has been defined a number of ways depending on the theoretical and cultural models used to understand it (Fletcher & Sarkar, 2013; Greene, Galambos, & Lee, 2008). Although the complexities of defining resilience are well recognized (Grotberg, 2003; Unger, 2010; Windle, 2011) all definitions suggest that resilience encompasses some form, construct, or process of overcoming or positively adapting to adverse, stressful, or traumatic circumstances (Windle, 2011; Windle, Bennett, & Noyes, 2011).

Evidence-based research and interest in understanding human resilience continues to grow and evolve, however little remains known about personal resilience in the lived experiences of ER physicians whose work involves treating patients and families in immediate crisis, trauma, and suffering. The following qualitative study addressed this gap in knowledge by seeking to understand resilience through the lived experiences of six practicing ER

physicians in Saskatoon.

Purpose of this Study

The purpose of this inquiry was to provide insight into how ER physicians currently working in Saskatoon experience personal resilience in their work. Research on resiliency in emergency personnel exists, though the majority of studies focus on disaster relief, emergency medical service (EMS) workers, police, firefighters, and nurses (Kendra & Wachtendorf, 2003; Eriksson, VandeKemp, Gorsach, Hoke, & Foy, 2001; McCann, Beddoe, McCormick, Huggard, Kedge, Adamson et al., 2013; Mealer, Shelton, Berg, Rothbaum, & Moss, 2007). The findings of this study add to understanding the lived experiences of resilience in the lives of ER physicians, an area of knowledge and a population that remains widely understudied. Findings will add new knowledge of how personal resilience is conceptualized as a process and phenomenon.

The Researcher

This research topic has great relevance to my personal life. I grew up in a family of physicians, and I have been married to an ER physician for 22 years. During these years my partner and I have experienced many challenges, especially when the kids were very young and required constant care. At this time he was in a residency program and the demands on his time and energy were constant. As a mother, the demands on my time and energy were also high. I was unable to understand why his profession felt all consuming to him. Fifteen years after completing a Masters degree in community health and epidemiology, I enrolled in the school and counselling psychology program and began my practicum, working directly with clients at an inner city community clinic. For months I came home feeling a range of emotions - overwhelmed, energized, helpless, preoccupied, hopeful, frustrated. At the end of each day at the clinic I almost always felt emotionally drained and found it difficult to engage fully with my family. Through my own experience I came to empathize with how my partner found it so difficult to be present at home after a full day at the ER. With an understanding of his lived experiences as an ER physician, I feel I would have been more sympathetic when the kids were young and I felt alone in the world of diapers and sleepless nights. In the past 5 years we have learned about balance, about reframing the struggles involved in everyday existence and finding the strengths and positives in each day, even if they seem inconsequential. After

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completing my practicum my partner and I have learned new ways of coping with the psychological and emotional challenges of *his* profession, as he often brings the effects of dealing with challenging people and traumatic situations in the ER home with him. I chose to study resilience because I am often surprised by the strength of the human spirit. Resilience is what sustains and allows people, including myself, to move forward, not necessarily in a perfect way, but with some sense of satisfaction.

Practically speaking, I chose to study resilience among Emergency Room (ER) physicians for two reasons: because little is known about the lived experiences of resilience in ER physicians, a profession with a high risk of stress and burnout; and because my own life experiences have led me to wonder how ER physicians adapt to the everyday challenges posed by their demanding work.

Significance and Implications

This study explored the lived experiences of resiliency in ER physicians. To date, literature on resilience among emergency personnel has been largely quantitative in nature, with studies focusing on nursing personnel, EMS workers, police, and firefighters (Kendra & Wachtendorf, 2003; Laposa, Alden, & Fullerton, 2003; Eriksson, VandeKemp, Gorsach, Hoke, & Foy, 2001; McCann, Beddoe, McCormick, Huggard, Kedge, Adamson et al., 2013; Mealer, Shelton, Berg, Rothbaum, & Moss, 2007). Qualitative research in the area of personal resiliency in ER physicians is extremely limited, as most studies related to physicians' lived experiences use surveys and questionnaires to quantify stress and burnout, with a few focusing on self-care (de Boer et al., 2011; Healy & Tyrrell, 2011; Iannello & Balzarotti, 2014; Wrenn, Lorenzen, Jones, Zhou, & Aronsky, 2009). Experienced researchers suggest the use of qualitative inquiry if little is known about the phenomenon of interest; if the researcher questions the integrity of existing studies and their findings; if there is a gap in knowledge pertaining to the understanding or the meaning of a phenomenon or in describing the experience of that phenomenon (Miles & Huberman, 2003; Morse & Field, 1995). Little is known about how ER physicians perceive and experience resiliency in their work, therefore knowledge development in this area is key. This study adds a unique perspective to existing research, one which provides the reader with a rich, in-depth understanding of how the six participants in this study experience and interpret their own resilience in relation to their ER

physician roles.

Use of the Interpretive Phenomenological Analysis approach (IPA) in this study provides a significant contribution of knowledge due to the richness of data collected through the inductive interview process. This approach is person-centered, relevant, timely, and provides ER physicians who are currently working in this health care system a much needed platform to share their own experiences as physicians. All participants expressed appreciation for the opportunity to talk about their life experiences; through the sharing of these stories, their experiences of personal resilience emerged. Again, findings from this research add new awareness and understanding to the slight but growing body of literature on ER physician resilience.

Knowledge of how ER physicians continue to practice, view, and experience personal resilience in their work is essential in order for patients, families, health-care providers, administrators, and the public, to understand and support ER physicians in their profession. Evidence suggests that health care providers who feel they are able to make a positive difference in the workplace report higher job satisfaction and lower rates of burnout compared with those who focus on the negative aspects of their profession (Jackson, Firtko, & Edenborough, 2007). High rates of burnout, post-traumatic-stress symptoms and secondary trauma will continue unless more is understood about the lived experiences of resilience, and how to support resilience in ER physicians. Additionally, with new understanding, positive changes in the structure, culture, and teaching of all those involved in ER work, and in the health care system may result. In essence, this study contributed to knowledge which can be used to understand and support ER physician resilience.

Summary and Thesis Organization

Emergency physicians are responsible for treating complex illnesses and traumas on a daily basis, often with little or no knowledge of the medical history of patients. Not surprisingly, a substantial body of research has been devoted to exploring the effects of stress and burnout among emergency responders. Though stress is evident, many ER physicians continue practicing emergency medicine, and report feeling satisfied in their professional lives. Investigating how they experience resilience has recently been the focus of a small but growing body of research. Through exploration of the lived experiences of resilience in six ER

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physicians in Saskatoon, this study adds a unique perspective to the limited research on resilience in this group of physicians.

The following thesis consists of five chapters. Chapter one provides an introduction to the topic, including a brief exploration of the reasons I chose to do this research and the purpose and significance of the study. Chapter two reviews selected literature on stress in the ER physician role, and conceptualizations of resilience in health care professions, with a focus on studies which incorporated the perspectives of ER physicians. Chapter Three outlines the methodology used in this study, including the foundations of qualitative phenomenological inquiry and IPA, participant recruitment, data generation, and analysis. Chapter three concludes with a discussion of the validity and quality of the study, and the ethical considerations involved in this research. Chapter four provides a detailed account of study findings, including how participants perceived resilience in their profession. A framework encompassing the six main themes which evolved from data shared by participants during their in-depth interviews is provided. The final chapter integrates findings from this study with existing research on resilience in primary helping professionals. Implications for education, research, theory and practice are discussed.

Chapter 2: Literature Review

This chapter begins with a review of literature on the negative effects of stress in the ER, and goes on to explore research on resilience in health care professionals including ER physicians. The search engines used to identify pertinent literature in the areas of stress and resilience were: Google scholar; Pubmed; PsycINFO; PsycINFO-ProQuest; and the University of Saskatchewan Library Usearch engine. Much of the literature I found focused on stressors and related outcomes of stress for health professionals, especially in the area of nursing, emergency medical service providers (EMS; police), and disaster relief. When I searched for positive experiences related to health care work using keywords such as physician resilience, wellness, satisfaction, coping, and longevity, relevant articles decreased dramatically. Understanding the stress involved in working as an ER physician is necessary in order to fully explore lived experiences of resilience, therefore this literature review begins with a look at some key stressors and negative outcomes associated with stress in ER physicians. A focus on resiliency, beginning with a brief overview of positive psychology and past research on resilience follows. A review of the history of resilience research, and common definitions, theories, and factors associated with personal resilience is provided. The final sections in this chapter summarize existing research on resilience in helping professionals, including ER physicians.

Stress and the Individual

Stress influences all dimensions of an individual's well-being (Cooper, 2017; Folkman, 2013; Folkman, Lazarus, Gruen, & Delongis, 1986; LaRocco, House, & French, 1980; Siegrist & Rödel, 2006). Studies show that certain levels of stress can enhance the body's response to the environment, making it an asset to the individual's adaptation response (Dhabhar, 2014). Stress can also become overwhelming, causing an individual to experience negative physical, mental, psychological and social effects (Edwards, Hershberger, Russel, & Mardert, 2001; Lupien, McEwen, Gunnar, & Heim, 2009). Emergency personnel working in the helping profession – police, firefighters, EMS workers, nurses, ER physicians, social workers, and counsellors – experience a multitude of factors which exacerbate stress in their respective workplaces. These helping professions work directly and routinely with distressed and members of the community. Some studies identify work related stressors specific to ER physicians

and their role in the ER, including sleep deprivation as a result of shiftwork and long hours, professional conflicts, multitasking/providing care for multiple critical and complicated cases simultaneously, perceived control over scheduling, overcrowding, and a professional culture which fails to encourage or support self-care (Chrisholm, Collison, Nelson, & Cordell, 2000; Czeisler, 2015; Halpern, 2007; Reiter, 2011; Rondeau, Francescutti, & Zanardelli, 2005; Sanches, Teixeira, Santos & Ferreira, 2015; Wrenn, Lorenzen, Jones, Zhou, & Aronsky, 2010).

Shiftwork and sleep disruption. Sleep deprivation and circadian disruption have detrimental effects on both body and mind (Dula, Dula, Hamrick & Wood, 2001; Kuhn, 2001; Sanches, Teixeira, dos Santos, & Ferreira, 2015; Smith-Coggins et al., 2000). The World Health Organization has likened shift work to a first-degree carcinogen – on the same harm level as cigarette smoking (Czeisler, 2015). The physical effects of poor sleep quality and lack of sleep include obesity, fatigue, and increased risk of heart attack and chronic illness. Executive functioning, memory, and mental acuity are also affected by sleep deprivation (Smith-Coggins et al., 2000). Specifically, reaction times are longer due to slower processing speed in comparison to individuals who are able to practice healthy sleep hygiene and work during daylight hours. Numerous studies suggest that the effects of circadian disruption and sleep deprivation can increase physician error and decrease the ability to effectively problem solve (Dula, Dula, Hamrick & Wood, 2001; Kuhn, 2001; Sanches et al., 2015; Smith-Coggins et al., 2000). ER physicians provide rotating 24-hour patient care as a routine part of their job description. Sanches, et al. (2015) conducted a research trial in which they divided eighteen physicians into two groups: those who were categorized as sleep deprived having worked a minimum of twelve hours on at least one night shift, and those who did not work night shifts. The authors used a number of scales to assess sleep quality, psychomotor ability, response times to specific stimuli, and ability to concentrate for both groups of physicians. Findings supported existing evidence that acute sleep deprivation negatively impacted physicians' ability to optimally perform their work – both physician safety and patient safety are essential to consider.

Inter-professional conflict. Despite emergency physicians' identification of conflict between colleagues as being a source of workplace stress, there are virtually no studies which effectively address this topic. Anecdotal evidence of conflict or 'workplace incivility' between emergency physicians themselves, physicians and nurses, and between ER physicians and the

specialists they routinely consult has been reported in journal disclosures and editorials, however little rigorous research has been conducted in this area, perhaps due to the sensitive nature of the topic (Reiter, 2011). The majority of research exploring workplace incivility within the healthcare system stems from the area of nursing. Here, studies explore workplace incivility among nurses and between nurses and physicians with findings indicating that conflict between colleagues is a substantial source of stress for both new and experienced nurses (Felblinger, 2008; Oyeleye, Hanson, Connor & Dunn, 2013; Pearson & Porath, 2005; Smith, Andrusyszyn, & Laschinger, 2010). Additional research is required in order to confirm anecdotal evidence of stress related to inter-professional conflict from the perspectives of ER physicians and their colleagues.

As with conflict between colleagues in the ER, anecdotal accounts of patient-physician conflict appear in editorials and blogs. Systematic research on patient-physician conflict is limited. A few studies focus on cultural influences affecting patient-provider relationships in health care (Flores, 2000) and the effects of empathy on patient-physician conflict in the emergency room (Halpern, 2007). It is clear that more research is needed in order to better understand the nature and experience of patient-physician conflict in the ER.

Treating multiple patients with complicated trauma/illness. On a routine basis an ER physician manages many urgent, emergent, and complex cases during one single shift. For example, "there is the elderly woman whose acute abdominal pain ends up being caused by constipation, a woman experiencing dizziness who almost dies from an aortic aneurysm, and a young man who is unresponsive following a motorcycle accident" (R. Bristol, personal communication, December 8, 2017). The challenges faced by patients may range from a cough or cold to life-threatening trauma and death – with every imaginable condition in between. Providing timely, optimal care for patients in crisis while dealing effectively with adverse effects have been identified as the most common sources of resident and physician stress in the emergency room (Wrenn et al., 2010). Interestingly, Chisholm et al. (2000) observed emergency physicians in three departments: an urban teaching ED, a rural community-based hospital, and a suburban academic ED in Indianapolis, Indiana. The authors found that within a 180 minute period, an ED physician engaged in approximately 68 plus or minus 16 tasks with a mean number of interruptions of 31- 41 and a mean number of breaks-in-task of 21-26. The

authors concluded that emergency physicians are 'interruptdriven' – meaning they are interrupted frequently and are conditioned to experience 'multitasking' as a normal part of their work. The authors did not however explore how stressful their physician participants perceived the breaks-in-task and the interruptions.

Perceived control over scheduling and work hours. Many studies provide evidence that perceived control over scheduling, overcrowding, and lack of material resources contributes to a stressful work environment for emergency physicians, nurses, and staff. For example, in a cross-sectional self-administered survey of 960 randomly selected Canadian physicians (48% response rate), Keeton, Fenner, Johnson, & Hayward (2007) found that the key predictors of burnout and work-life balance were physicians' perceptions of control over scheduling and work hours. Those physicians who felt they had some control over their schedule and the number of hours/weeks worked reported significantly more job satisfaction compared to those with the perception of little control over schedule and hours worked. Similarly, Totten, Beveridge & Hoch et al. (2013) compiled an online survey sent to two separate cohorts of 1500 emergency physicians across the U.S. Authors used the Maslach Burnout Inventory (MBI) as the outcome variable in looking at the characteristics of burnout-resilience among physicians. Findings provided evidence that physician participants who reported feeling satisfaction with their shift schedules and perceived control over their work hours scored significantly lower on the MBI and reported feeling that their jobs were a 'calling' rather than an obligation. Johnston et al. (2015) reviewed existing literature on stressors in the ER and found a pervasive theme: perceived autonomy was reported to be a strong mitigating factor against stress experienced by physicians in the ER.

Overcrowding and lack of resources. Since the early 1990's there has been growing concern over the overcrowding and lack of access to resources in emergency departments of urban hospitals in Canada (Rowe et al., 2006). Overcrowding has been shown to negatively impact patient wait times and care as well as physicians' perceptions of control and job satisfaction in the Emergency Department (Rondeau, Francescutti & Zanardelli, 2005). In a large study sample of Canadian emergency physicians, Rondeau et al. (2005) examined the impact of insufficient institutional resources on the work satisfaction of physician participants. The authors concluded that, "resource factors that have the greatest impact on job satisfaction

include availability of emergency room physicians, access to hospital technology and emergency beds, and stability of financial (investment) resources" (p. 327). The authors suggest that insufficient access to needed resources impacts directly on the perception of control over the work environment, hours worked and physician job satisfaction. Hwang and Concato (2004) found concurrent evidence suggesting that overcrowding and restricted access to critical resources negatively affects physician effectiveness and consequently, work satisfaction. Interestingly, Wrenn et al. (2010) found evidence to the contrary after surveying 18 emergency medical residents over the course of a day, evening, and night shift. The authors conducted a prospective cohort assessment of factors that contributed to stress in the ER, with findings suggesting that overcrowding made no significant contribution to residents' level of perceived stress. It is possible that residents do not perceive the negative effects of overcrowding in the same way the attending physicians perceive them, as the attending physicians are ultimately responsible for the quality of patient care provided by the residents. This may account for the finding that resident did not report significant increase in perceived stress due to overcrowding in the ER.

Negative Outcomes of Stress in the ER

The previous section identifies some of the major work-related factors which have been shown to cause and/or exacerbate stress for physicians working in the ED. The following section identifies negative outcomes which are correlated with stressors in the ER, where research findings suggest that these job-related stressors may contribute to negative outcomes such as burnout, substance abuse, relationship breakdown in relation to secondary trauma. Until recently, work stress was treated in theory and practice as equivalent to secondary trauma. Researchers now recognize the importance of understanding the processes as interconnected and not necessarily identical, noting that all those who work with traumatized individuals are vulnerable to the experience of vicarious trauma and post-traumatic stress.

Burnout. Burnout is consistently defined in the literature as having 3 components: an inability to cope due to overwhelming feelings of *emotional exhaustion*, a sense of *depersonalization* (the patient/client is seen by the caregiver as an object or an illness rather than a sentient being), and a profoundly *negative sense of achievement* (Goldberg, Boss, Chan, Goldberg, Mallon, Moradzadeh, & McConkie, 1996; Lee, Lovell & Brotheridge, 2010).

Research suggests that altruism, perfectionism, and capacity for empathy/compassion, the very characteristics which make a health care provider excel at the job, are risk factors for eventual burnout (American Academy of Pediatrics, 2014; Carmel & Glick, 1996; Edwards, 2016). The attention, care, and emotional investment in their patients eventually becomes unsustainable for those lacking sufficient support and coping tools. Studies assessing burnout in physicians predominantly use the Maslach Burnout Inventory – Human Services Survey (MBI-HSS), a questionnaire which explores the dimensions of exhaustion, depersonalization, and negative self- appraisal.

Findings from a number of studies suggest that over 50% of Canadian physicians have suffered from burnout in the past or at present. For example, Boudreau, Grieco, Cahoon, Robertson, & Wedel (2007) administered a survey assessing level of burnout to physicians practicing in Alberta, Canada. The authors found that over 50% of respondents reported experiencing advanced burnout at the time of the survey. The same authors surveyed physicians across Canada and found approximately 46% of respondents reported experiencing burnout at the time of that survey (Boudreau et al., 2006). Factors associated with burnout in ER physicians include shiftwork, overcrowding and a dearth of resources, work-time pressures, feeling forced to make critical decisions based on too little information, unprocessed grief, continuous exposure to trauma, difficult patients and colleagues, unrealistic expectations of endurance, isolation, and a 'culture of silence' (American Academy of Pediatrics, 2014, p. 831; Arora, Asha, & Chinappa,, 2013). Emotional exhaustion and negative self-appraisal are also symptoms of major depression, though there is evidence that burnout and clinical depression are not identical in nature, rather burnout may lead to clinical depression and in some cases suicidal ideation (Dyrbye, Matthew, & Thomas, 2008). Dyrbye, Matthew, and Thomas (2008) conducted a cohort study of 4287 medical students in the U.S. (65% response rate) and found that half the respondents reported all the symptoms of advanced burnout. Of those experiencing burnout, 11.2% reported feelings of depression and suicidal ideation.

Substance use. Substance use among emergency personnel has limited documentation in the literature (Gastfriend, 2005; Hughes, Storr, Brandenburg, Baldwin Jr, Anthony, & Sheehan, 1999). The physical, psychological, and spiritual challenges posed by working with distressed individuals can take a toll on the caregiver. Research suggests that sufficient social

support and use of positive coping strategies can mitigate stress on the caregiver, however when these are lacking the caregiver may suffer (Shanafelt, Sloan, & Habermann, 2003; Wallace, Lemaire, & Ghali, 2009). A few studies indicate that the type and level of stress associated with some specialties my leave certain physicians at a higher risk of substance abuse compared to others. Specifically, emergency physicians and psychiatrists have been found to be most vulnerable to substance abuse, while pediatricians are the least likely of the specialties to use all substances except tobacco. Stress associated with ER physicians' and psychiatrists' inevitable exposure to trauma and trauma narratives are thought to be a factor exacerbating substance use among these specialties (Hughes et al., 1999).

Vicarious trauma and relationship breakdown. McCann and Pearlman (1990a) coined the term vicarious traumatization, also referred to as secondary trauma, and reasoned that it was a natural and inevitable response to helping those in extreme distress through their healing process. All helping professionals experience thoughts, feelings, and behaviours as a consequence of empathizing with patients/clients, families, and communities experiencing extreme emotional distress and/or physical trauma. Vicarious traumatization is thought to occur when helping patients/clients with trauma results in a transformation of memory and cognitive schemas related to safety, trust, power, intimacy, and/or esteem for self and other (Sansbury, Graves & Scott, 2015). A large body of literature on vicarious traumatization in mental health workers and nurses is available, however only a handful of studies touch on physicians and their experiences of vicarious traumatic stress. It is possible that emergency room physicians were not considered at risk of experiencing secondary traumatization until recently. This assumption has been challenged. Findings from one study suggest that those physicians working with patients who resemble a loved one in age or physical appearance are more likely to experience vicarious traumatization, especially when the patient is a child (Laposa & Alden, 2001). In addition, Gleichgerrcht & Decety (2013) conducted a large-scale online study with 7,585 practising physicians. The authors used online validated instruments measuring aspects of empathy, distress, altruism, burnout, compassion fatigue and secondary traumatic stress. Results suggest that physicians who display a high capacity for compassion and empathy are more likely to experience burnout, secondary trauma, and compassion fatigue compared to those who score significantly less on measures of compassion and empathy (Gleichgerrcht & Decety, 2013).

There is some evidence that secondary trauma experienced by ER physicians can lead to intimate relationship breakdown. Negative appraisals of power, intimacy, safety, trust and/or esteem for self and others may lead to seemingly unpredictable shifts in thought, emotion, and behaviour of the helping professional – for example increased anger, sadness, or difficulty coping in their professional and personal lives (Laposa & Alden, 2001; Laposa, Alden, & Fullerton, 2003; Sansbury, Graves, & Scott, 2015). Vicarious traumatization presents similarly to Post Traumatic Stress Disorder (PTSD) and can include feelings of dissociation, atypical anxiety, and feelings of impending threat, re-experiencing the traumatic event in real-time, and/or intrusive negative or disturbing thoughts, and feelings of guilt and helplessness. If left untreated these thoughts and feelings have been shown to negatively impact on the close relationships of those experiencing vicarious traumatization (Sabin-Farrell & Turpin, 2003). Interestingly, some studies suggest that the divorce rate among physicians is lower than that of other occupational groups, however these studies did not provide information regarding degree of marital satisfaction in significant other relationships (Doherty & Burge, 1989; Ly, Seabury, & Jena, 2015).

Positive Psychology and Research on Resilience

Psychology is the study of human strength and agency as much as it is the study of human deficit and pathology (Snyder & Lopez, 2009). Civilizations have acknowledged and learned from human strength for centuries, and the last 20 years has seen a surge of formalized research based on the principles of positive psychology, the study of positive subjective experience (Seligman, 2002; Snyder & Lopez, 2009). Positive attitudes, traits, and behaviours have the potential to increase quality of life and mitigate pathology in individuals and systems (Seligman, 2002). A review of the research on resilience, often defined as *the capacity to positively adapt in the face of adversity* (Greene, Galambos, & Lee, 2008), reveals two distinct bodies of literature: those studies focusing on resilience within organizations (a systems-oriented approach), and those which focus on personal resilience (individual-focused approach). This study focused on the lived experiences of resilience in ER physicians, thus the literature review of resilience focused on the unique experiences of health professionals rather than organizational resilience in the health care system. The following section briefly describes the history of resilience research, followed by definitions and the key theoretical assumptions

which underlie the concepts of resilience.

History of Resilience Research

The idea of personal resilience was rooted in the psychiatric studies of children and adolescents who were 'high risk' – meaning they had experienced a number of adversities in their young lives (Earvolino-Ramirez, 2007). Researchers noted that some children were 'invulnerable' to trauma and adversity, that is, despite being subjected to difficult and often painful circumstances in their lives, they appeared to be able to move forward toward healthy functioning. This *invulnerability* was later termed resilience. Children who were able to persevere through adversity were viewed as extraordinary – possessing exceptional individual qualities (Earvolino-Ramirez, 2007). Today the conceptualization of resilience has changed from being a static individual characteristic to an adaptive process in which everyday people seek and employ personal, social, and environmental resources to work toward overcoming adversity and cultivating a sense of wellness (Gartland, Bond, Olsson, Buzwell, & Sawyer, 2011).

Definitions and Theories of Resilience

The complexities involved in defining and operationalizing resilience are well documented (Fletcher & Sarkar, 2013; Green, Galambos, & Youjung, 2008; Harney, 2007; Matheson, Robertson, Elliott, Iverson, & Murchie, 2016; Southwick, Bonanno, Masten, Panter- Brick, & Yehuda, 2014). Over the past 40 years the concept of resilience has evolved from a construct based on achievement of positive individual outcomes to a dynamic, life long process- oriented view where resilience is no longer conceptualized as a linear progression (Bonanno, 2004; Yates & Masten, 2004).

It is important to note that resilience and recovery are not necessarily the same concept, as resilience implies a process, and recovery is often seen as a positive outcome in research and practice (Bonnano, 2004). The American Psychological Association (APA, 2014) defines resilience as "the process of adapting well in the face of adversity, trauma, tragedy, threats or even significant sources of stress" (as cited in Southwick et al., 2014, p. 2). This definition is used widely in psychological and sociological paradigms, however multidisciplinary experts on trauma and resilience argue that though useful for research purposes, it fails to recognize the complexity of resilience processes (Southwick, Bonnano, & Masten, 2014). In a

comprehensive review of literature on resilience theory, Greene, Galambos, and Lee (2008) began by outlining three of the most common definitions of resilience used in research and practice. These include a) resilience as the capacity to overcome stress and adversity, b) the capacity to cultivate and maintain competence under duress, c) and the ability to recover from traumatic life circumstances. Much of the literature in developmental psychology defines resilience similarly as "the ability to maintain personal and professional well-being in the face of on-going work stress and adversity" (McCann et al., 2013, p. 61). Through their review, Greene et al. (2008) compiled a number of common themes regarding the key assumptions of resilience theory and derived a framework outlining major components of resilience. The meta-analysis revealed resilience to be a biological, psychological, social, and spiritual phenomenon; to involve an interactional process between self-other-environment; to involve an adaptive component; to occur throughout the lifespan of individuals, their families, and their communities; to be associated with the stress and coping capacity of the person, families, and communities involved; include an ability to engage in daily functioning; may be on a continuum–a polar opposite to risk; may be interactive, having an effect in combination with risk factors; be enhanced through relational and cultural connectedness with others; be influenced by diversity including ethnicity, race, gender, age, sexual orientation, economic status, religious affiliation, physical and mental ability, and the existence of social and political power differentials (Greene, R. R., 2002 in Greene, Galambos & Lee, 2008).

In summary, resilience is the ability to adapt to stress and is both expressed and shaped by multidimensional relations, both internal and external, including self, family, and environment (Bronfenbrenner, 1979).

Factors influencing capacity for personal resilience. Earvolino-Ramirez (2007) synthesized existing research on resilience and derived a multidisciplinary concept analysis of the factors associated with resilience. The authors found interdisciplinary commonalities in the characteristics evident in promoting resilience among participants in most or all of the studies reviewed. These protective factors included being easy-going in nature, having a good sense of humour, having positive relationships, possessing a strong sense of self-worth, feeling at least some sense of control over work and personal circumstances, feeling effective in work, relationships, recreation, having an approachable informal social network, having above average social intelligence, being flexible and being able to delay personal gratification,

believing in one's self-efficacy, having an internal locus of control, having the ability to problem solve, being able to trust in others, having hope for the future, having the capacity for critical thinking, and having high expectations of self. These protective factors identified by Earvolino-Ramirez (2007) are consistent with studies exploring factors which mitigate stress such as individual coping styles, the existence of social supports coupled with the ability to mobilize supports, and individual perceptions of locus of control. These factors are discussed below.

   Coping style. Psychological studies have examined the effects of coping strategies on stress-levels and capacity for resilience and wellness. In these studies, coping is typically defined as "a multidimensional process that comprises both cognitive and behavioural efforts to manage external and /or internal demands that are evaluated as taxing or exceeding the individual's resources (Iannello & Balzarotti, 2014; p 72). Coping involves a complex interplay between individuals, circumstances, and the environment (Folkman, 2013). Coping is not a unidimensional or linear process, and most individuals use a number of coping approaches in one situation as the reality of their circumstances changes/evolves (Sommerfield & McCrae, 2000).

   To simplify measurement of the coping process, four main coping styles have been used to categorize individual responses to stress in the literature. These include problem-solving or task- oriented coping, emotion-focused coping, appraisal focused, or escape-avoidance coping (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). There is an extensive body of research exploring the individual's use of different coping styles and their effects on stress level. Specifically, problem-solving, positive reframing of distressing events, and seeking social support were related to increased resiliency – most often measured using a questionnaire such as the Connor-Davidson Resilience Scale, the Resilience Scale for Adults and the Brief Resilience Scale (Windle, Bennett & Noyes, 2011). Some authors suggest that these coping approaches encompass an element of external locus of control, where the individual views self as able to influence circumstances in the environment. Escape-avoidance coping, emotion-focused coping, and use of self-control (keeping thoughts/feelings to oneself) are almost always found to impede capacity for continued healthy functioning (McCann, Beddoe & McCormick et al., 2013).

   Interestingly, in a quantitative study of seventy ER physicians' perceptions of work-

related stress and coping style, Iannello and Balzarotti (2014) found that task-oriented and escape-avoidance coping were both associated with diminished perceptions of work-related stress, while emotion- focused coping was associated with a greater perception of work-related stress. The authors defined escape-avoidance coping as any distraction, for example seeing a movie, going for a walk, or visiting a friend. Other studies label these actions differently – as either task-oriented coping or support seeking. It is important to note that variations in definitions of coping styles exist in the literature.

   Social support. Social support is defined as the perception that one is involved in meaningful relationships, is loved and cared for, is a member of a community, and is able to access both tangible and emotional aid when needed (House, Landis, & Umberson, 1988; Voltmer & Spahn, 2009). Some definitions of support are based solely on the presence of a social network, though this is now recognized as a flawed approach. A multidisciplinary body of research identifies being able to access and utilize social supports when experiencing both acute and chronic stress as a key component involved in mitigating the negative effects of stress and increasing capacity for personal resilience (Armstrong, Birnie-Lefcovitch, & Ungar, 2005; Tsai, Harpaz-Rotem, Pietrzak, & Southwick, 2012). Many studies identify positive social support as a buffer to stress, while a few provide evidence that social support mitigates stress even when relationships are complex and include some areas of conflict as well as caregiving (Belgaumkar, 2001). Most studies focus on clients' and patients' experiences of support during illness with research on the impact of social support on the health care provider focusing on social support as a correlate of burnout in nurses and physicians (Medland, Howard-Rubin, & Whitaker, 2004). Only one qualitative study looked at social support in relation to physician wellness (Weiner, Swain, Wolf, & Gottlieb, 2001). The authors of this study used a mail survey to investigate practices physicians used to promote their own health. A thematic content analysis indicated that relationships and social support was one of the health promotion strategies physicians used to improve their overall wellness.

   Locus of control. Locus of control refers to the tendency of an individual to believe that life circumstances are a consequence of his/her own ability and efforts (internal locus of control), or a result of chance, fate, and/or the actions of others (external locus of control; Kirkcaldy, Shepard, & Furnam, 2002). This personality construct was originally introduced by

Rotter in 1966 (Kirkcaldy, Shepard, & Furnam, 2002). Since then the influence of locus on control on psychosomatic health has been extensively researched in diverse populations. Few studies looked specifically at the relationship between resilience and locus of control, likely due to the complexity of defining, measuring, and quantifying the resilience process. Instead studies explore the relationship between LOC and aspects thought to be related to resilience such as social-emotional adjustment to novel situations, trauma and the healing process, willingness to access to social support, psychosocial wellbeing, and occupational health (Baron, Eisman, Scuello, Veyzer, & Lieberman, 1996; Lefcourt, Martin, & Saleh, 1984; Pruessner et al., 2005; Shehu & Mokgwathi, 2008). Results from these studies vary, with most showing significant increases in specific aspects of wellbeing when individuals have the expectancy of internal locus of control (Fazy & Fazy, 2001; Flouri, 2006; Liu, Uchiyama, Okawa, Liu, & Ma, 2000), and some findings suggesting that there is a weak relationship between both internal and external LOC and aspects of wellbeing such as job satisfaction (Judge & Bono, 2001). Though the LOC in relation to physician wellness/resilience has not be studied in detail, studies looking at job satisfaction among emergency physicians provide strong evidence that perception of personal control over number of hours worked and shift schedule is key to physicians' job satisfaction (Johnston et al., 2016).

Resilience in Helping Professionals

Literature available on the lived-experience of resilience among health professionals stems predominantly from the areas of nursing, police, firefighters and emergency medical responders. Interest in resilience processes among mental health professionals such as social workers and psychologists continues to evolve. Nursing research focuses mainly on personal as opposed to organizational resilience, exploring coping styles, personality constructs, and specific qualities and resources such as the availability of social support and how these factors influence resilience among nurses (Jackson, Firtko & Edenborough, 2007; McCann et al., 2013). For a literature review on personal resilience in the nursing environment, see Jackson et al. (2007).

Many studies focus on resiliency in relation to responses of disaster relief organizations (police, firefighters, paramedics) following critical incidents such as the September 11, 2001 terrorist attack on the World Trade Center; earthquakes causing large-

scale devastation; and man-made disasters due to crumbling infrastructure (Kendra & Watchendorf, 2003; Marmer, 1997; Paton, Violanti, & Smith, 2003; Somers, 2009). The majority of these studies focus on resilience related to emergency systems rather than personal resilience of police, firefighters, and EMS responders who were deployed during the disaster.

Among social workers, psychologists, and mental health workers, the concept of secondary resilience has received some attention. Secondary resilience refers the ability of helping professionals to grow and find meaning from working with traumatized individuals and/or being exposed to trauma narratives (Michelchuck, 2015; Petrov 2015). Michelchuck (2015) explored the lived experiences of secondary resilience in psychologists working with clients who had experienced trauma. The author used interpretive phenomenological analysis (IPA) to examine data collected from six psychologists using individual semi-structured interviews. A thematic analysis revealed four areas of positive growth identified by psychologists working with distressed clients: privileging a shared journey, developing purpose and personal growth, deriving positive meaning, and serving humanity (Michelchuck, 2015). The author concluded that these areas were identified by the participating psychologists as key elements contributing to secondary resilience following exposure to the trauma narratives of clients. Knowledge of the processes that contribute to secondary resilience in psychologists can be used to inform program, practice, and policy and increase wellness and job satisfaction among mental health care providers.

The number of studies on physician resilience pale in comparison to the number of studies documenting stress and resulting burnout among physicians. Qualities of resilience, coping strategies, and self-care were the focus of the studies relating to resilience among physicians (Jensen, Trollope-Kumar, Waters, & Everson, 2008; Keeton, Fenner, Johnson, Rodney, & Hayward, 2007; Matheson, Robertson, Elliott, Iverson, & Murchie, 2016; Reiter, 2011; Wallace, Lemaire, & Ghali, 2009; Zwack & Schweitzer, 2013). For example one Canadian study recently explored differences between male and female physicians and types of coping strategies used in management of workplace stress (McCann et al., 2013). Findings suggested that physicians who identified as female relied heavily on social support from work colleagues as a form of coping compared with physicians who identify as male. The latter

group of physicians were found to rely more on family, friends, and self-care. In another study, Wallace and Lemaire (2007) investigated qualities associated with physician work-life satisfaction by interviewing a small number of physicians and identifying themes from the interview data. The authors developed a questionnaire based on these themes, and used this measure to study positive and negative qualities linked to self-reported wellbeing in 182 physician participants. Findings suggested that positive interactions with patients was strongly related to physician wellbeing.

Other factors related to physician health included degree of support from coworkers and family, as well as feeling a strong sense of ownership/control over one's work. It is important to note that the questionnaire developed by the authors was not tested for reliability and validity, calling into question the accuracy of the results.

In their literature review on self-care among health care clinicians, Sansbury, Graves, and Scott (2015) synthesized existing research on compassion fatigue, vicarious trauma, and management of stress among health care providers. Based on the findings of this review, the authors came up with four practical guidelines to promote resilience in the professional and personal lives of clinicians. These include: knowing yourself – specifically cultivating awareness of the state of your own body and mind; working to reduce existing stress – for example, setting healthy boundaries and/or reminding yourself about what drew you to the role you are in; planning in detail how to change negative behaviours, and monitoring self-care to track what works and why. It is important to keep in mind that these recommendations are derived from the authors' interpretations of the literature and may or may not hold true for the individuals experiencing the stress and resilience process.

The majority of studies which explored resilience among health care providers were quantitative in design. I was able to identify a handful of qualitative studies related to resilience in physicians, with most participants being general practitioners or family physicians. In one such study, Jensen, Trollope-Kumar, Waters, and Everson (2008) explored the concept of personal resilience among 17 Ontario family physicians and identified themes from data analysis of individual in-depth interview transcripts. These authors asked their physician peers to discuss their experiences of work-related resilience. Four descriptive themes emerged from the data. These included individual attitudes and perceptions related to the importance of the

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physician role, cultivating interest in the work, and developing awareness of competencies; working toward work-life balance, including setting boundaries; management of professional practice, including having effective staff and work-flow; and having caring personal and professional relationships with good communication. The authors concluded that resilience is an ever-changing process of experimenting with effective attitudes and strategies.

In a qualitative, phenomenological case-study, Petrov (2015) investigated the role critical incident narratives had on a physician working with newcomers who have suffered through traumatic events in their countries of origin. The author found when the physician in question empathized intensely with his patient's traumatic experiences, the physician was inevitably emotionally, psychologically, and intellectually transformed. Initially this transformation manifested as secondary traumatic stress, however when processed appropriately, resulted in a strengthening of the physician-patient therapeutic relationship (Petrov, 2015). Both physician and patient reported feeling an increased sense of satisfaction with the care being provided.

Finally, using qualitative focus groups consisting of general practitioners, nurses, health visitors, practice managers, and pharmacists, Matheson et al. (2016) explored the resilience in healthcare professionals working in rural environments. The authors found that participants in five focus groups identified challenges to resilience as time pressure, overwhelming paperwork, complex patient care, and lack of resources. In turn, promoters of resilience were found to include good organization, strong support from management, having a team approach, supportive colleagues, comfort with self, adequate sleep, nutrition, exercise, and a good work-life balance. Matheson et al. (2016) developed a framework outlining the key themes associated with resilient health professionals. Participants in Matheson et al.'s (2016) study did not include ER physicians, however it is possible that this model may be used as a preliminary framework for exploration of the lived experiences of resilience in ER physicians.

Resilience in ER Physicians

Emergency room physicians consistently work with patients who are in physical and/or mental crisis, often suffering from urgent and life threatening conditions. ER doctors are ultimately responsible for the well-being of these patients. A number of studies provide evidence of the high level of stress and possible negative health outcomes associated with the

ER role. Despite the effects of stress, there are many ER physicians who report long and satisfying careers. Surprisingly, most studies on burnout among ER physicians have found that the rate of attrition among emergency medicine specialists is similar to that of family physicians and other medical specialties (Cydulka & Korte, 2008; Keeton et al., 2007). A few studies acknowledge the co-existence of work-related stress with career satisfaction, finding it is possible for ER physicians to struggle with stress and continue to report satisfaction with their careers (Cydulka & Korte, 2008; Keeton et al., 2007). A gap in knowledge and understanding of the lived experiences of resilience in ER physicians continues to exist.

Researchers on resilience in ER physicians tends to operationalize the process based on concepts related to burnout-resistance such as control over work schedule (Iannello & Balzarotti, 2014; Keeton et al., 2007; Totten et al., 2013). In a survey of 237 emergency physicians working in the United States, Totten et al. (2013) synthesized a number of previously validated scales which measured characteristics of resilience and effective management of work-related stress. The authors used findings to construct a survey which they used to predict levels of burnout using the Maslach Burnout Inventory (MBI) as an outcome measure. Findings indicated that three factors significantly predicted resistance to burnout among ER physicians: satisfaction with scheduling, access to 'good' social support, and feeling that helping people in the ER role was a religious or spiritual calling. It is noteworthy that less than 8% of emergency physicians invited to participate in this study actually completed the survey, making findings difficult to verify.

A handful of primarily quantitative initiatives have explored the effectiveness of self-care as a strategy used to increase capacity for personal resilience among ER physicians. These studies identify good nutrition, exercise, and healthy sleep hygiene as key factors in promotion of resilience, however some ER physicians perceive these self-care goals as unrealistic due to the demands of the ER physicians' role (Schmitz et al., 2012). Some authors suggest that learning about the importance of self-care early in medical training is essential (Schmitz et al., 2012; Shanafelt, Sloan, & Haberman, 2003). I was unable to find any qualitative research utilizing in-depth interviews with ER physicians as a form of data collection. The lack of qualitative research exploring the lived experiences of resilience in ER physicians is indicative of the importance of this study.

The following chapter is divided into four sections. The first section explores social constructivist theory, which underlies the qualitative methodology chosen for this study. The second section focuses on the nature of qualitative inquiry and of interpretive phenomenological analysis (IPA), the approach used to understand and analyse the experiences of personal resilience in practicing ER physicians. The third section focuses on data collection, including participant selection criteria and recruitment, how data were gathered and analyzed, and how appropriate criteria for trustworthiness were met. The last section focuses on ethical considerations pertinent to this research.

Research Design

Social Constructivist Theory

The foundations of this qualitative inquiry are rooted in social constructivist theory, an inductive, relativist approach where knowledge is seen as constructed through relationships and interaction rather than created by the laws of nature (Andrews, 2012; Hammersley, 1992; Kovach, 2012). Social constructivists believe that reality is shaped through interactions with self, others, and the environment. By exploring and understanding these relationships through the perspective of those who experience them, knowledge is brought to light (Miles & Huberman, 1994; Morse & Field, 1995). Social constructivist theory has sociological, psychological, and philosophical roots dating back to the 1920s, when sociologists and philosophers such as Emile Durkheim and Alfred Schultz spoke of reality in terms of social constructions as opposed to reality being the product of the objective, immutable laws that govern nature. Social constructivist theory became increasingly know after Berger and Luckman (1966) published their work entitled "The Social Construction of Reality", which synthesized existing visions of reality as a relational, social, and cultural phenomenon.

Qualitative Inquiry

Qualitative research is dedicated to exploring and understanding the dynamics of human relations from an *emic,* or insider perspective, using the participants' experiences and

interpretations of their own reality as a starting point (Morse & Field, 1995). This approach differs from the *etic, or* outsider approach typically used in quantitative inquiry, where application of theory is the starting point, and subjectivity is viewed as a research limitation.

Qualitative research incorporates the researcher as the instrument of inquiry, and researcher 'bias,' known as the subjectivity of the researcher, is assumed, acknowledged, and fully accepted. Pioneers in the field define qualitative research as an inductive approach where participants' perceptions, experiences, and meanings attached to those perceptions and experiences are studied with the hope of understanding participants' realities (Butler-Kisber, 2010; Huberman & Miles, 2002). Qualitative inquiry involves open-ended process oriented research questions focusing on *how* or *what* as opposed to *why* a phenomenon has occurred (Huberman & Miles, 2002; Morse & Field, 1995). This may be accomplished through observation in context and/or in-depth interviews in which participants share their stories. With the help of participants, researchers attempt to explore the meanings associated with participants' experiences and find commonalities or themes in the data which, depending on the type of qualitative inquiry, may be used to describe and make sense of reality, serve as a narrative platform for voices to be heard, explore the journey of the researcher as instrument, and build theoretical models to be tested in further research.

Interpretive Phenomenological Analysis

Phenomenology is a philosophy and a methodology, and literally means the study of phenomenon through lived experience (Sloan & Bowe, 2014). This approach essentially "accepts experience as it exists in the individual's consciousness" (Morse & Field, 1994, p.22), with the goal being able to describe and understand of the lived experiences of others. The two main phenomenological approaches commonly identified in the literature, descriptive and interpretive, began in the field of philosophy, with the works of Edmund Husserl, a German philosopher and professor, and Martin Heidegger, a German philosopher and student of Husserl (Sloan & Bowe, 2014; Van Manen in Morse and Field, 1995). This research used interpretive phenomenological methodology, however understanding the roots of this approach requires the reader to delve, if only superficially, into the philosophical roots of both descriptive and interpretive phenomenology.

Descriptive phenomenology was developed by Husserl in the early 1900's as an

alternative to the Cartesian philosophy of objectivity and the belief that reality was a separate entity and existed outside of the individual realm. Husserl's phenomenology involved the study of phenomena to illuminate how objects are perceived and experienced by the individual or individuals, thus recognizing reality as a product of the experiences and perceptions of individual consciousness (Sloan & Bowe, 2014). Though Husserl moved away from the idea that reality is separate from the individual, his descriptive phenomenology focused primarily on distillation of the essence of a phenomenon and less with participants' interactions with the world around them. Husserl believed an observer could transcend the phenomena and eventually, through deep understanding, distill the essence of the phenomenon which could then be objectified and viewed as a global construct (Dowling, 2007; Reiners, 2012).

Martin Heidegger developed his own philosophical understanding of phenomenology which he termed existential phenomenology, more commonly known as hermeneutic phenomenology. This interpretative approach differed from the descriptive approach in that the observer was thought to be an inevitable part of understanding the essence of the phenomenon. Simply, the researcher who is involved in interpretation of phenomena cannot view the self as being detached from that interpretation (Sloan & Bowe, 2014). The researcher is therefore required to acknowledge their involvement in the research process (Huberman & Miles, 2002; Morse & Field, 1995; Reiners, 2012; Smith, 2011).

Additionally, interpretive (hermeneutic) phenomenology places importance on the existence of the participants and their engagement with the world as opposed to the goal of uncovering the essence of a phenomenon as a global construct (Eatough & Smith, 2017; Reiners, 2012).

Contemporary interpretive phenomenological analysis stems from the works of Husserl and Heidegger and involves two key requirements: to take an insider's perspective by describing and understanding the lived experiences of participants; and to interpret and contextualize participants' lived experiences from a psychological viewpoint (Dowling, 2007; Larkin, Watts, & Clifton, 2006; Smith, 2004; 2011; 2015; Van Manen, 2016). A key component of IPA is the understanding that an insider's perspective cannot be fully or completely realized. Smith, Flowers, & Larkin (2009) state that access to the lived-world of the participant impacts on, and is impacted by the conceptions of the researcher. Indeed, these

conceptions are not simply unavoidable but rather *required* if one is to comprehend as completely as possible the lived- experience of another through an interpretative process (Smith, 2015; Smith, Flowers, & Larkin, 2009). Thus, IPA is essentially a double-interpretive process in which participants are working to make sense of their own lived experiences, and the researcher, in turn, works to describe and interpret what these lived experiences are, and how participants make sense of them (Smith, Flowers, & Larkin, 2009). Simply stated, interpretive phenomenological analysis involves a combination of descriptive and interpretive phenomenology where the researcher is embedded in the description, interpretation, and context of the phenomenon (Van Manen, 2016). I chose an IPA approach for this research because the goal of the study is to describe, understand, and interpret the participants' perceptions of their own lived experiences of resilience in their ER role.

Data Collection

Description of Participants

Six participants volunteered for this study. Experienced qualitative researchers suggest that in-depth interview data from six to ten participants provides enough rich information to allow for theme identification and rigorous data analysis (Smith, Flowers, & Larkin, 2009; Smith & Osborn, 2015). The six participants in this study were similar in terms of gender, education, and career length. All six participants worked in at least one of the city's three hospital-based emergency departments at the time of this research. Participants had two years of training in family medicine and had completed a third year in emergency medicine, all having worked as ER physicians for at least a decade when this study took place.

When using interpretive phenomenological analysis, Smith (2004; 2015) and Smith & Osborn (2007; 2015) urge researchers to find a roughly homogeneous as opposed to explicitly heterogeneous sample. The authors suggest that when interviewing a small sample of participants it is both inefficient and essentially unhelpful to strive for random or representative sampling. With a homogeneous sample, I was able to focus on a defined group of participants thus ensuring the relevancy of the research question and increasing the richness and depth of that data.

Participant Recruitment

To begin participant recruitment, I contacted the Department Head of Emergency Medicine, Dr. James Stempien, and informed him of this study by phone. He was enthusiastic about the research and gave permission to recruit ER physicians for this study by placing recruitment posters in the ER physician lounges of three main hospitals in the city: Royal University Hospital, City Hospital, and St. Paul's Hospital (refer to Appendix A – Participant Recruitment Poster). Those who were curious about the study or were interested in volunteering contacted me using the contact information included in the recruitment poster.

The first participant contacted me by phone and was debriefed about the study using the initial contact telephone script (refer to Appendix B – Initial Contact Telephone Script). I reminded him of his right to refuse participation or withdraw from the study at any time. This ER physician met the criteria listed on the poster and consented to participate in the study. We arranged a meeting at the participant's home and proceeded with further discussion, written informed consent, and the audio-recorded interview. Almost one month later, a second participant was recruited in a similar fashion. Following our interview, the second participant expressed an appreciation for the opportunity to share his experiences, describing a sense of relief and enjoyment in being given the chance to reflect upon his own strengths, in addition to the stresses he experienced at work. This physician suggested that he might inform his ER colleagues of the benefits of participating in this study. I gratefully agreed to this. I am uncertain as to whether this participant was influential in recruiting others. Over the course of approximately 6 months, four additional participants contacted me and participated in this study.

Data Generation and Analysis

Data Generation

A 90-120 minute semi-structured interview was used to gather participants' stories and interpretations of personal resilience. Each interview was conducted separately; names of individual participants were confidential and were not shared with other participants in the study. The interviews were digitally recorded using a small personal recording device which was placed in front of the participant at the time of the interview. Exact interview length depended on the participant and followed the natural flow of conversation. A verbatim

transcription of each interview was generated and used to conduct data analysis. Immediately following each interview I made note of my thoughts, emotions, observations, and fledgling ideas to be considered for further analysis. These notes were recorded in a field journal which was used as a reference during the stages of data analysis.

Interview Questions. Participants were invited to share their personal stories of how they experienced their ER work, and how they perceived and experienced resiliency in their roles as emergency physicians. Interviews began with an open-ended question on how participants came to follow their respective professional paths, with the conversation moving organically into exploration of their everyday experiences as ER physicians. Participants' discussions of personal resilience were embedded in questions related to personal resilience, as well as those which focused on the broader experiences of living and working as ER physicians (refer to Appendix D - Interview Guide). I constructed the research questions with guidance from my supervisor, with the intention of exploring personal resiliency through the lived experiences of the ER physician participants. I utilized active listening, paraphrasing, and follow-up questions to encourage participants to confirm, clarify, and expand upon their experiences. I used member- checks during the interview process, however I did not contact participants following their initial interview to request their feedback regarding my interpretations of their transcript data. Because of this I was vigilant about following up on questions, clarifications, and information participants shared while the initial interview was in progress.

In-Depth Interviews. A private conference room in the University of Saskatchewan Health Science library was secured for the interviews, however all participants chose to meet me in their homes or offices. All were welcoming and their sincerity and willingness to share their stories and their time with me was so appreciated. Prior to each interview, I reviewed with the participants the study goals, requirements, and procedures outlined in the consent form, and requested them to read and sign the form with the understanding that consent may be withdrawn at any time (refer to Appendix C - Informed Consent). All six participants decided to continue with in-depth interviews, which took place immediately following participants' written consent to volunteer for the study. At the end of each interview, participants were asked if they had anything more to add before I turned the data recorder off.

Most of the participants took this opportunity to reflect on the experiences they shared. A few revisited with emphasis specific traumatic losses in their lives which they felt shaped their capacity for resilience as adults. Nearing completion of each interview, participants were given the opportunity to reflect on the information they shared, and retract, add, or alter sensitive or personal information. Two participants took this opportunity.

IPA places me, the researcher, in the context of the research and acknowledges that data from the interviews are co-constructed by the participant and myself. The assumption that my partnership with each participant will influence the nature and depth of information shared throughout the research process in inherent in this methodology. It is necessary that I acknowledge my previous acquaintance with more than half of the participants, as they were colleagues of my partner. Smith, Flowers, and Larkin (2009) emphasize the importance of building good rapport with participants in order to strengthen the researcher-participant partnership and create an atmosphere which promotes comfort and open conversation. I feel that having been acquainted with most of the participants before this study began helped establish a feeling of trust and familiarity between participants and myself early in the interview process. I perceived participants as interested, open, and genuine in their discourse during and following the interviews, often taking extra time to continue the conversation after the interview questions were exhausted. I noticed there were times when participants made assumptions regarding my experience of being married to an ER physician. When this occurred, I observed these assumptions and asked for clarification and guidance in understanding participants' own lived experiences.

Data Analysis

In accordance with the flexible approach to data analysis suggested by Smith, Flowers, and Larkin (2009), preliminary analysis involved immersing myself in the raw data by listening to each interview at least twice, making note of participants' tone of voice, content, and my own reactions during each interview. Following the review of audio recordings, I began a case-by-case reading and re-reading of each participant's transcript (Smith, Flowers, & Larkin, 2009). I made notes and comments in the margins across from lines and paragraphs of text on almost every page, noting semantics, meanings, initial ideas, and comments on relationships, places, events, emotions, values – anything that seemed even broadly relevant to

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participants' experiences of personal resilience. As I continued to engage with the data, preliminary themes emerged from participants' accounts. I bracketed the ideas emerging from each participants transcripts to ensure that I was able to explore and understand each participants lived experiences of resilience (Smith, Flowers, & Larkin, 2009). I conducted manual thematic analyses by drawing a box around the transcript data representing the theme and using a descriptive word or phrase to identify meaning or content of the theme. I highlighted all themes using a green marker, so a single glance at any page allowed for visual identification of the raw data that illustrated the various themes. I created a Word document to group data representing similar themes and subthemes together. I referred to this Word document frequently, and I continued to use raw transcripts as a reference in addition to the thematic file. As analysis progressed, I worked to cluster similar themes and subthemes and allowed my own interpretations of the data to evolve based on participants' interpretations of their own experiences. To help me visualize connections, I used story boards to identify relationships between themes and subthemes (Frost, 2011). My interpretations of participants' realities were based closely on the raw transcript data, as recommended by Smith, Flowers, & Larkin (2009), however I made sure to differentiate between my own interpretations and those of the participants. Throughout the analysis process I continued to return to raw transcript data in addition to my thematic depictions and evolving versions of my story boards to refine emerging themes and visualize broad connections.

Validity and Quality in IPA

Establishing validity and quality, also referred to as trustworthiness, validity and quality, or rigor in qualitative research, is akin to providing evidence of reliability and validity of research in the positivist paradigm (Lincoln & Guba, 2018; Shinebourne, 2011). Flexible guidelines for assessing the validity and quality of qualitative research were developed by Yardley (2000), and include four broad dimensions: sensitivity to context, commitment and rigor, transparency and coherence, and impact and importance.

Shinebourne (2011) suggests that sensitivity to context is fulfilled in IPA, "from the initial choice of method and the rationale for it's adoption, as choosing IPA implies a commitment to idiographic principles and a focus on recruiting participants from a particular context, with a particular lived-experience" (Shinebourne, 2011, p. 26). Specifically, as the

researcher I established sensitivity to context with participants by demonstrating that I valued their individual experiences by listening attentively with genuine interest in what they chose to share. During data analysis, which continued throughout the writing of this study, I demonstrated sensitivity to context by immersing myself in the raw data, listening repeatedly to the audio transcripts of each interview, and meticulously examining each transcript, line-by-line to nurture an understanding of each participant and their individual realities (Shinebourne, 2011). Sensitivity to participants' perceptions was ensured by the use of verbatim quotations from the raw data, giving voice to participants realities in their own words. My interpretations of participants experiences were closely related to the raw data to ensure sensitivity to participants' respective contexts.

Commitment and rigour is the second dimension used to establish validity and quality in IPA. Shinebourne (2011) suggests that commitment is demonstrated in IPA through the entire research process. In the current study commitment involved a actively seeking participants over a six month period of participant recruitment, treating participants with sensitivity and respect, and engaging in meticulous data analysis. Rigour refers to the thoroughness of the data collection and data analysis processes. This criterion was established through the use of an appropriate sample size which fit the IPA approach, and the use of in-depth interviews which allowed for strong participant-researcher rapport, and the collection of rich, participant centered data. Additionally, thorough immersion in the raw data and prolonged engagement with the phenomenon in question helped demonstrate commitment and rigour (Shinebourne, 2011; Yardley, 2008).

Yardley's third dimension, transparency and coherency, denotes how well the researcher described the stages involved in the research process, and in essence, how intelligible, interesting, and useful the research is to the reader. Transparency was demonstrated in the current study through a description of detailed accounts of how participants were selected, interviews were conducted, and data were analyzed. Interview questions, the initial contact telephone script, consent form, participant recruitment poster, and all pertinent documents were appended to the research document in the interest of transparency. Shinebourne (2011) suggests coherence is demonstrated in IPA when the researcher attends "closely to participants' experiential claims, and at the same time

manifest[s] the interpretative activity of IPA" (Shinebourne, 2011, p. 27). This study fulfilled the coherency criterion by offering the reader varied verbatim accounts of participants' experiences as well as my interpretations of participants' experiences of resilience in relation to their work.

Finally, consideration of the impact and importance of this research, Yardley's (2000) fourth criterion, was fulfilled through my discussion of the theoretical, educational, and practical implications of this work.

Ethical Considerations

This study was approved by the University of Saskatchewan's Behavioural Ethics Review Board (Beh-REB). Information included in the application related to the participants' right to refuse participation and/or withdraw from the study, ethical recruitment and debriefing of participants, methods employed to ensure confidentiality and anonymity, level of risk and potential conflicts of interest, the process used to attain ongoing informed consent, and use, storage, and destruction of data following completion of the study. Participants were informed of the opportunity to review and amend their transcripts, however transcript review was not a prerequisite for authorization of transcript release. None of the six participants chose to review their respective transcripts. As the researcher, I ensured participants had the opportunity to verbally alter, omit, and add information towards the end of each individual interview. Participants authorized the release of their transcripts to be used in the manner outlined in the consent form.

As outlined in the consent form (refer to Appendix C – Informed Consent) the privacy and confidentiality of participants was maintained during all stages of the research process. Identifying information was altered during transcription of the raw data, analysis, and dissemination of findings. Participants were invited to amend, add, and/or omit data from their transcripts, and/or request that the digital recorder be turned off during personal conversations to ensure sensitivity and anonymity, and to maximize the comfort of each participant. Pseudonyms were used to replace participant names, while names of places, incidents, and organizations which had the potential to compromise the anonymity participants were altered. Data was stored in a locked filing cabinet accessible to the myself and my supervisor.

Some participants shared traumatic experiences during the interview. In these instances I made sure to 'check-in' with the participants, giving them the opportunity to pause the interview, allowing space for debriefing both during and after the interview. One participant chose to pause the digital recorder during the interview. All six participants took the opportunity to follow-up on ideas, add comments, and summarize their thoughts at the end of each interview. All participants were provided with contact information for three counselling support services. This information was included in all copies of the Informed Consent document and was not contingent on participants' requesting the information.

Chapter Four: Results

The aim of this research was to understand the lived experiences of resilience in emergency room (ER) physicians. Six participants shared their stories which were audiotaped, transcribed verbatim, and analyzed using IPA. Ongoing analysis resulted in generation of themes and sub-themes borne from participants' voices. Much consideration was given to how best to introduce the six participants in this study. They continue to work in close proximity to one another within a small, defined area of medicine, thus maintaining participants' anonymity was of primary concern. Pseudonyms were chosen for each participant in order to safeguard confidentiality and anonymity. To ensure privacy and promote readability, excerpts of raw data presented here have been altered in the following manner: Specific names of persons, places or events outlined in the raw data have been omitted or slightly altered where deemed necessary by the participant and/or myself. Words that were used as filler (e.g., ummm, uuhhh) were omitted from the transcripts, while words which aided in understanding context and promoted coherency for the reader were added using square parentheses. Finally, in cases where participants' thoughts were interrupted by me in order to confirm or clarify the thought, a (…) symbol was used in place of my comments in order for the participants' voices to continue uninterrupted.

The following section begins with a description of how participants became ER physicians and what they enjoyed about the work. This section continues with a description of participants' perceptions of workplace challenges, and their definitions of personal resilience as it pertains to their lived experiences as ER physicians. The bulk of this section delves into the overarching theme of *Building Resilience,* detailing the themes and sub-themes which arose from participants' descriptions of their lived experiences and the meaning of resiliency in the ER. Briefly, these themes included *managing the workload* by making a mental plan at the beginning of each shift and approaching work as a challenge*; confidence as a process* influenced in part by successes and setbacks in the ER; *deriving meaning from traumatic life experiences* which contributed to participants' views of self and professional ability; *controlling what you can* by approaching human suffering in relation to the ER physician role, setting professional boundaries, and adopting a creative problem-solving approach at work; *emotional processing* in the ER and at home*;* and *fostering the energy to continue working* by acknowledging gratitude for what is, and actively seeking support from

others.

Contextualizing the Data

The six participants interviewed had completed at least a two year family medicine residency and a third year of training in Emergency Medicine. All were practicing ER physicians at the time of this study. The majority had worked as family doctors in both rural and urban areas in Saskatchewan before entering an Emergency Medicine Residency. All participants identified as male and had worked within one or more of the three hospital-based ER departments in the city for a minimum of ten years. The following section describes participants' accounts of their path to becoming an ER physician, and why the profession appealed to them.

Throughout all participant interviews the continuing desire to learn, challenge themselves, and grow in one or more realms of their lives became immediately apparent. Scattered throughout participant interviews were stories about how they valued learning as a multifaceted and lifelong process. Remi spoke of learning to recover from an illness by finding a daily repetitive task he could do to strengthen his body and "get something productive done" at the same time. Santos spoke of continuing to learn to set boundaries and "put myself first sometimes" after grieving lost relationships, and Jacque spoke of learning how to navigate the healthcare system more efficiently. As undergraduate students many told stories of how they loved studying in areas such as music, education, history, mathematics, political science, and engineering. The challenges involved in learning a new task, process, or way of thinking was exciting and energizing to these participants.

While sharing stories of how they became ER physicians, the majority of participants were excited to speak in detail about their initial desire to study and work in fields that were unrelated to their current profession. I witnessed participants thoughtfully reminiscing, some enjoying sharing the stories of how they fell into the path that brought them to the present, others expressing frustration at obstacles which prevented them from following a childhood dream.

Grinning widely, Remi shared his thoughts on how practicality led him down his current path:

I think I more stumbled into medicine than anything else. I was in university, I was pretty smart, I liked those social sciences [but] I realized at the end of that night there ain't fuck all I can do with a [social sciences] degree. I was living in residence and of course it was a residence with a lot of smart guys…everyone was applying for medical school and I thought well then I guess I might as well apply [laughs] for medical school.

Participants appeared to immensely enjoy sharing stories of their student days, and it became apparent that all participants as individuals enjoyed and pursued learning and had numerous interests outside of medicine. Like Remi, Santos laughed when he suggested that practicality was one of the reasons he became a physician. He admitted that his "undergrad was in [another field] and to be honest I was much more captivated by the idea of being an [x] than I was a physician…I knew that it's very difficult to get a job that pays anything."

Jacque was the only participant to declare that as far back as he could remember he wanted to be a physician to "help people." He talked about the importance of knowing he was making a positive contribution to his community. He had also considered becoming an engineer because "it's the same multiple systems, logical, engineering is very important in the human body." He enjoyed learning about parts and how they integrated into systems and how multiple systems integrate with each other.

As students, most participants viewed a medical degree as relevant and applicable to the "real world," and felt they would have stable employment afterwards. When exploring a specialty in addition to family medicine, the majority of participants talked about how "you don't choose the specialty, the specialty chooses you" because it incorporated specific characteristics which participants felt were intrinsic to their personalities. They naturally gravitated towards ER because it was "a good fit." Specifically, participants talked about the appeal of instant rather than delayed reward – having an immediate sense of changing patients' lives for the better.

Participants had worked as family physicians before specializing in emergency medicine and wanted me to understand that family medicine was important, however not a good fit for them because it was "boring" and lacked urgency and intensity. The idea of needing to be challenged in the work environment was something that emerged repeatedly in

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conversations with participants. Though almost all participants found the uncertainty and responsibility associated with being the attending ER physician "scary" or "overwhelming" at times, participants stated they wanted to feel that "adrenaline" and rise to the challenge in their work. As Miller explained,

> A person doesn't like to feel out of their depth but it is not uncommon to feel that way at work…that's kind of scary but at the same time it is also like a challenge. I like the thought of my efforts helping somebody at the end of the day. I like the intellectual challenge of medicine because it is like problem solving…and emergency, it's a fairly exciting environment, like it is fairly fast-paced and you access to all these diagnostic tests….And you get to see very sick people as well, so there is a lot of challenge in that too.

As the participants talked about their jobs the heightened emotion in their voices, widening of their eyes, and increase in their hand gestures made it apparent that they were excited about what they did. They were attracted to emergency medicine because the work involved high cognitive demand which is what they felt kept their brain alert and functioning at a high level. Jacque felt had always learned differently than other children and his need to switch from task to task and back again left him feeling an outsider among his peers as a child. In his role as ER physician he felt that he had finally found an environment that suited his learning style. He referred to this type of distraction-driven processing as having the "ER" or "ADHD" brain:

> Every one of us [ER physicians] has ADHD right? Every one of us can't focus for very - We can all focus on one thing, for sure at a time right? But we need the energy, we need the variety and we need to be able to juggle…You have to be a little hyperactive right? We have to be able to do that but I think we also need to do that - I think our brains do work that way.

Participants felt that it was their love of learning and need to feel intellectually challenged on the job that, in part, brought them to the ER and gave them the energy to continue working as ER physicians.

Workplace Challenges and Participants Definitions of Resilience

In keeping with IPA methods this study did not view participants' lived experience through the lens of preexisting theory or definitions of resilience, but rather endeavored to understand resilience as the participants defined, created, and/or experienced it in the context of their work. Definitions of resilience as strength in the face of adversity abound in the literature; these definitions were not explicitly used or suggested to participants during any of the interviews. Furthermore, the idea of vicarious or secondary resilience was not introduced to the participants during the course of the study. The purpose of this study was to explore the experiences and processes involved in resiliency in the context their ER work.

All participants spoke about the challenges involved in the type of work where "there's lots of bad things that happen - nobody ever comes to us when its good." Having over ten years of experience doing their jobs impacted on how they experienced this stress. Jacque explained,

> This is my job, I know this is going to happen when I walk into work. I know that somebody may be shot, stabbed, dead, stroked right? Bad brain bleed at a young age whatever. I know that might happen, I may see that. So I think…after years of doing this of course you don't have to prepare on a daily basis.

Participants felt that stress associated with being an ER physician was what Miller described as "a given" - the nature of the work:

> We see really stressful things that are sometimes like horrible…a lot of violent acts, you see sick kids and you see people die. And that almost in the context of today for me, isn't something that registers as a stress anymore because it just is the nature of the job. Like it's just kind of what you do on the job.

Participants operationalized their ideas of resiliency in relation to their work. All spoke of being able to continue working as a way of knowing they were resilient, as in Miller's case where "resiliency would be can I continue to do this job or not? If I choose that I want to, then how do I continue to do it despite finding stresses in these areas that we kind of talked about?" After some self-reflection it was clear for the majority of participants that resiliency was something that happened on a daily basis as well as in the context of specific adverse events.

For Remi, resiliency meant being able to support his patients and colleagues because he

"wanted them to be happy" in the ER. He went on to explain "I don't really think of resilience in myself, like, I don't plan how I'm going to be resilient." Later he suggested "maybe that's part of it - I mean I like, when I work, part of my philosophy is can I make things better? And I'm happier if I'm making things better for other people whether it's my patients or staff or the nurses and that makes me happier." Remi perceived resilience as finding happiness at work. Knowing his efforts at work were positively contributing to others gave him a sense of accomplishment and "happiness" which, at least in part, gave him the reward he needed to continue his work as an ER physician.

Initially Santos found it easier to describe what resilience was not – not feeling grouchy, not burnout. After taking a moment to think, he described resilience as, "showing up on time, getting your work done, being efficient, being able to establish an emotional connection with your patients within limits." He described how he gained strength from caring for patients in their time of need and therefore knew himself to be resilient. If he was unable to draw strength from his patient-physician partnership, he would know he was burnt out:

> I'm drawing some sort of strength from it and it's not wearing me out and being able to share a little in someone's toughness, that they're better or whatever. Like there's an emotional reward to work that when you're burnt out you completely lose appreciation for I think. It's a real privilege to care for people especially when they're about to die and you can save them or help them die well or whatever, it's a real privilege and I think I feel that a lot of the time when I'm at work and 10 years ago less so. So I think that, to me that tells me that I'm resilient 'cause I still like to work, I like it more than I ever have and I want to put more effort into it than I have up to this point.

Santos talked about the emotional reward he experienced through "being able to share a little in someone's toughness" and the privilege he felt in being able to help those who are on the precipice of life and death. The strength he felt from these dynamic interactions with patients helped him continue finding reward in the work and "tells me that I'm resilient 'cause I still like to work, I like it more than I ever have…"

While Santos described resilience in terms of getting work done efficiently and deriving strength from connections with patients, Chad perceived resilience at work as

being able to show up, go in for your shift day in and day out, and function at the same level as you did at the start – either the start of your career or the start of that block if you know you have seven shifts in a row, you should be able to function the same on shift seven as you did on shift one.

Functioning at a "high level" at work day and night again reinforced the concept of resilience being present on a day-to-day or routine basis. Chad spoke often of his family and how important his relationships with his wife and kids were, and he incorporated this value into his ideas of being resilient:

Part two would be your home life. It doesn't count if you function every day at that high level and then come home and crash and don't give your family that same level of attention or love or whatever that you're giving at work.

During his interview, Jacque touched on how working as an ER physician allowed him to feel he was contributing to his community, helping his patients and this knowledge contributed to his sense of purpose and being a good citizen. He explained "the job's important because it provides me that happiness and that feeling of being a productive member of society myself right and doing something good for the world." He stated that he had not given much thought to idea of resiliency before this interview - after a brief pause to reflect he explained that "being resilient" was something he experienced as "water off a duck's back:"

It's water off the ducks back. You just, being resilient means not letting things bother you. You don't internalize it, you don't take it in right? You need to be able to, and I think it's the same thing as I said before it's that circle of control, being able to realize what's important to you, what you have control over and what you can do and not. Those things are the things you worry about and everything else, you try to accept and ignore. Right? It's that level of acceptance that, the world is out there… Right? The world is out there and I can't control it right?

Being resilient to Jacque meant recognizing what he was able to control and what was out of his control. He explained that being able to influence those circumstances which were under his control and "ignore" or externalize those things which are out of his control was the key to his longevity at work. By focusing on his acute care role as an ER physician he was

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better able to take less ownership of the inherent stress and trauma that had already occurred when patients arrived for treatment in the ER.

For all of the participants being able to find ways to continue or move forward in a sustainable way was key to how they defined and perceived the dynamics of resiliency. Max stated with firmness that resilience to him meant "moving forward, forward, always forward never backwards," He suggested that moving forward as an ER physician meant being able to accept living with pain, with regret, and being a changed person forever.

Experiencing Resilience in ER Work

Each of the six participants in this study shared rich and storied descriptions of lived experiences related to their current work as ER physicians. Understanding how participants' perceived and made meaning of their experiences is the focus of IPA and I worked to recognize each person's reality as perceived and voiced by each participant. Themes and sub-themes based on the richness and meaning of the content making up the raw data evolved from my interpretations of participants' lived experiences.

Data analysis resulted in the evolution of an overarching theme entitled Building Resilience. Six main themes with related sub-themes arose from the overarching theme. The first major theme was *Managing the Workload* with sub-themes *making a mental plan* and *shiftwork as a race or challenge*. The second major theme involved participants' *Confidence As a Process* with sub-themes of *getting the "win"* and *processing "mistakes."* The third major theme was *Deriving Meaning From Traumatic Life Experiences* which encompassed one sub-theme entitled *"I've seen bad. I know bad".* The fourth major theme was *Controlling What You Can,* which included the sub-themes of *suffering in relation to participants' role, setting professional boundaries,* and *creative problem-solving.* The fifth major theme, *Emotional Processing,* was divided into two sub-themes: *externalizing difficult emotions at work* and *processing emotion in a safe place.* The last major theme discussed in this chapter is *Fostering the Energy to Continue Working,* with sub-themes of *feeling grateful for what is,* and *actively seeking support.*

Figure 4.1 depicts an overview of the themes and subthemes which evolved through ongoing analysis.

Figure 4.1

Managing the Workload

Making a 'Mental Plan'

Shiftwork as a Race or Challenge

Fostering the Energy to Continue Working

Feeling Grateful For What Is

Actively Seeking Support

Confidence as a Process

Getting the "Win"

Processing Mistakes

Building Resilience

Emotional Processing

Externalizing Difficult Emotions at Work

Processing Emotion in a Safe Place

Deriving Meaning From Traumatic Life Experiences

"I've Seen Bad. I Know Bad

Controlling What You Can

Suffering in Relation to ER role

Setting Professional Boundaries

Creative Problem-Solving

The Overarching Theme: Building Resilience

      The majority of participants in this study outwardly stated that they had 'the best job in the world' despite the inevitable stresses associated with their work as ER physicians. Participants defined and experienced personal resilience, being resilient, and/or possessing resiliency as many things including "not letting things bother you;" being able to function

consistently at a "high level" at work and at home; being able to feel some sense of privilege, purpose and satisfaction as an ER physician; being a "productive member of society;" coming to work on time and ready to give one hundred percent. All definitions built on the idea of being able to continue working effectively while finding satisfaction in ER work as proof of resiliency. This study focused on participants' lived experiences of *how* they continued to work and find fulfilment on a day-to-day basis in their work as ER physicians. Each participant spoke about how he managed challenges such as caring directly for dead or dying persons, systemic pressures, a disaster that had recently occurred in the nearby community, and professional decisions resulting in unexpected patient outcomes. Participants viewed their ability to come to work every day, do their best, and get some sense of satisfaction and strength from what they do while "not being kind of broken" as resiliency. The six major themes and related subthemes which evolved from the data are discussed in the following sections.

Managing the Workload. When asked about a typical work day all participants chuckled at the suggestion that there was anything typical about ER work. Each shift was unique on any given day, evening, or night. This uncertainty was one of the characteristics of the job that participants appreciated. For example, Miller suggested, "I don't know, I don't really think of myself as an adrenaline-seeker kind of personality but I do in the end like that environment. I like the challenge of not knowing what's coming in the door and having to make quick decisions without having any information really." Not knowing who or what they might see in the ER was described by most participants as exciting and participants needed to prepare themselves for the uncertainty and workload they experienced on a daily basis. This preparation was described by all participants as necessary in order to "get a sense of what I'm up against" and mentally prepare themselves for the pace and nature of the work ahead. The analogy of a race, a fight, or a challenge was used frequently by participants to describe how they approached their work on a daily basis. Two types of mental preparation were discussed as being important to their work: assessing the tone of the department and making a "mental plan" before beginning; and approaching work as a challenge or race.

Making a mental plan. Participants talked about ways in which they mentally prepared themselves for work to ensure they were ready and able to approach their job based on the demands of the particular shift. It was apparent that assessing the "tone" of the

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department as part of beginning a shift was necessary for this type of mental preparation. Specifically, a "walk through" before seeing patients allowed these ER physicians to prepare a mental plan for their work so expectations and behaviours were rooted in the realities of the department during the time in which they worked. This process helped the participants focus on the here-and-now, who and what required attention, and how to best approach the needs of both the patients and the department.

Most participants identified knowing which colleagues were working the shift beforehand and who was working with them as being important to managing expectations of pace, intensity and nature of the work ahead. Max explained that this information helped him anticipate whether the department would be a "shit show" and allowed him to immediately adjust his expectations and actions in the work environment:

> If I work with certain people I know I'm going to walk in to just a complete shit show with like 15 in the waiting room and 10 people waiting to be seen in beds and if I work with other people I'm like okay it's going to be under control right? There is such a thing as a perfect storm of like slow doctors. And you just end up walking in to just a hell hole. So you check that out, you get there and then you start looking at patients.

Jacque explained how he made a mental note of environmental cues as he began each shift to "get a sense of what I'm coming into" so he knew whether he should "run today" or "relax a bit more." These cues were varied and gave him a fairly well-rounded idea of what to expect on that day:

> Is it a bad day, is it a good day, is it a busy day, is it going to be a slow day, are there a bunch of ambulances in the back hallway or not…how many patients are there, just in usually in the extra hallway beds and if there are open beds, how many people are in there, what the noise level is, what kind of a, how fast people are moving, if the nurses are just sitting and talking, are they doing stuff or not right? So just really trying to get the sense of, but it only takes a few seconds to get a sense of that feeling of activity - to know if I'm going to be angry or have to make a phone call to administration or not.

> ***Shiftwork as a race or challenge***. Many participants viewed their work as both

challenging and as a challenge. The majority approached their work beginning a shift as akin to a race in which the goal was to do as much as possible and for some, to leave the ER in better condition than they found it. For some this meant seeing as many patients as possible while doing their best for each; for others this meant taking needed time and trying not to worry about the number of patients waiting. In many cases participants' use of language, tone of voice, and gesturing illustrated a sense of urgency and excitement when sharing their work experiences. For Chad, his face brightened, his hands flew emphatically, and his words rushed out when he spoke of the excitement he felt during a busy shift in the ER. When he described the overcrowding and lack of resources he encountered on a daily basis he explained that instead of becoming angry or frustrated he chose to use each shift to challenge himself not to "have to fix it, just make it better than it is." He described his mindset on shift as "I come out of the gates running" – akin to a racehorse charging from the gate towards the finish line – the end being leaving the department in better shape than he found it at the beginning of the shift. He explained:

> Almost always I'm walking into a very full department with lots of beds called for and nowhere to see patients and a very full waiting room with lots of long wait times…I take it as, okay well there are 20 patients in the waiting room, the doc comes on after me and starts at whatever time, I need this place to look better when they come on than when it did when I came on. I look at it like that so it's a challenge for me to make it better, I don't have to fix it, I just need to make it better than it is. And I come out of the gates running. And I'm just signing up for patients, I'm seeing patients, doing my notes; boom boom boom boom boom, boom, boom!

Max shared his experiences of caring for 20 patients at a time, explaining, "you kind of go full bore and like you roll. Like you don't break to pee, you don't break to eat, you don't do any of that stuff you just go." His sense of excitement and rapid speech as if he were reliving the pace and intensity he brought to his work was apparent. As he talked about 'going full bore' he began gesturing a forward circular motion with his hands indicating the constant fast pace he used to push himself to move forward.

When describing how he approached his shifts Remi spoke of "throw[ing] myself in" at the beginning of a shift in order to make the biggest difference and boost morale in the

department when the ER was overwhelmed with patients who had nowhere to be housed or seen. His personal challenge involved improving the mood of his colleagues and making the department a more positive place to work by seeing as many patients as possible. He spoke in a matter-of-fact tone with a purposeful expression on his face:

> I either throw myself in if we are far behind and I try to see four or five right away and get things moving because I find if you do that, like if the mood of the ER is a little bit low because there's 20 people waiting but you throw yourself in and start moving patients right away, the mood tends to change a little bit. The nurses know that's going on, oh things are moving here, I'm going to get this patient in the next room for you – that sort of stuff.

For Miller, treating as many patients as possible was important, but this was not the challenge he set out for himself. He explained that he had recently and deliberately decided to allow himself the time he needed when working with "very sick people." He used this as a focus during each shift and found that he felt less overwhelmed with the volume of work ahead of him, stating "I used to feel more compelled to try to get through the masses of people at work that aren't seen. [Now] I want to do a better job on the people I am seeing and spend a bit more time with them." The challenge each day for Miller was to allow himself time with the patients he was treating in the moment while trying not to worry about those in the waiting room. This form of mindfulness was what gave Miller a sense of accomplishent after each shift.

Taken together, it was apparent that framing their often overwhelming work as a race, a battle, or a challenge helped participants approach their shiftwork with the energy and intensity needed to tackle the hours ahead. Participants were able to motivate themselves, focus on their work, and derive a sense of accomplishment at the end of each shift by viewing their work in the context of a race or a challenge.

Confidence as a process. The need for finding balance between enough but not too much confidence in ER work arose again and again as participants spoke of their experiences. Miller explained that "you're doing your best but it's not something where you're super confident in everything you do. I don't think you should be super confident in everything you do because then you're kind of fooling yourself." All participants felt that having confidence in their

ability to make a positive difference in patients' lives was essential in order for them to work each day in the ER. At the same time participants felt that some level of questioning their decision- making process was inevitable and necessary for them to continue providing patients with their "A game," their best. Participants described "the fear of screwing up" as essential to what made them good ER physicians. Max referred to the dynamic of being able to function at work with confidence as having the "eye of the tiger." He explained that having the eye of the tiger meant working with "a level of confidence to know that the vast majority of the time you're on the right track……I feel like I'm good at [my job] and if I felt like I was bad at it, I don't think I'd do it." He suggested that it was equally important to be "paranoid enough about it that you're not going to miss someone who is truly sick cause those people, they go home and they die." According to Max these confidence dynamics were "the cornerstones of being able to do this job for a long period of time." He went on to tell a story of a colleague who lost the "eye of the tiger" after experiencing a particularly jarring incident which left his colleague consistently anxious at work and no longer confident in his ability to do more good than harm.

In this way possessing confidence in one's ability was described by participants as a dynamic process which needed to be cultivated and nurtured in order to continue working in the ER. Two themes arose to shed light on the processes involved in participants' cultivating and maintaining their belief in their ability to be "good" at their jobs. These included knowing and observing that they made an immediate difference in the lives of patients and their families; and knowing that making a significant "mistake" at some point in their careers was inevitable and that external and internal processing of these experiences were necessary in order to continue working. These themes are listed below as *getting the "win"* and *processing "mistakes."*

Getting the "win." All participants spoke of the sense of purpose and personal satisfaction they derived from being able to "fix" a problem – help a sick patient – and witness immediate positive change as a direct result of their actions. Santos explained that he enjoyed making decisions in which he could see a direct response almost immediately, especially when caring for patients who were "dying or close to dying or really distressed" and "making them better fairly quickly." These experiences were referred to as "wins" by many of the participants, helping build the confidence needed to do the job as ER physicians. For the majority of participants getting a few wins in a row built confidence in the workplace. For

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Remi, every interaction with a patient was an opportunity to have immediate "positive impact" or win during a time of distress. He explained:

> I enjoyed the times where you were there to make a difference because one person can make a difference in an unruly situation. I enjoy the fact that you can work hard and make a difference…and every time you have an interaction or see someone, you're actually making a positive impact and I enjoy that - I feel good about what I'm doing.

Confidence in his ability to improve the lives of his patients and their families was important to Remi's sense of satisfaction and knowledge that he possessed the capacity to do his work well.

Chad proclaimed "I love my job the most" at times when he was called to take immediate action for patients who "are dead or dying" and he had to "get here and fix it now!" Feeling the urgency and knowing that his actions directly and positively affected the lives of patients and their families gave him confidence in his abilities as trauma leader. This was deeply rewarding for him:

> The traumas, the stab wounds or gunshot wounds, falls, head injuries – those are the ones that are really sick in the moment and you need to act. You just need to be there…you don't feel like you're thinking. Like, you're just doing. I mean it's bad because someone is sick, someone's family member is sick and they're in a crappy spot but that's the time where I love my job the most in those moments.

Max spoke in detail about his first resuscitation, how he felt after the "win" and how he derived confidence in his abilities early in his career when he believed he had the ability to save a life. While sharing his story he was animated with a sense of urgency and awe in both his voice and his demeanor. The idea that he could do something so incredible, save a life, made him feel special – capable of doing something most people could not:

> It's like Tom Hanks in that movie where he's on the island with the volleyball…You know that scene where he's like there and then he like, he tries to figure out how to make fire and he's like "I have made fire!" That's what it feels like when you actually resuscitate someone or someone's been shot in the chest and you crack their chest and they survive the OR [operating room]…and they're literally dying or are dead in front

of your eyes, and you are able to reverse that, that's a pretty- you're like I have made

fire. Like I have done something that a handful of people that I know could do…

That's a good feeling. I get like goosebumps just thinking about it.

The knowledge that as a team leader his decisions and actions were directly responsible for saving the life of another was proof for Max that he was exceptional at his job and left him with a deep sense of purpose and pride.

Miller spoke about the "reward" associated with ER work being the instant rather than delayed gratification – seeing the "fruits of my labour" and knowing that "you could see what you did that day. You could see that you maybe helped somebody or there was some kind of result at the end – you can see that you have made a difference for somebody which is the reward of the job."

For all participants the result of feeling this instant gratification on a daily basis was a strengthening of confidence in their own abilities as ER physicians. These "wins" were an important part of building and sustaining the confidence participants needed in order to make quick, educated decisions based on little information.

Processing mistakes. Participants strove to do their best each day, aiming for "perfection" in their work as ER physicians. At the same time they knew they were human and perfection, given the demands of their work, was an unrealistic goal. Participants described inevitable mistakes or errors as anything from a patient complaint about their bedside manner or missing a "subtle fracture on an x-ray" to discharging a patient who would later "go home and die." Participants described minor mistakes as affecting them in various ways. Jacque suggested that "when I do something that may not be right, maybe a little incorrect, remembering that you're still human and that, that you can probably learn from it and the vast majority of the times when you do something incorrectly you can fix it." Remi explained that after minor errors in the ER, "I beat myself up and I'll think fuck I'm an idiot….I should've got that diagnosis, and how much I screwed up will depend on how long I beat myself up for right?" He talked about the inevitability of making a mistake when diagnosing and treating patients with complex and urgent medical needs with little information. Remi, as with other participants, felt that learning to "bounce back" in some sustainable way was essential for longevity in his profession. He explained:

In emergency medicine we're perfectionists. We try to get it right all the time, but there's no way we can right? I mean, we don't know any of the patients, the patients are drunk, upset, anxious, unconscious or whatever and we don't get a right history, we're doing a physical exam in a hallway or something like that so to think that you can get it right all the time is a fantasy….but to bounce back from your imperfections is probably necessary to stay as an emergency physician.

Rare but significant "screw ups" relating to their own leadership and/or actions left participants deeply and indelibly scarred. For those participants who felt that they had "really fucked up" at some point, most described a loss of confidence that took much time process. Some participants gave emotional and detailed accounts of a particular circumstance in their careers which they felt had changed them forever; that they would never fully recover from. One participant described how he felt after making a decision he later regretted:

That's going to be in my head for my whole life until I die. Seriously, forever. It'll be there forever….I did learn from it and I'll probably regret that [decision] for the rest of my life. Like actually I felt like I should maybe quit my career – and then you keep going to work and you see other cases, you maybe get some wins and it get's a bit easier…but you're kind of wounded a little bit from that, I think. It kind of nibbles a little bit at your soul. Little pieces…Like it just consumes part of you and you- like I'm different now then I was before that happened….. it's kind of a weird thing cause you're like holy shit – me, me, me, - but it's not about you and….there's a family who is grieving right? So that's pretty selfish right? So it's like Ahhhh what do you do?'

This participant described struggling with self-doubt and guilt about being selfish for having feelings that did not focus entirely on his patient and family. At this point he asked himself "could I continue doing what I was doing…..like should I keep doing this? Maybe I'm, I'm not good enough to do this anymore?" A similar feeling of inadequacy was common to all those who had experienced a traumatic circumstance in which they felt they could have done something differently. Jacque explained that at the end of the day he had to be able to continue "having that sense that I'm still doing the best I can and I'm still a good person and this does not mean that I can't do my job. Cause you get that feeling a lot….Can I do this job? Am I going to hurt people?"

A few participants were able to describe how they continued to deal with these deep feelings of inadequacy and loss of confidence and move forward to keep doing the work they loved. A pattern arose in which participants immediately questioned themselves, their ability to do good and not harm, and their identities as emergency physicians. They described processing the incident over and over both in their own minds and with their partners when they felt safe to do so. Participants spoke about how they engaged in repeated honest clinical discussion with colleagues who were close and respected friends. Chad talked about sharing his feelings with his partner while using a trusted group of colleagues as "a sounding board for being a good doc and becoming a better doc." He gave an example:

> My colleagues help me because I reach out. They help me process what can I do to be better next time? Did I hesitate; did I do something that maybe wasn't quite the best, like, what would you have done in this situation? What are your thoughts - could I have done this better? Should I have added this or should I have added that or could I have maybe done this sooner? As long as they are honest with me and I'm honest with them when they're asking me the same questions we're all going to be better docs at the end of the day.

When Chad was able to consider all options with his trusted "sub group of docs" and conclude that he did his absolute best at the time, he could use the circumstance as a learning experience and begin to rebuild his sense of professional confidence.

Max was emotional as he shared a detailed and clearly traumatic account of an incident in the ER where he was the attending physician. After much thought he reflected on how he processed his loss of confidence with his partner, himself, and his colleagues in the days, weeks, and months following this incident:

> I'll talk to [my partner] about those things and I think that's me leaning on her right? And it's not just a one day conversation too like these things drag on for months….there's lots of self-evaluation, questioning, and that's hard, that's the hardest…cause I mean there are people that have jobs but doing what I do it's a big part of who I am. That's actually when I lean on my circle of friends and [they] get a text at like 11:30 at night right? And I'm like dude I think I killed someone, and then you go and you talk about it right. And, because it's kind of an insular experience, it's

an insular profession…but I think it's like you lean on your friends and you talk to them and you look for validation or you look for someone to say maybe you shouldn't be doing this anymore….The people that I would really take that seriously from were people that I highly respected – the doctors that I'm friends with, there would be no friendship if I didn't respect them clinically. I guess [they are] someone who I feel safe engaging with…if they said to me well maybe it's time, I'd be like holy shit, maybe it is time.

Max leaned on his partner "to some extent," struggled with intense self-evaluation, questioned his ability to do his job well, and relied on trusted colleagues to help him evaluate his actions on a professional level. It was apparent that he valued the input of those colleagues with whom he felt "safe" and used their assessment of his professional performance as a guide. These processes helped him eventually rebuild the belief that he could continue working as an ER physician.

When participants felt responsible for negative outcomes in the ER they engaged in deep self-evaluation, talked with their partners to process the incident, and reached out to trusted and respected colleagues for an objective, step-by-step, honest assessment of their professional performance during the incident in question. If they knew in their hearts that they did the best job possible given the circumstances and that they incorporated feedback from trusted colleagues, they could start from that point and work to move forward.

Deriving meaning from traumatic life experiences. Woven throughout participant stories were worldviews and personal philosophies born from various life experiences which laid a foundation of strength and self-confidence for participants. They identified these experiences as the turning points in their lives which gave them unique perspectives on their work in the ER. Participants spoke in depth about the knowledge and strength the believed they had gained from these traumatic life events. The theme *deriving meaning from traumatic life experiences* is divided into one subtheme: I've seen bad, I know bad.

I've seen bad. I know bad. Participants spoke in detail about early traumatic life experiences which changed their outlook on life after the experience. More than half the participants had lost an immediate family member early on in their lives and spoke about how the deep suffering associated with this loss influenced their growth and development as

adolescents and their ability to cope with intensely stressful events in their adult lives. They described these losses as forcing them to continue living and integrate the tragedy into their lived experience. Max lost a parent, an individual he described with great love and admiration, when he was a young boy. He explained how "having survived" this loss with the help of his siblings gave him a unique perspective on how to deal with trauma and loss in his ER role:

> Like I honestly, I think that part of my resiliency is my - I think part of it is my [parent] dying. I think that having that kind of an experience as a young person, it just, it was just such a horrible experience that I think that through life I've been like yeah that's bad but that wasn't as bad as that. Like I've seen bad. I know bad right? And yeah it's bad, but it's not that bad. Right? Like honestly I feel like I could go through anything honestly. Well not anything, there are some things I would not, I couldn't deal with. But for the most part, I feel like having survived that I think like I'm okay - I didn't become a crack addict or whatever was the alternative right? And I think that, honestly I think that that's part of it. Like it would take a lot to break me. I just feel that.

As Max shared stories about the parent he lost it was apparent that he continued to feel this loss. At the same time he was proud of his ability to experience and survive the pain without destroying himself in the process. Faith that he possessed the strength to do this allowed him to feel he could survive almost any challenge presented to him in the ER.

Santos described how as a child he watched someone he loved "die from lack of self-care." He explained that witnessing this person "self-destruct" was the catalyst which propelled him to spiral downward for many years. He worked through these difficulties by drawing on an inner strength to stop himself from going too far down the path he had witnessed his loved one follow, in a sense knowing what he did not want to become drove him to seek help when he felt himself spiraling out of control:

> There was a point where I was worried about myself that maybe I was an alcoholic. I wasn't, but I was worried about it so I started going to AA. I was 17 or 16, like I was young. So I went to a few meetings and then I stopped going, but that whole experience was completely driven by me. Nobody suggested it to me. Nobody gave me some sort of tip or example or anything. I was completely on my own. The same was

true for accessing counselling in medical school. I just knew on some level that this was wrong and I needed to do something about it. I wanted to do something about it. I don't know where that [inner drive] comes from but maybe it comes from that [witnessing that loved- one self-destruct].

During his ER career Santos explained that this ability to identify when he needed to change his mindset or his actions in order to continue down a the path of "forward momentum" was what allowed him career longevity.

Chad made it clear that knowing how he survived the tragic death of an immediate family member helped him at a core level to cope with the challenging work in the ER early in his career:

A lot of how I deal with the badness at work is born out of how I deal with the badness of losing my [loved one]. The way I dealt with it in that first year was to completely disconnect myself from [losing my loved one] while I was at work, like it's never happened. So I would disconnect myself from [my loved one] who [died in this way] so I could treat this guy [who was dying in a similar circumstance] and do my job - and then come home and process the mixed feelings around that and lean on [my partner] a fair amount. So I think that's where I learned to do that disconnecting in the moment, in order to be the doctor and not Chad.

Chad's trauma happened early in his career and forced him to learn how to "disconnect" from his personal life experiences in order to practice mindful in-the-moment medicine. He attributed this ability to being forced to treat patients who were similar to his lost loved one and learned early on to focus on his role as doctor rather than his personal feelings. He stressed the importance of processing the "mixed feelings" with his partner when he returned home.

Jacque was a young man when his perspective on mental health changed following the death of a close family member with mental illness. Because he witnessed and experienced firsthand the distress borne from mental illness he felt he was able to better understand patients suffering from similar difficulties. This knowledge gave him the power to interact with his ER patients in a compassionate and sympathetic manner, essentially to "take the good from the bad" and move forward. Jacque explained:

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We've had a lot of bad things happen in our family and I can dwell on that or I can say that happened, lets learn from it, lets deal with it and lets just keep on going. Right? Just in my job especially lately, we see a lot of depression and suicide happen right? What happened with my [close family member], does that hurt me or help me right? And in some cases it's both. In some cases it helps cause I can have some understanding about what the family is going through. Right? In some cases it hurts… So you can dwell on the past and think about okay all this bad crap happened but instead of doing that, one thing I learned from it, take away the good from it, that will help me help people when I see them, and help the families around them.

Learning how to cope with the death of a loved one early in his life and "take the good away from the bad" helped Jacque develop this "personal philosophy" which he used in the ER on a daily basis.

Taken together over half of the participants had experience a significant and traumatic loss in their lives. With sadness and courage participants described how their perspectives changed after the loss of a close family member, and how coping with this trauma contributed to their personal and professional strength and perspective in the emergency room.

Controlling what you can. As participants told their stories it became clear that the mantra "you only deal with what you have control over" was necessary for participants to follow in order for self-preservation at work. At a basic level this meant being able to schedule their work shifts and vacation time as much as possible. On a deeper level, identifying and accepting those external circumstances which characterized the "nature of the job" or the nature of the health care system without attempting to take ownership or control of those circumstances was considered necessary by all participants if occupational satisfaction and longevity was to be cultivated and maintained. In addition, physicians spoke in detail about the importance of identifying those circumstances which they perceived as outside of their control, and at least to some extent, finding sustainable ways to manage these circumstances in the ER. For example, Miller talked about spending half of his career feeling responsible for mitigating the deficiencies in the current healthcare system in the midst of caring for his patients on shift. He explained that no matter how many patients he was able to treat during his shifts he never felt it was enough. The challenging nature of the job was not as upsetting to him as "the things

that shouldn't be, where you see people waiting forever, or getting poor treatment or whatever because the system isn't adequately financed or organized correctly." After more than a decade of working in the ER he explained how he was able to reframe his work as meaningful within the overwhelmed healthcare system.

> I think it's a dangerous way to look at life to think of how things should be because you can't really control any of that. It's far better to go to work and do what you can and then leave work and hopefully you can make your mark and help some people on the way but it's, you're trying to be less preoccupied with how things should be.

Like Miller, the majority of participants explained that accepting and internalizing realistic role expectations was an essential part of being able to continue working in the ER with it's many challenges. Over the course of participants' interviews three sub-themes related to *controlling what you can* emerged. These included suffering in relation to participant's role as ER physician; setting professional boundaries; and creative problem-solving to meet unavoidable challenges in the ER.

   Suffering in relation to participants' ER role. Participants talked about their roles as ER physicians in relation to their understanding of the inevitability of universal suffering and the impact they could have on the lives of individual patients and families. Physicians accepted that suffering could not be extricated from the process of existing and were able to make meaning of their role in the midst of this. Taking control over what was controllable in their minds was essential to their work, as was relinquishing ownership and control over what participants perceived as external to their control. For Santos this meant finding a sense of balance in his role as a caregiver within this framework:

> I take the view that human suffering is infinite so no matter what I do it won't make a difference from a cosmic scale…no matter how much you try to change the state of things they're probably still going to be the same on some level right? On that level. But the differences you can make in an individual life by taking care of someone are also infinite in another way right?...Those are the experiences that are spiritually restorative for me, not to be too flaky about it but…it makes [me] feel good about what I do and makes me want to go to work cause it is a balance like if you work, like it's a tough balance to walk to find that place where you're enjoying what you do and

it's not killing you.

Jacque's worldview and philosophy of life was woven throughout his interview. Every story circled back to his belief that it was his responsibility to control those circumstances which could be controlled and accept those which were beyond his realm of control. Jacque spoke about the majority of human suffering being out of his control and the importance of focusing on those conditions which he could realistically influence. This approach allowed him to find peace in the idea that he did everything he could to help a patient and external forces were not his to own or accept responsibility for. Jacque explained how he viewed inevitable suffering:

> I'm here to help. I can't prevent [tragedy]. I can only deal with what I have control over. There's a lot of things that happen in the world right? There's a very small amount that you can control, so [I] worry about the things I can control and I don't worry about the things I can't right? People still die and everybody will. I can't stop that right? I can't stop people from getting sick, I can't stop people from getting shot, I can't stop people from getting hit by a car….it's that level of acceptance that the world is out there and I can't control it right? So I do whatever I can and then if it doesn't work out, it doesn't work out, knowing that I tried my hardest and that I did everything I could.

The ability to feel a sense of professional accomplishment for a job well done independent of the outcome of the patient was considered essential to being able to find meaning and continue functioning in the challenging role as ER physician.

For Max, learning to accept that witnessing a patient's death or dying process was part of the nature of emergency medicine. He talked about the importance of being able to take pride in his best efforts even if the patient died in the ER, again knowing that he and his team had done everything humanly possible to help. As with the other participants, Max felt his ability to separate his best and most thorough efforts from the outcome of the patient was essential to longevity in the ER.

> There's many times where you finishing doing like a cardiac arrest and I'll talk to the team and I'll say you know what, the patient died, and that sucks. But we did

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everything we were supposed to do and we did it well. And you should feel good about that, even though the outcome was bad. And so, and I don't want to make you leave with the feeling that like I feel like a piece of shit every time somebody dies, because I don't. If we did everything right and if I believe that we gave the best care that you could receive anywhere in the world, I'm happy. I'll go and I'll have that conversation with the family and if I can say it with a true heart, [I] can take pride in working well and having the team working together well and doing things in a timely fashion and doing like the most up to date things you can do, like you can take pride in that even when someone dies.

It was apparent that participants felt it was essential to have realistic expectations of themselves and their ability to influence the health and well being of their patients. This knowledge allowed participants to feel sadness, a sense of loss and/or sympathy for the patient and family without taking responsibility or owning the patient outcome.

Setting professional boundaries. Setting professional boundaries allowed participants to maintain their energy for ER work. The ability to set and follow clear boundaries was essential to physicians feeling good about their work-life balance and their ability to continue working in the future. Miller believed that "just learning to say no" was important to "make the career sustainable." He described his struggle with letting go of work stress since the ability to check patient status outside of the ER became available. At the time of his interview he was reconsidering his fairly common practice of checking patients' status from his home office, a capability which he felt was both "a blessing and a curse." He explained that doing so left him feeling overwhelmed with what he perceived as endless work in the ER.

Santos believed that cultivating and being able to maintain a sustainable work-life balance was essential to his sense of well-being and ability to continue working in the ER. He explained that it had taken him many years to feel comfortable drawing boundaries without feeling guilty. "Protecting" himself and those who depended on him meant deciding early in his career that he would focus on patient care in the ER and leave fixing the system to those who were interested in doing so, stating "I'll do the best I can with what's here and I just leave all that shit up to someone else….it's kind of a herd perspective." Santos attributed his longevity to not overscheduling himself as he did early in his career (when he felt financially strained),

being paid for overtime work, recognizing that he had responsibilities outside of the ER and prioritizing leaving his shifts on time whenever possible. He explained:

> I need to protect who I am for myself, for my kids, and for the patients that I am going to see…One of the ways I do it is looking at the list of people waiting and if there's a patient that comes in and they are imminently about to die obviously I'm going to see that person and I'm going to stay late. But many patients it doesn't matter if they wait 30 minutes or 50 minutes or 70 minutes but it does matter to me that I get out on time. Cause it's not the only job I have, I'm a parent and I work for [another company] and I do call and I do this, I've got a lot of balls in the air and I want my life to be a positive experience right? The more positive it is for me the more I can give back to whatever job I'm doing. So that's what I tell myself with that pressure, I'm just like you know what there's always going to be a waiting list, always, and if it doesn't make a life changing difference to see that person and be late then you need to leave on time.

Max agreed that after a shift "the last thing I want to think about is work." Drawing as clear a line as possible between work and his personal life was something Max had struggled with over the course of his lengthy career. His voice took on a serious tone as he explained that being present for his kids had become a priority for him in the recent years. This increasingly balanced view of his physician role had given him some perspective on what was important to him and to his family.

> I had a conversation with my partner and she was like you know what, your kids are getting older and you're not there. Is that what you want? And I was like hmmm. It was sobering so I purposely made a change…I feel like now's the time to do that right, so I've decreased my clinical FTE (full time employment) in emerg.

Jacque shared a number of life experiences in which he felt setting boundaries promoted his feeling that ER work was sustainable in the long run. For example, he explained how he drew boundaries with patients and staff in the ER by letting them know what his job was and how he could help them. This allowed him to focus on what he could control and in turn do his job well without focusing on circumstantial aspects of the situation which were not under his control. He explained that having these boundaries limited the negative energy he experienced during patient interactions.

When people come in [after] a car accident and they tell me about whose fault it was, I specifically say that doesn't matter, I would like to know what happened only so I can deal with, so I can know what injuries you may have. I don't care whose fault it is, that's not my job, talk to the police. And I usually shut them down at that point. But I think they appreciate that, that, the fact that I am not going to dwell or worry about that negative, I don't want that negativity to be there… I don't need blame… it doesn't matter at this point. What matters is how can we help you get back to where you were.

In Jacques experience, as with most participants, setting boundaries around how much to work, how late to stay after shift, and what role to perform in the ER was necessary in order to find sustainability and satisfaction in ER work.

Creative problem solving. Within their stories participants' described many ways in which they learned to reframe seemingly out of control situations in order to find a way to function effectively in the ER. All participants spoke about how overcrowding and lack of beds in the city ER departments and wards often left them feeling overwhelmed, helpless, and often times frustrated with the health care system. Miller described how seeing "violent acts, you see sick kids and you see people die" was "just kind of what you do on the job" and "it's stressful of course but – it's a given." What really bothered him was feeling responsible for patients having to wait long hours in the ER and to be examined in the hallways or closets of the department. Earlier in his career Miller explained that trying to work within this system left him feeling ineffective, questioning whether he was making a positive contribution to patients and families and wondering if he willing to continue working as an ER physician. After more than a decade of working he explained how he managed this:

I'm trying to reframe things…I used to feel more compelled to try to get through the masses of people at work that aren't seen but now I feel less like that…If they're not my patient yet then I feel less ownership over it and I now want to do a better job on the people I am seeing and spend a bit more time with them. So that's part of my strategy for coping – you know not owning the fact that the waiting room is bursting at the seams because it's not me who is making those decisions.

In order to feel good about the care he provided to patients Miller was able to reframe his concept of good care in terms of quality rather than quantity. He consciously geared his

practice less towards reducing patient wait times and focused more on doing his best with each patient as a marker of success in the ER.

Max agreed that "no matter how good of a doc you are there's so much pressure on the emergency department now that your ability to affect someone's experience is there but you're always playing catch up." He talked about how the patient-physician interaction was negatively impacted by long wait times, explaining that "when we start any patient interaction so frequently the patients [are] pissed off now. That makes my job harder." According to Max patients feeling "pissed off" occurred on a daily basis and negatively impacted on Max's feelings about his work and his relationships with patients. Beginning with a negative interaction was upsetting for both parties so Max developed a strategy to diffuse the patient's frustration and cultivate a positive initial patient-physician interaction. He explained:

> I'll come into the room and some people [patients] will be like YOU! Blah Blah Blah! And I'm not even tired of apologizing like I don't mind apologizing - doesn't cost me anything to say I'm really sorry about your wait cause I actually am and they usually understand.

Max felt that entering the exam room with a sincere apology often quelled patients' frustrations and gave them the validation they required to move forward from anger to understanding that the ER environment was a busy one and everyone was doing their best to help the patient. He was able to relay sympathy for the patients experience and immediately change the climate of the patient-physician relationship without assuming responsibility or control for the overcrowding and long waiting periods in the ER. A simple apology made patient and physician partners working together within an imperfect system as opposed to adversaries.

Similarly, apologizing to patients was a strategy employed by participants when overcrowding necessitated that patients be seen in hallways and sometimes in closets and makeshift corners of the ER. Participants knew that their patient-physician interaction was often negatively affected in these situations. Jacque appeared visibly annoyed when he explained that the patients "can't lie down, and then they're angrier so you can't have that same interaction." He spoke of going one step further than apologizing and talking with patients about where they felt they fit into the ER environment. In order to diffuse patient

frustration and imbue patients with a sense of control he described a strategy he had developed through trial and error:

> I apologize for the situation and basically say, listen I'm going to talk to you here only because if I don't talk to you here I'm not going to talk to you for another hour and I'd rather just speak to you and get at least something so we can start your process and are you okay with that? So I try to not take responsibility and engage the patient - give them a little bit of accountability and a little bit of responsibility to say what do you need really? When you look around this place and you see this insanity, how do you feel you fit in? Do you really think you need to take that person out and have that bed or do you feel like we can manage you in this kind of environment. So they can feel ownership.

Creating a feeling of partnership between the patient and himself as physician allowed Jacque to engage patients in a decision related to their own care and in turn cultivate a positive interaction and work environment. This turned a seemingly uncontrollable situation, inadequate space and resources in the ER, into one in which he did not assume responsibility for the failure of the system but rather came up with a solution by involving the patient in their own health care.

Most participants identified feeling mentally exhausted during shifts as another challenge related to overcrowding as well as the intense nature of the work in the ER. They described the quantity and intensity of ER work as unavoidable. In response to the cognitive load experienced by all participants, Remi had adopted a technique to mitigate cognitive exhaustion and give himself "a bit of a mental break…to have a normal conversation, be able to joke, get my head clear, write a note and it's done" and re-energize himself during particularly intense shifts while continuing to see patients. He referred to current literature on how to continue seeing patients while taking a "break. " He explained:

> If I just see complicated patients man I can't think about anything after a while so I'll probably, I start to alternate somewhere an hour or two where I'll see a couple complicated patients then I'll pick an easy one out of the back room or in the waiting room or in a chaired space or something like that, then I'm able to keep the department moving. I'm a list person, so whenever I see those lists of patients waiting shrinking a

little bit, it makes me feel better, probably releases some endorphins somewhere right?

But then also it allows me to just see an ankle, order the x-ray and send them home. And then I can add another complicated patient.

Remi described the less complicated patient as a "mental break" because seeing someone who is asking "do you think my ankle's broke" is akin to "going to the mechanic" where the customer is asking "so can you fix my tire?" Remi experienced being able to "fix" a patient and send them home as a reward which releases endorphins and gives him renewed energy to continue assessing, diagnosing, and treating patients with more complex illnesses/injuries.

Creative problem-solving was key for Santos, who over the years had encountered a number of frustrating recurring and unavoidable circumstances in the ER. He explained how he learned to consciously change his expectations in these situations in order to approach colleagues and patients with a positive attitude. For example, he described his thought process during handovers, the transitions in which attending ER physicians "hand over" patients who are under their care to Santos as he begins his shift:

I find handovers really annoying because you're getting a bunch of patients that you've got to start fresh from right from the beginning but if you just assume they're yours to begin with, and that's just your job today, it takes away a lot of irritation cause you just own the work that's in front of you instead of trying to avoid it and go well it's not really my fucking job because it's his patient and I'm just going to do what he said. But if you take responsibility for it and just say ok, fine, this is on my plate today and this is what I'm going to do then it's not quite as bad.

Being able to control and change his thoughts from "it's not really my fucking job because it's his patient" to "this is on my plate today and this is what I'm going to do" helped Santos reframe his negative approach to a more neutral one and reduced his feelings of irritation during unavoidable handovers at the beginning of every shift.

Taken together, it was apparent that finding ways in which to reframe specific recurring or unavoidable circumstances in the ER was important to participants sense of control and effectiveness in their work environment. These creative problem-solving techniques allowed participants to take control of certain negative interactions or circumstances and create a more

positive work environment for themselves, their colleagues, and their patients.

Emotional processing. As participants shared their stories of working in the ER it became immediately apparent that all struggled to some degree with how to process upsetting emotions which arose on the job. Participants described acting with compassion and not emotion as a necessity which allowed them to perform to the best of their ability in the ER. This meant being able to externalize or otherwise "disconnect," "dissociate," or "ignore" emergent emotions by focusing on their roles as ER physicians and the immediate task at hand. Remi explained, "I have a certain emotional distance, like I relate because I can understand a problem and I want it to be better for them [patients] but I don't get so invested that I can't make a decision right?" Jacque talked about "the wall" he used at work, the ability to focus on his role in the moment and ignore all other aspects unrelated to his role as physician. This allowed him to do his job effectively and feel good about his efforts:

> The ability to just have a wall at work…I think that's part of it, just trying not to let that [emotion] affect you and realizing you're doing a job. This is my job. I know this is going to happen when I walk into work – bad brain bleed at a young age or whatever right? I know that might happen…I don't deal with it [emotionally] I just remember that I'm here to help.

Participants also used humour to express emotion in a way which allowed them to connect with ER colleagues without feeling vulnerable or overexposed on the job. Each participants unique and often dark sense of humour was evident throughout their interview processes.

In addition to externalizing emotion on the job, participants felt that acknowledging and processing upsetting emotions after work was essential to being able to continue in the ER. Most of the participants were unsure of how to do this. Max laughed uncomfortably as he suggested that he dealt with troubling emotion by "filing it away. Pushing it down *deep*." As interviews progressed one participant was able to articulate how he processed difficult emotions which arose on the job. Thus, the theme of *emotional processing* was separated into two sub-themes: externalizing difficult emotions at work and processing emotion in a safe place.

Externalizing emotions at work. Participants described two ways in which they handled emotions, some which were upsetting, at work. These included using "dark" or sometimes "inappropriate" humour with colleagues to bond together and/or "externalize rather than internalize the badness," and practicing mindfulness by "ignoring" emotion and focusing on the patient in front of them and their physician role in that moment.

On a day-to-day basis when the work involved routine treatment of patients without life threatening illness and injury participants expressed emotion in the ER through humour to decompress, laugh together, and share common experiences in real time. This use of humour came across during the interview process where it became clear early on that participants used humour to express a range of emotions without necessitating the actual display of these emotions. Participants observed that this was true in their work environment as well. They spoke of using humour to externalize emotions, a practice which most recognized bonded the ER team on a daily bais. Jacque was able to articulate how "joking around" on a daily basis promoted emotional connection with the ER team and helped him "expel the badness without internalizing it." He explained how sharing laughs with colleagues helped the ER team feel like "a family" so when something terrible happened they were able to work together having built the trust needed to lead a trauma with the support of their peers:

> All the nursing staff and all the physicians that have been there a long time, we all have a dark side to our humor right…there's a lot of inappropriate jokes but I don't think the, I mean the population doesn't understand that stress, that environment and those jokes are actually helping us deal with that stress. Right? That resiliency comes from stuff like that. You're trying to get rid of it. You're making a joke of it… laughing together, making those jokes together, it bonds us as a team and as a family that we can help each other. Right? And then when something really bad happens, like that bus crash right? We are already bonded, we're already a family. We're not joking about that.

Max vividly illustrated an incident in which he was the admitting ER physician who was responsible for stopping and then restarting the heart of a patient in cardiac arrest. After relaying the details with great intensity, he laughed loudly and suggested that on the outside he appeared calm to the ER team, but on the inside he was screaming "OH MY GOD SOMEONE CALL A DOCTOR!" Max admitted, "I use a lot of humour to kind of make light

of situations, [sometimes] very intense situations." He, along with most of the participants, observed over the years that ER staff who deemed "inappropriate" humour unacceptable and those who were unable to express their emotion through humour had short careers in the emergency room. As participant interviews unfolded it became apparent that all enjoyed laughing and joking as a way of releasing stress, making a connection with others, and punctuating their stories of ER work.

Remi suggested that "joking around with the staff makes it pleasant to come to work if you can enjoy yourself."

In addition to using humour to express emotions in the ER, participants spoke of how they purposefully "ignored" difficult or painful emotions at work. They described how existing in the moment and focusing on their role as diagnosticians allowed them to dissociate from their emotions and focus on their physician role in the midst of highly charged situations. This type of focus-driven mindfulness when working amidst tragic circumstances was common to all participants. Miller explained, "you try to keep your brain on the job and keep your emotions out of it." Miller's expression was serious and pensive when he shared an example of a tragic circumstance that occurred in the ER and how he responded to it:

> You have a 40-something guy with young kids who has [life threatening episode] and you're going to talk to family, asking them for their wishes and trying to explain the situation, like it's not looking good, I don't think we are going to get him back. The kids are kind of wrapped around leg saying bring my daddy back, you know, it's some intense environments like that that stick with you. And then you go in there and do another ten minutes of futile CPR and come back and say sorry, we couldn't save him. [You] dissociate. Pretty much, yeah like it's, you can't really go in there- I don't think you can go in there and cry with them. I think I just dissociate and then process it maybe in the coming days or weeks or something.

Jacque described emotional disconnection as a physical barrier he referred to as putting up "the wall" – something that now happened automatically after working as an ER physician for over a decade. His demeanor became somber as he shared his experience of a recent vehicular tragedy that had occurred in the community, resulting in the deaths of many young athletes and members of their support team. He felt that "getting rid of" upsetting emotions

while organizing and treating these young men and women "was very hard" but necessary because he had to continue working:

> There's that wall – you have to be able to push that [personalization] out. It's not my life, it's not me, this is not my family. Every one of those patients is not me or my family…When it happens at the early part of the shift, some crappy thing happens an hour in, I still have seven hours to go. And I can't stop, I can't walk away, there's nobody else to come in. You just have to go on.

Jacque was able to continue treating the victims of the crash without feeling overwhelmed by painful emotion because he did not allow himself to relate his patients and their families to his own life, his family, or his children during that time. In short, participants used humour and a mindful "ignoring" of emotion by focusing on the patient in the moment, as ways in which they dealt with day-to-day and sometimes upsetting emotions in the ER.

Processing emotion in a safe place. Participants struggled with how to process upsetting emotions and the "cumulative stress" associated with experiencing frequent tragedy the ER. All agreed that managing feelings of sadness, grief, post-traumatic stress and/or guilt and finding some form of peace with the circumstances and their actions within those circumstances was important. Most wondered what the best way to do this was. Participants spoke about their need to clinically debrief with colleagues after a difficult patient outcome, however most agreed this did not include sharing their feelings. Chad described himself as emotionally "introverted," in part because "docs don't talk about the emotional piece, we don't train for the emotional piece, there is nothing in med school that tells you how to deal with the emotional piece, the badness." Furthermore, he declared, "I don't need or want that emotional support from the docs. It makes me feel awkward." Similarly Miller felt that "there are not a lot of places I like to get a hug." Miller explained, "I still feel like there may be some judgement out there where people agree to it in principle [sharing feelings] but if you want a shoulder to cry on you would not find that amongst all your colleagues. I think there is still some stigma about expressing your emotions… it still isn't really seen as the norm." Most participants agreed that they did not want to show emotion at work and would not feel comfortable expressing their emotions with colleagues, patients or families of patients. Max recalled a time early in his career when a patient of his died and he was tasked with letting the

family know what happened. He remembers vividly the reaction of the patient's family member:

> I remember saying this is what happened, your dad, your husband, your loved one collapsed and when paramedics got there he didn't have a heart rate and he wasn't breathing and they did this and they brought him to me and I did this, this, this and this but I couldn't bring him back and he died. I remember this [family member], it sticks with me, he was like, it's okay, I know you did everything you could…

After over a decade of thought Max still interpreted that family member's reaction as a professional failure. By conveying his emotions through body language and tone of voice Max explained that he had unintentionally elicited sympathy from the [family member] who had just lost his [loved one]. He explained that having the family feel "sorry for me" was "not what we are there for – that has nothing to do with our job."

Participants explained that figuring out how to best process the upsetting emotions which inevitably arose from experiencing tragedy on the job was difficult for them. Though all participants felt it was essential for them to "come back to it [upsetting emotions]" in order to continue their best at work in the ER, only one participant was able to articulate how he dealt with his upsetting emotions following a trauma that ended in tragedy on the job. Chad's expression was serious and thoughtful as he spoke of how he processed the "the sadness, the empathy, the sadness, the guilt" he felt after treating patients of a recent bus crash where over 15 young people died on site or in the ER. He described how he "tempered" his emotions by surrounding himself with "goodness" while simultaneously allowing himself the space to experience sadness in a safe environment:

> I don't talk that much about it. I talk with [my partner] probably once or twice and then the remainder of the processing is internal, it's just me processing it while I'm with my family. The therapeutic is that I get to go to the park with [my partner], and me and [the kids] and ride our bikes and I'm processing it as I am on my bike, watching them go down the slide or going to [an extracurricular event]…so I get to be in the good moment and slowly process the bad stuff while I am getting my goodness from my family without dumping this big burden on them…it's processing my emotions and letting myself feel them in a safe way that's not destructive. I'm feeling that sadness

while I'm having a blast with my family, so it's tempered. I'm not sitting in my room by myself crying because this sadness is overwhelming. I temper the sadness with the goodness because I get to experience it in a way that is not overwhelming.

Chad explained that he was able to think about the troubling emotions which arose from the trauma by experiencing these emotions surrounded by surrounded by his family, engaged in an activity he enjoyed, away from the intensity of the ER environment. He emphasized how important he felt it was for all physicians to acknowledge and process those difficult emotions rather than simply hope they go away.

Fostering the energy to continue working. Participants spoke of many ways in which they had learned to mentally and physically "decompress," gain perspective on what was important to them, reenergize, and find meaning in the midst of careers spanning over a decade of working as emergency room physicians. The ability to derive pleasure, meaning, and energy outside of ER work was essential to all participants' sense of well-being. For Santos this meant focusing on the positive aspects in his life and feeling gratitude for what he already had. He explained that this allowed him the perspective he needed in order to go to work every day feeling enthusiastic and grateful for having the means to be happy:

I feel like I have a very, very good life. I heard a statistic once that no matter who you ask, no matter how much someone makes, if you ask them what they would need to be happy it's 20% more…Yeah I could make more but Jesus I have everything I could possible want. To find a way to be happy with the way things are I think is really important because most people [in our profession] have it pretty good.

Almost all participants spoke of deriving energy from being able to express and experience alternate aspects of themselves through activities enjoyed alone, with family, and/or with colleagues and friends. Examples of these activities included playing hockey, running, watching Netflix, traveling and looking forward to traveling, cooking, having one or more alternate jobs, spending time with kids and family, and going "out for beers" with colleagues. The sub-themes of *feeling grateful for what is,* and *actively seeking support* discuss how participants cultivated and sustained the energy to continue working from their lives outside the emergency room.

Feeling grateful for what is. Most of the participants felt lucky to be able to do the work they loved. Many expressed feeling that they were good at their work, that they felt they made a positive difference in the lives of their patients and their families the vast majority of the time. Treating distressed, injured, or dying persons in the emergency room allowed participants to reflect on how "lucky" they were to be in a position to help those in distress. It was apparent that their experiences at work cultivated an awareness and appreciation of the positives in their own lives. Remi explained:

> I get to help people, people are generally happy to see me. I mean some swear at me and spit at me, every now and then people have taken a swing at me, but generally even those people who are doing that have a deep set reason why things are so bad in their life…I think well fuck man just think about the life he's from and how lucky we are right? To live on the east side of the city and we go home to this beautiful home, family that loves us, all that sort of stuff and these people spitting at me don't. We get to make a positive influence in the world…I have the money to do stuff so we want to go on a holiday or my kid says how am I going to pay for tuition, well it's no problem. So in terms of our lifestyle, in terms of the contribution we get to make, in terms of all that yeah, it's all golden.

Both Remi and Chad used the phrase "I get to" when sharing the events of a typical day, suggesting that they enjoyed and were grateful for many of their routine experiences. It was immediately apparent that Chad loved spending time with his family and cherished the life they had together. He appreciated the flexibility shiftwork offered him, and smiled widely as he described time with his family before and following late afternoon shifts in the ER:

> I get the day with my family, I get the day with [my partner] and we'll spend time together, get some stuff done, some shopping stuff. I'll get to play with the [kids], I'll get to have breakfast with the [kids], lunch with [one of them], and then I'll go to work. On dayshifts I don't like staying late because that means I don't get to come home and have supper with my family or I don't get to come home and play with my [kids] before they go to bed.

As with many of the participants, in addition to feeling grateful for having the means to live well Santos felt "privileged" to be able to influence the well-being of patients and their

families by "being able to share a little in someone's toughness" during their most vulnerable times. He explained that is gave him strength. Everything from sending patients home healthy to helping them die "well" was a privilege, something he felt grateful to experience:

> It's a real privilege to care for people especially when they're about to die and you can save them or help them die well or whatever. It's a real privilege and I think I feel that a lot of the time when I'm at work.

Max talked about his kids and how he was grateful that they were doing well, that his job allowed him to provide them with the opportunities needed to lead successful lives. He felt that seeing "kids who struggle at work all the time" made him realize how grateful he was to be able to spend time with his kids who were "not struggling -they're doing great." Being in close proximity to patients faced with death and dying and "worse than death" scenarios influenced Max's perspective on what was important for his own life and that of his family. He felt lucky that his kids were healthy, stating, "Yeah, they can be selfish, yeah they can be this and that or whatever but they are good kids, healthy kids, and they're going to do well in life I hope."

Taken together, participants experienced feelings of gratitude which stemmed from working with patients in crisis and recognizing their own privilege and the positives in their own lives.

Actively seeking support. Participants found energy through various support systems which enhanced their identities both within and outside of their professional roles. All spoke of the importance of "diffusing" or "going for beers" with close colleagues as essential to their work support system and their mental health. Jacque described a time when he and some colleagues "went and threw axes at the wall first, which helps manage stress and then we went for drinks." He explained that having ER colleagues who were close friends helped him feel supported in his ER role "We have a really good group, so informally we talk about stuff all the time so when somebody crashes and I'm working with Max or Chad or Adam or Santos, somebody like that, we usually do it together and walk out, talk about it." Being able to share his experiences with colleagues immediately following an "event" in the ER was important to his sense of not being alone, to his connection with colleagues, and a key part of helping him process what had just happened.

Similarly, Max found validation and support was especially significant from friends who knew firsthand the stresses associated with working in the ER. He discussed work infrequently with his spouse at home because "honestly I think it's upsetting to her." Max felt that his partner could not comprehend the gravity of his role as ER physician and sometimes trivialized his experiences which "upsets me a little bit because it's kind of important to me." Max explained how support from close colleagues "in the business" was uniquely helpful:

> So you kind of need that, a sounding board and I think having a group of friends in the same position, who have the same stresses – because they do – I think that you need that to talk these things over with. Those friendships, those kinds of peers that you are friends with, that's huge. Like the ability to take a problem and talk to someone who you know actually has a clue as to what you're talking about, that makes a big difference.

Miller suggested that talking with colleagues and friends who were in the same position, had similar work experiences and could directly understand the pressures and stresses involved in ER work normalized his experience of feeling overwhelmed at times and helped him feel less alone. He explained,

> A lot of people that you're working with are in the same boat and so there is a sense that you are trying to do the best you can in the situation for the person and that's all you can do at the end of the day. Basically everyone feels overwhelmed at some point…so it's somewhat reassuring to know that you are not alone in that sense.

The knowledge that colleagues felt overwhelmed was reassuring to Miller because it normalized the feeling of being "uncomfortable" in some situations in the ER and allowed him to continue working without interpreting these feelings as a sign of professional inadequacy.

Family was a source of energy and support for all participants. Being engaged in the roles of parent and spouse allowed participants to focus on aspects of their identities unrelated to the ER. Most felt that these roles, although challenging at times, were the source of their strength as individuals. Some participants spoke of leaning on their spouses for support when "an event" occurred in the ER, especially when the spouse worked in the health care system and was able to empathize with the challenges involved in being an ER physician. Participants

explained that it was difficult to convey the depth and nuance of their experiences in the ER to those spouses who were not directly involved in front line health care.

All participants with children found strength in their role as a parent. Max laughed as he talked about the time he spends with his kids "laughing and not laughing and yelling at them" being "rejuvenating" and explained that more than ten years into his ER career if he had to choose between being an ER physician and a parent he would choose the latter. Early in his career this was not the case because "that was my big thing – I was an ER doc right?" Now he explained, "I think you have to decide what is your priority and make that happen, and it took a decade to figure that out honestly." Max learned that his "inner strength" came from being a dad by giving him meaning outside of work - a "foundation" outside of his role as ER physician.

Similarly, Jacque suggested that his most important roles in life were those of spouse and parent. In addition to viewing his ER work as contributing to his community, he viewed what he did both at work and outside of work in the context of setting an example for his kids, teaching them how to be positive and productive members of their family, community and society. His kids teased and joked with him following the interview and he explained that much of his life outside of work was dictated by his kids activities and family outings. He spoke with a combination of loving sarcasm and pride about the accomplishments of his children and it was apparent that his role as dad was a source of strength and pride for him.

Half of the participants spoke of reenergizing by working in the ER less than full time and using their knowledge of trauma management to work in alternative contexts. For some this meant working for government organizations and/or less intensive work within rehabilitation programs. Varying work environments gave participants the opportunity to experience different contexts while working from home, in an office, and/or integrated within the community. These jobs allowed participants to spend more time at home with family, time to finish paperwork, and a break from the intense emergency room environment. Participants felt that these jobs were important "breaks" from the ER which allowed them to approach emergency work with a sense of renewal. Santos explained that he worked in the ER half time and supplemented his hours working in a less intense social environment which he felt "has a profound effect on my quality of life." He enjoyed this change of work and stressed, "I can't overstate how important this job is for that [quality of life]."

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Max held a quarter time position outside of his ER work and explained that the organization he was involved in "made me feel valued, maybe even more so than I do in emerg, and that's been very good for me. That's kind of been a renewal." The sense of value Max gained from working as a physician in another context gave him renewed energy to continue working as ER physician. For Jacque taking on another role in health care meant he reduced his ER hours to less than full time. He explained that this new role gave him the opportunity to affect change within the healthcare system, something he felt complimented his role as ER physician. Being able to influence the system was appealing to Jacque because "I don't like going to work and having capacity issues and being in that situation…helping the system as well as [the patient in front of me] and improving everything so that more people can be helped on a daily basis [is] more of a higher level look at things."

During the interview process all participants talked about concrete activities they engaged in to "de-stress", "decompress", and relax outside of the work environment. Participants felt that these activities directly contributed to their overall well-being and helped renew the energy needed to do their best work in the emergency room. For Chad this type of self-care came in the form of "adrenaline stuff" which he engaged in on a routine basis - physical activities such as diving, soccer, extreme sports, and ski holidays. Building enjoyable and intensive activity into his weekly schedule allowed Chad to release physical and emotional stress on a routine basis so it didn't build up and feel unmanageable:

> It's what I grew up doing so for me that's fun, that's my stress release and I need to have that it my life. I think it makes my job less stressful, or, that's not even the right word.
>
> Well maybe that's why my job isn't stressful. Maybe that's why I don't see my job as stressful because I get all that out…I get my sports, I get my stress relief outside of work so when shit hits the fan I'm starting at a point of no stress, so I'm ramping it up but it doesn't matter because I'm not getting overwhelmed.

Unlike Chad, Miller naturally shifted to quiet time after working ER shifts many days in a row, feeling that he would like to exercise and do more "productive" things but needed the time to reenergize in a solitary environment:

> I like to do active things, see friends – I don't do enough of it but I like to exercise, go

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for runs, go for skis. It just energizes you. I'd like to start doing yoga again, but I've been saying that for a while. I wish I did more. If I do four shifts in a row my brain is fried…I'll just kind of hang out, read stuff on the internet, watch a bit of TV and like take the dog for a walk. It takes me a while to bounce back energy wise.

For Remi "a half hour to myself here and there" was enough for him to renew the energy he needed to continue with his work life. He explained "I like exercising and I try to exercise every second day or two days out of three because I find that's a break. Put all that aside and I work [doing chores at home]." Remi found that checking his emails and doing paperwork that had piled up "would make me feel better because I'll catch up." In this way he defined being able to "cross it off the list" of things he needed to do as a form of self-support.

Taken together participants identified many ways in which they actively sought support from others and engaged in self-care and self-support activities. Whether it was finding strength through family relationships, friendships with those who "were in the same boat", deriving meaning from working in alternate contexts, or engaging in self-care activities, participants were able to mobilize support for themselves. Their ability to do this appeared to contribute to their individual capacity for resilience in the ER.

Chapter Five: Discussion

The purpose of this research was to explore the lived experiences of resilience in ER physicians. Substantial data on the stress and resulting burnout associated with working as a front-line health care provider exists, with less focus on how physicians such as those working in the emergency room continue to do the work they do on a long term basis (de Boer, Lok, Verlaat, Duivenvoorden, Bakker et al., 2011; Laposa, Alden, & Fullerton, 2003; Sansbury, Graves, & Scott, 2015). This study aimed to address this gap in knowledge by exploring resiliency through the lived experiences of emergency room physicians.

Data from in-depth, semi-structured interviews with six participants who were practicing ER physicians at the time of the study was analyzed and six major themes were identified. Through exploration of the lived experiences of resiliency for these participants. the overarching theme of *building resilience* evolved as a broad, dynamic concept which tied together six major themes: managing the workload, confidence as a process, deriving meaning from traumatic life experiences, controlling what you can, emotional processing, and fostering the energy to continue working. In the first theme, managing the workload, participants described how they made a mental plan at the beginning of a shift , approaching the work ahead as a fight, challenge, or race to prepare themselves for the challenge. In the second theme, confidence as a process, participants described how self confidence in their abilities fluctuated depending on their performance in the ER. They derived energy and a sense of accomplishment from treating patients and witnessing their improvement, at times struggling with how to deal with injustice and tragedy, arduous self-evaluation, and negative patient outcomes influenced by their decision-making or behaviour. In the theme deriving meaning from traumatic life experiences participants shared how their own personal losses had in some way contributed to their strength and understanding both at work and outside the workplace. The fourth theme, controlling what you can, evolved as participants spoke of how they dealt with those aspects of their work that were both within and outside of their control. It became evident that using creative methods to solve challenges that would otherwise be frustrating to participants was important to their sense of being able to continue working in the ER. The fifth theme that arose from the data was emotional processing. Here participants explored how they used humor and role focused mindfulness to deal with emotions while working in the

emergency room. In the sixth and final theme, fostering the energy to continue working, participants felt grateful for what they had and were able to actively seek support on an ongoing basis.

During the interviews participants spoke in detail about the challenges they faced on the job, the triumphs and regrets they experienced, the confidence built, lost, and regained over time. They talked about how they were able to continue to do the work most felt they loved, and how they found purpose and satisfaction in the process. They talked about what it meant to be able to help patients in their time of need, knowing they were good at their jobs, and appreciating that what they did was important and made a difference to others. Participants described how these positive elements of doing ER work existed alongside feelings of sadness, regret, loss of confidence, and the knowledge that they were human and therefore limited in what they could do for their patients. They understood what it meant to be resilient nuanced ways, based on their own worldviews and professional experiences, and shared how they attempted to frame their internal and external environments in order to create their own sustainable work conditions.

The following chapter focuses on how the findings of this study relate to recent literature on the lived experiences of resilience in ER physicians. The strengths and limitations specific to this research are discussed, followed by recommendations for future study and implications for practice.

What is Resilience?

Recent definitions of resiliency in the literature agree that it involves processes which are complex, dynamic, multifaceted, developmental and dependent on the life context of the individual (Greene, Galambos, & Lee, 2008; Jackson, Firtko, & Edenborough, 2007; Jensen, Trollope-Kumar, Waters, & Everson, 2008; McCann, Beddoe, McCormick, Huggard, & Kedge et al., 2013; Southwick, Bonanno, Masten, Panter-Brick, & Yehuda, 2014). The results of this study support these findings. Participants experienced resiliency as the process of being able to continue to find satisfaction in their work, do their best, and not allow negative experiences to "break" them. This is consistent with physician definitions of resilience in the literature as "a dynamic, evolving process of positive attitudes and effective strategies" (Jensen, Trollope-Kumar, Waters, & Everson, 2008, p. 772) and; "the ability to invest personal resources in a way

that initiates positive resource spirals in spite of stressful working conditions" (Zwack & Schweitzer, 2013, p. 382). How participants experienced their work and made meaning of resilience in their challenging work is described below.

The Overarching Theme: Building Resiliency

In this study participants shared how they perceived and experienced resiliency in the context of their ER work. All described points in their careers when they questioned whether they were fit to keep working, and even *if* they wanted to go on. They knew they were resilient because they were able to go to work and continue to feel a sense of accomplishment and connection with their colleagues and patients after more than a decade without being "broken." Participants shared experiences of *how* they continued working and finding satisfaction in the fast-paced and challenging ER environment for many years. Six themes emerged from these stories and provided valuable understanding of how participants experienced their resiliency given the challenges involved in decision-making and treating patients and families in crisis. These include: managing the workload, confidence as a process, deriving meaning from traumatic life experience, controlling what you can, emotional processing, and fostering the energy to continue working. The relation of each theme to current literature on resilience in primary health professionals is described in the sections below.

> **Managing the workload.** Participants described how surveying their work environment helped them set realistic expectations of themselves on each shift. For example, they described noticing the number of patients in the hallway and nursing staff stress level, and used this information to govern their own expectations, pace, and actions on shift. Preparing at the beginning their shifts was essential to knowing what they were "up against" and allowed them to reduce frustrations associated with unrealistic expectations of themselves, their colleagues, and the department. Participants descriptions supported the broad findings of a qualitative study which explored the dimensions of resilience in family physicians. Here Jensen et al. (2008) found that a key area of physician resilience was management style, including organization of time at work. The finding that ER physicians manage how they spend their time and adjust their expectations and behaviours based on an immediate assessment of their specific workload and environment supports the idea that planning for the work ahead and time management are factors affecting personal resilience in ER physicians.

Adopting a positive and proactive outlook on how to manage their workload in real time was key to participants' ability to continue working in a sustainable way. This broad finding was consistent with a number of studies on what contributed to resilience in primary health professionals (Matheson et al., 2016; Jackson et al., 2007; Jenson et al., 2008; Zwack & Schweitzer, 2013). In a study of 200 German physicians varying in age, career span, and discipline, Zwack and Schweitzer (2013) found that a focus on positive aspects of work contributed to resiliency and decreased the potential for burnout in physicians. This finding is consistent with the experiences of participants in this study where the majority approached shiftwork in a positive, energetic manner - as a race, a challenge, a fight to be won. Leaving their patients and the department in better condition after a shift meant the race had been successful, the challenge met in that moment.

Confidence as a process. Participants in the current study experienced confidence in their work and their identities as ER physicians as a fluid and shifting developmental process with setbacks and successes influencing perceptions of their own professional competency. Consistent with previous research involving primary health care professionals (Matheson et al., 2016), the findings of this study suggest that participants' ability to persevere through fluctuations in confidence contributed to their personal resilience in the workplace. Zwack and Schweitzer (2013) found that gratification from medical efficacy, in the current study "getting the win," gave physicians from many disciplines feelings of success, professional satisfaction, and strength and energy for their participants. Reiter (2011), an emergency physician himself, suggested that the instant gratification he felt from making an immediate positive difference in the lives of patients and families made him feel like a *real* doctor. The direct and rapid patient response to his treatment built confidence and energy for him, and was a major advantage of emergency medicine. Reiter's (2011) experiences are consistent with the findings of this study, where ER participants described how their own confidence was boosted in the emergency department when positive interactions and outcomes were the result of decisions and actions made by them.

Many participants felt that loss of confidence was inevitable in their line of work, however most felt that a sustained loss of confidence in their professional abilities would

result in them leaving emergency medicine. When participants made a significant medical error they questioned their professional competency, spoke about their internal dialogue, and described reaching out to colleagues for advice, learning from mistakes, and leaning on significant others to help evaluate their own competency and cope with their emotions. Studies of primary health care providers broadly support this finding (Tugade & Fredrickson, 2004; Zwack & Schweitzer, 2013). For example, Zwack and Schweitzer (2013) found that proactive attempts at accepting responsibility and regaining confidence when treatment errors and complications transpired amplified resiliency in family physicians, psychiatrists, surgeons, and other medical disciplines. Other studies suggest that failing to adequately deal with medical errors results in decreased resilience in physicians (Wears & Wu, 2002). Participants in this study found that they lost confidence in their professional abilities when medical errors occurred due to their actions. They were able to process this loss and move forward after some time when they engaged in self-reflection and received support from colleagues, family, and friends. It is important to understand that taking responsibility for their mistakes and processing loss of confidence and/or life of a patient due to a mistake did not necessarily mean recovering fully from the loss. A few participants explained that moving forward meant being changed forever by these circumstances and still being able to find purpose and satisfaction in their ER role.

Deriving meaning from traumatic life experience. Over half of the participants felt that their strength, in part, originated from the internal knowledge that they survived the loss of a close loved one, and therefore were strong enough to survive almost anything experienced in their profession. To my knowledge there are no studies to date which explore the impact of past personal trauma (e.g., divorce, loss of a parent, sibling, spouse, or child) on the resilience of emergency physicians. The effects of personal loss or trauma on personal resilience in ER physicians and those in helping professions might be explored in order to better understand how these 'at risk' individuals view and experience their resiliency at work.

Controlling what you can. There is a widespread body of literature on the stress mediating effects of feeling a sense of control in the workplace, and the detrimental effects of feeling a lack of control in a variety of health-related work environments (Dollard, Winefield, Winefield, & Jonge, 2000; Pierce, O'driscoll, & Coghlan, 2004). I was able to find three

studies which mentioned how control in the workplace impacted on resilience in family physicians and nursing staff (Jensen et al., 2008; Matheson et al., 2016; Zwack & Schweitzer, 2013), and no studies relating to resilience and the role of control in ER physicians. The broad findings of the three studies on physician resilience were consistent with this study's findings on how taking, relinquishing, and finding control contributed to resilience in emergency room physicians. For example, Zwack and Schweitzer (2013) interviewed family physicians and discovered that certain practices and routines such as having control over work hours and schedules, setting and accepting personal boundaries, prioritizing ones' basic needs, problem-solving, and taking a third person perspective to create inner distance when needed, allowed family physicians to cultivate and maintain resilience in their profession. Matheson, Robertson, Elliott, Iverson, and Murchie (2016) explored physician resilience in rural areas of deprivation and found that being able to initiate problem solving in difficult situations was important to the development and maintenance of resilience in family physicians. A potential parallel between rural physician practice and ER physicians is the demand on the physician to be prepared to manage any and every medical issue. Findings of this study support the idea that problem- solving is essential to physician resilience. Participants in this study experienced circumstances in their roles as ER physicians which were under their control as well as those in which they were able to find or create some degree of control. These included setting personal and professional boundaries for themselves and creatively ameliorating situations such as patient anger due to wait times and overcrowding. Having control and feeling a sense of personal control was essential to their resiliency in the emergency department. Additionally, being able to identify those things which were outside of their control and relinquish some degree of responsibility for these circumstances was necessary in order for participants to continue working amidst the ever-increasing workload, suffering, and overcrowding due to lack of space and resources in the ER. Jensen et al., (2008) found that this acceptance of human limitations was essential to family physician resiliency. This manner of creating inner distance from suffering by adopting a third person perspective was noted as important to resilience processes in family physicians (Zwack & Schweitzer, 2013).

Emotional processing. Participants spoke of the need to distance, disconnect, detach, and/or disengage themselves from distressing or challenging emotions in order to focus on their diagnostic and treatment roles as ER physicians. This manner of mindfulness, focusing on

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the role and ignoring distressing emotion, was consistent with studies on how primary health-care providers learned to cope with emotion during crisis (Shapiro, 2012). Additionally, in the current study participants used humour to reduce stress and build social cohesion. This experience is consistent with other physician accounts that sharing laughter and releasing emotion through humour at work contributes to work satisfaction and in turn, resilience (Matheson et al., 2016).

While a few studies focus on how physicians manage emotion in their work, I did not find any which outline how physicians including ER physicians process difficult emotions outside the workplace. In this study one participant was able to articulate this process which for him evolved from self-reflection and investigation, reviewing the issue with

trusted colleagues who were also friends, and sharing with a partner, allowing himself to experience emotional pain, while at the same time engaging with loved ones in an enjoyable, safe environment.

Fostering the Energy to Continue Working. As ER physicians, participants were directly involved in the care and treatment of patients and families in crisis. Being in close proximity to those in distress promoted participants' awareness of how lucky they were to be healthy and have families who were healthy and in no immediate distress. In addition, they described feeling grateful for the opportunity to earn the means to live a privileged life with their families. Existing research on the relationship between gratitude and resilience supports the finding that gratitude contributes to resilience in health-care professionals (Bird, Martincheck, & Pincavage, 2017; Cook, Doust, & Steele, 2013; Nedrow, Steckler, & Hardman, 2013; Zwack & Schweitzer, 2013). For example, in a qualitative study of resilience in physicians from numerous disciplines, Zwack and Schweitzer (2013) found that being able to *appreciate the good things* was an attitude key to building and maintaining resilience in their participants.

Participants described how they continued to find satisfaction in their roles as ER physicians and talked about actively engaging in support from others and finding enjoyment in activities outside of the workplace. Consistent with previous research (Jenson et al., 2008; Matheson et al., 2016; McCann et al., 2013; Zwack & Schweitzer, 2013) mobilizing supports and initiating activities which promoted self-care helped participants in this study

maintain their personal resiliency. According to Zwack and Schweitzer (2013), who explored the resilience strategies of experienced physicians, cultivation of relationships with family, friends, and colleagues provided physicians with relaxation, a break from work, increased feelings of connectedness, and reduced feelings of professional insecurity. Likewise, Jensen et al. (2008) found that regular vacation time, recreation, and exercise helped build family physician resilience, a finding consistent with participants' experiences in this study. Studies suggest that strong managerial support is an important promoter of resilience in health care professionals (Matheson et al., 2016). Interestingly, participants in this study viewed managerial support as a barrier to their personal resiliency in the ER. Many felt unsupported by the leaders in health region administration. Participants felt they oversaw the ER department despite administrative leadership rather than with the help of it.

Strengths and Limitations of this Research

This research had numerous strengths. First, use of IPA to explore the lived experiences of resilience in ER physicians resulted in rich, nuanced data in which participants used their own voices and words to share in detail how they were able to find satisfaction and sustainability in their challenging work. Semi-structured interviews facilitated participants description of what they felt was important, while use of active listening and empathic responding allowed me to dig deeper into participants realities, perceptions, attitudes and lived experiences (Dowling, 2005). By using a small, homogeneous sample of participants I was able to focus on the phenomenon, the lived experiences of resiliency, without being overwhelmed by the data. The *emic* perspective and inductive nature of the data collection allowed participants to explore what was meaningful to them without having the researcher guide the framework in which their experiences must fit (Dowling, 2005; Smith & Osborne, 2003).

Second, apparently no qualitative research on ER physicians and how they continue working in their challenging environments exists, therefore the findings of this study add essential and unique knowledge to the area of resilience in this population of physicians. Specifically, this research addressed a gap in the literature on how ER physicians experience resilience in their work and professional lives. In doing so these findings contributed to the narrow knowledge base in this area where past research has focused largely on stress and

burnout among family physicians and ignored the experiences related to physician resiliency in the ER (Fernandes et al., 1999; Healy & Tyrell, 2011; Johnston et al., 2015).

Third, participants in this study were positively impacted by participation in the interview process. The majority were eager to share stories of how they became physicians, how their families influenced who they were, and how they experienced their work and their home lives.

Many of the participants expressed relief at being able to share their experiences of trauma, frustration, resilience, and success as ER physicians. Participants explicitly stated that they enjoyed or otherwise received some benefit from being able to talk about themselves, being able to spend ninety minutes without worrying they were talking too much about their own experiences. Participants also expressed appreciation for the opportunity to talk about challenges while focusing on the positives, particularly how they continued to deal with them, moved forward, and found satisfaction and sustainability in their work as ER physicians.

Finally, although this research is based in the principles of positive psychology, this study allowed participants to share their personal histories of trauma, frustration, loss and stress in relation to the positive and often innovative ways in which they both cultivated and experienced personal resilience in the workplace. I believe this study is unique in that participants were able to delve deeply into how they experienced resilience because they were provided the space to express the challenges which necessitated this need for resiliency. It was apparent that sharing on this deep level allowed participants to revisit their thoughts, feelings, and actions organically rather than focusing immediately on the positive aspects of their work. The resulting data was rich, detailed, and well-rounded in both depth and scope.

Limitations of the current study are threefold. First, use of the IPA approach necessitated that the findings of this research can rigorously be applied to the six emergency physicians who participated and not necessarily the general population of ER physicians in Canada or to emergency responders such as paramedics and nurses. The relatively small homogeneous sample of participants reduces variability within and between participants and therefore inevitably makes transferring findings less accurate. As such, the aim of this study was not broad transferability, but rather rich, deep exploration of the lived experiences of resilience in emergency room physicians.

A second limitation relates to the sampling method that was used to recruit participants. A participant recruitment poster was displayed on the walls of physician lounges in the emergency departments of three hospitals in the city. The first two physicians who volunteered to participate replied to the poster and contacted me, while remaining participants may have been informed of the study by those who had completed interviews and had a positive reaction to the process. Because some participants were colleagues and friends who worked closely together, variability in the participant pool was likely reduced, a factor that inevitably occurred to some degree because small, homogenous samples of participants were used.

Finally, as a result of my spouse being an ER physician in the city, I was acquainted with some of the participants before beginning this research. This may be viewed as a potential limitation, as it is possible that our prior acquaintance may have affected participants' comfort level in sharing their genuine feelings, experiences, and actions during the interview process. It is also possible that some ER physicians did not volunteer for the study because they knew me, or knew I was the spouse of a colleague. Additionally, some participants made assumptions about what I knew and understood as the spouse of an ER physician. These assumptions were noted and addressed accordingly during the interview process with the respective participant.

Theoretical Implications

There are three main theoretical implications of the current study. First, the resilience framework borne from this study contributes unique knowledge of how ER physician participants experienced personal resilience at work. In a review of existing personal resilience theories, Fletcher and Sarkar (2013) suggested that two core attributes were common in most theories of personal resilience: the presence of adversity, and the individual's ability to positively adapt to adversity. The findings of this study support these core attributes as being part of personal resilience for ER physicians. Furthermore, the findings from this study suggest that participants described adversities as a traumatic life events, and also as challenges, frustrations, and difficulties experienced on a regular basis in the ER. Resilience theories might include a broader perspective on what constitutes adversity for specific participants, and how perceptions of the nature of adversity relate to participants' thoughts of their own resilience.

Second, in a recent study, Matheson et al. (2016) outlined a theoretical framework related to resiliency in health professionals. The authors identified three key themes associated with resilient health care providers: personal characteristics, workplace characteristics, and social network. The framework is depicted below.
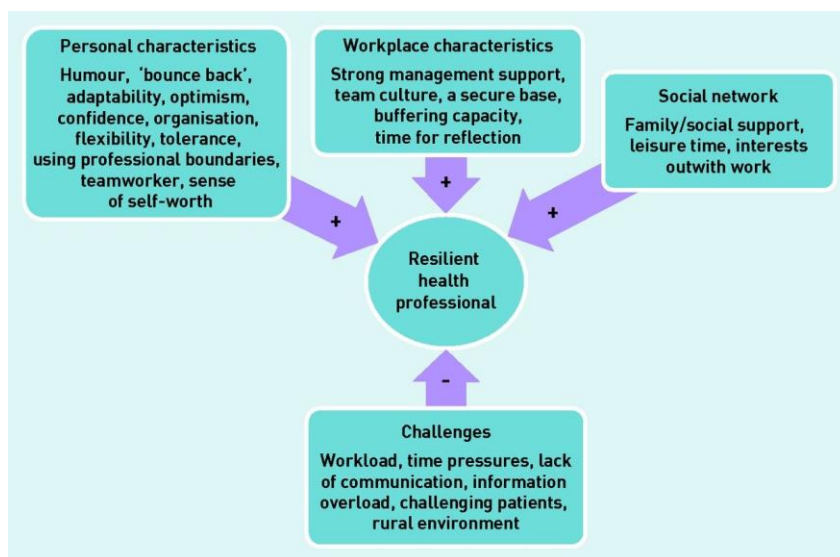
A model of health professionals' resilience in primary care. Matheson, Robertson, Elliot, Iverson, & Murchie (2016)

The content of these themes were largely congruent with those found in this study, however this study adds a unique perspective on how ER physician participants experienced confidence as a dynamic, evolving process influenced by numerous circumstances. Additionally, this research expands on the above theoretical framework by considering how ER participants' past trauma influenced their perceptions of personal resilience, and how ER physicians' philosophical views of suffering and human limitations influenced their resiliency at work. These unique areas of knowledge contribute to theoretical conceptualizations of resilience in health care professionals, specifically ER physicians.

Finally, the findings of this study appear to fit well with the theoretical underpinnings of constructivist self-determination theory (CSDT; Saakvitne, Tennen, & Affleck, 1998). CSDT is a broad framework borne from trauma theory, which focuses on a developmental view of trauma and growth. CSDT integrates psychoanalytic, social learning, constructivist,

and cognitive development theories to emphasize the cultural, developmental, and social contexts related to individual experiences (Saakvitne et al., 1998). CSDT has been used to explore the process of *thriving* in the literature, a process determined by a person's capacity for resilience (Ledesma, 2014), and defined as "the effective mobilization of individual and social resources in response to risk or threat, leading to positive mental or physical outcomes, and/or social outcomes" (Ledesma, 2014, p. 3). The findings of this study suggest that CSDT may be useful as a lens through which resilience may be studied, as the theory suggests that personal responses to trauma, and perhaps adversity in a broader sense, are determined by the specific meanings ascribed to the adversity, experiences related to identity and self, developmental stage, biopsychosocial resources, relational experiences and expectations, and the person's sociocultural and socioeconomic background (Nishikawa, 2006). In this study, ER participants described adversities and their lived experiences of resiliency in relation to the meanings they ascribed to particular adversities, as well as in relation of their identities, developmental stages, relationships, expectations, biopsychosocial, and cultural backgrounds.

Implications for Future Research

There is a dearth of qualitative research on how ER physicians experience resilience in their profession. The majority of studies in this area have focused on factors related to stress and burnout among family physicians, nurses, and other helping professionals (Iannello & Balzarotti, 2014; Laposa, Alden, & Fullerton, 2003; Moskop et al., 2009; Wrenn et al., 2009). Some ER physicians experience burnout due to the high physical and mental and emotional demands of their work (Healy & Tyrrell, 2011), however there are many ER physicians who find satisfaction in their work while living with the suffering they witness, and even experience, on a routine basis in the ER (Reiter, 2011). Until this study, few if any qualitative studies have explored the lived experiences of resilience in experienced ER physicians who were formally trained in ER medicine. The need for research in this area is apparent in order to further explore how ER physicians continue to find satisfaction and remain working in their challenging professions. Some questions for future research include: How does personal trauma impact on ER physicians' ability to find strength and resilience? What shapes the worldviews that help ER physicians rationalize suffering? How do personality factors influence longevity in the ER? How do ER physicians navigate work-life balance and continue to do shiftwork? There are many questions that require exploration and findings that require replication and further

investigation.

Future research on how best to incorporate the findings of studies such as this one must be conducted in order to address important areas of content lacking in current training, education, and professional programs for medical students and emergency residents. Preparation for practice taught during medical school and residency fails to include material on how to foster personal resiliency beyond informing students that poor sleep and nutritional hygiene negatively impact their health and wellbeing (Machi, Staum, Callaway, Moore, Jeong, Suyama, et al., 2012). Physicians are taught to report substance use, minimize exposure to infectious diseases, and avoid litigation (Schmitz, Clark, Heron, Sanson, & Kuhn et al., 2012). The content of new training initiatives and how they are taught needs to be created based on data from future research on how experienced ER physicians have learned to build professional boundaries on the job, find control through innovative problem-solving, make sense of suffering while focusing on their ER role, and rebuild confidence while living with regret after a medical error. Additionally, research which focuses on how medical students and those in an emergency medicine residency might respond to specific training and educational initiatives geared towards cultivating their personal resilience in the workplace would ensure that new initiatives were effective.

Implications for Practice

Findings from the current study can be used to implement individual and systemic initiatives to aid ER physician resilience, change the health care culture and system for the better, and improve the sustainability of this challenging career. By focusing on positive and often innovative ways of fostering resilience, these participants have provided the reader, the public, and their employers with a better understanding of what ER physicians experience at work and after work on a daily basis. Understanding how they process these experiences and cultivate ways to increase their personal resilience within an imperfect, under-resourced, and often overwhelmed health care system is essential in order to understand how changes in the system can evolve to support resiliency in ER physicians.

Results from this study, supported and supplemented by future study, may be used to develop training material for medical students and ER medical residents. For example, medical students might benefit from learning about the unique demands of ER work before applying

for the residency program. ER residents may systematically explore the importance of surveying and organizing the workload before setting expectations, establishing professional boundaries, taking ownership of that which is under their control, considering personal philosophies of suffering and why they do what they do, how their past has affected their approach to the ER role, and learning where and how to express emotion. Teaching resilience has been identified as important by medical clinicians, however this area of knowledge and training continues to be ignored in the academic medical curriculum (Howe, Smajdor, & Stockl, 2012). Establishing the legitimacy of conversations such as these may help ER physicians and first responders in general learn and value the dynamic, lifelong processes, attitudes, and actions involved in personal resiliency.

The findings of this study suggest that the existing health-care system may benefit from integration of systematic professional support for ER physicians on a daily basis as opposed to the current system which responds with incidental support following a major tragedy. Participants expressed feeling relieved after engaging in the interview process, having shared not only upsetting experiences, but how they experienced the personal resilience which allowed them to continue working with a sense of satisfaction. In addition, they described actively seeking informal support and the importance of being able to share experiences and knowledge with respected colleagues. Many felt there was no psychological space for this kind of engaged dialogue in the ER on a routine basis, and particularly after upsetting occurrences. According to participants, small scale day-to-day incidents remained unaddressed on a systemic level, leaving ER physicians to find support on their own. Establishment of a health-care protocol where diffusion and support after any incident was routine would benefit all ER physicians and increase personal resilience by allowing conversations to happen in the moment. Having a mental health professional on site and integrated into the ER team, present and available during times of strength and of need, would allow ER physicians to confidentially share their work and home experiences with a member of the ER team and hopefully find some relief in this process. Informal peer support was also described as essential to the building and maintenance of participants' professional security, confidence, and mental health. It is apparent that ER physicians would benefit from a routinely scheduled, inclusive social activity, giving them the opportunity to discuss professional experiences, bond in a safe space, and confide in their peers when needed.

Conclusion

Emergency physicians work in an environment characterized by crisis, witnessing and treating patients and families in distress on a routine basis. Still, many love doing what they do, and are able to find satisfaction and longevity in their careers. Existing literature focuses largely on stress and burnout in varying physician populations, with little attention given to the lived experiences related to resilience in these professionals. To address this gap, this study explored the lived experiences of resiliency in ER physicians.

Results from this study revealed that participants cultivated and maintained personal resilience by using processes which helped them find both satisfaction and longevity in the challenging ER environment. Participants shared animated and often detailed accounts of how they attempted to create and maintain their own resiliency; embedded in these descriptions of participants' experiences was the overarching theme of *Building Resiliency*, which reflected the dynamic ways in which participants created and experienced their own resiliency. Six sub-themes stemmed from the overarching theme, including managing the workload, confidence as a process, deriving meaning from traumatic life experience, controlling what you can, emotional processing, and fostering the energy to continue working. Participants made a mental plan of how to approach their shifts and tackled their work with energy, viewing it as a challenge. They derived confidence from knowing they had the knowledge and skills which allowed them to make an immediate and direct positive impact on the lives of their patients and their families. All participants acknowledged that being human meant being imperfect, and many of them struggled with this, especially in rare occasions when their actions led to negative patient outcomes. Rebuilding confidence following a significant mistake involved a long and arduous process in which participants questioned their competencies and their identities as ER physicians, leaned on their partners, and used trusted colleagues as sounding boards. Over half of the participants described how previous personal losses had shaped or strengthened their capacity for resilience. Many shared the view that universal suffering was inevitable and infinite; being able to alleviate that which could be alleviated was the role of the ER physician, but; ownership of suffering in the broader sense was not. Participants felt that treating each individual and each family gave them a sense of purpose; they found strength in the knowledge that they were able to do this. In the work environment, participants described the importance of setting boundaries for themselves, while providing themselves with the

opportunity to creatively solve otherwise unsolvable challenges in the ER. Creative problem-solving was a key process which positively influenced participants' sense of efficacy and control. In other words, reframing how they viewed barriers such as overcrowding, a problem they could not control, was key to changing their approaches to the problem. For many participants, a routine shift involved using dark humor with the ER team, which; was key to releasing emotion, sharing experience, and creating the sense of an 'ER family.' Participants found it difficult to process their emotions after particularly distressing incidents in the emergency room. Those who were able to process troubling emotions did so in a safe environment outside of the ER. Participants actively practiced self-care by making time to do activities they enjoyed and by seeking socialization, friendship, and support from colleagues, family, and friends. Taken together, the results of this research shed light on the dynamic, evolving ways in which ER physicians experience personal resilience in their challenging work.

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Attention: Emergency Physicians Currently Practicing in Saskatoon

You are invited to participate in a qualitative study exploring your ***lived-experiences as an emergency physician and the meaning of personal resiliency*** in your professional lives. This study has been approved by the University of Saskatchewan Research Ethics Board.

Volunteers will be asked to:

- Participate in one 90 minute interview where you will be invited to share thoughts on what you experience in your practice on a day-to- day basis and how you experience personal resiliency in your profession.

Little research has been done in this area and the knowledge you choose to share will inform emergency room physician wellness by helping others better understand how you adapt to the challenges you face in your day-to- day work as an ER physician.

For more information about this study please contact the student researcher at the telephone number listed below. Thank you for your time. Sincerely,

Anu Belgaumkar, Graduate Student

Department of Educational Psychology,

(306) 291-2109

Appendix B: Initial Contact Telephone Script

The Lived Experiences and Meaning of Resiliency In Emergency Room Physicians

Hello. To whom am I speaking? Hi   , thanks for your interest in the study. Let me introduce myself. My name is Anu Belgaumkar and I am currently enrolled in a Masters program in the department of educational psychology. I'm looking for practising ER physicians to participate in a research project I'm doing as part of my degree. I assume you saw the participant recruitment bulletin in the RUH ER physicians' lounge? Shall I jump in and tell you a bit more about the research or do you have questions you'd like to ask up front?

I am hoping to speak with ER physicians about how they experience their work and what personal resiliency means to them. The results from the study would help others understand what ER docs go through on a regular basis, and how their experiences of resilience influence their professional lives. There is a hope that the findings can also shed light on what is important to ER physicians and how employers can recruit, retain, and support physician wellness.

If you decide to volunteer for the study you'll be asked to take part in a 90 minute interview which will focus on your own experiences as an ER doctor, how you deal with/adapt to challenges on a day-to-day basis, and the meaning and role that resiliency plays in your life (define resiliency as adaptation in the face of adversity). I plan to record the interview for accuracy, and this audio recording and all transcripts and analysis would be confidential meaning you, myself, and my supervisor would be the only ones with access to the raw data. I will be reporting the results in aggregate form so you will not be identified based on the information you share in the interview. Do you have any questions or comments so far?

Do you think you would be interested in volunteering for the study and sharing some of your experiences as an ER doctor and how resiliency plays a role in your professional life? If so, let us schedule a meeting time that is convenient for you. I am booking a conference room close to the health sciences library so there will be a private space to do the interview, but we can meet somewhere else as long as it is a private area to ensure confidentiality. My priority is that you

feel comfortable sharing your experiences. At this time I will give you a consent form to review and go through all the details of the study and you can decide whether you want to do the interview after that. If you do, I'll ask you to provide written consent to participate and we will proceed with the audio-taped interview. Remember your participation is strictly voluntary, You have the right to refuse now, or withdraw participation for any reason until the data analysis is complete. If this happens I will delete or shred any information you might have already shared. Everything you need to know about the study is outlined in the consent form, which I'll bring with me if we meet.

Yes – proceed as indicated

No – Thank you for your interest in this research. Take care.

Thoughts? Questions or concerns which I have not

addressed?

The Lived Experiences and Meaning of Resiliency In Emergency Room Physicians

You are invited to participate in a qualitative study exploring *The Lived Experiences and of Resiliency in Emergency Room Physicians* currently employed in Saskatoon, SK. Please review this form carefully and feel free to direct any questions or comments you might have to the student researcher listed below.

Researchers: Anu Belgaumkar, Student Researcher, Graduate Student in the Department of School and Counseling Psychology (arb132@mail.usask.ca; 306-291-2109), **Stephanie Martin, Principal Researcher**, Associate Professor and Graduate Chair (stephanie.martin@usask.ca; 306-966-5259).

Purpose: It is well known that emergency room physicians experience stress and burnout in the workplace. Many studies focus on exploring antecedents to stress and burnout, while few explore the lived experiences of resiliency among emergency physicians. As a result, we know more about the stress, strain, and challenges associated with the job than we do about how ER physicians adapt in the face of challenge and adversity – a process known as resiliency. This study will help provide a deeper understanding of the lived-experiences and meaning of resiliency in emergency room physicians. Knowledge gained from this study will shed light on the day-to-day experiences and of ER physicians and how they respond to challenges in their professional lives. Findings will elucidate issues related to physician wellness and job satisfaction. This information is crucial at this time when recruitment and retention of ER physicians continues to be of interest to employers. On a broader scale, the findings from this study may inform a wellness model to be used in the recruitment and retention of ER physicians in this city/province.

Procedure: Participation involves one 90 minute interview which will be scheduled based on your availability. To ensure privacy and confidentiality, the interview will take place in a locked conference room beside the health sciences library. You will be invited to share information relating to your work as an ER physician and your thoughts on how personal resiliency plays a role in your professional life. At the end of the interview you will be invited

to amend, omit, and/or add to the information you have shared in the interview based on your comfort level. To ensure accuracy the student researcher will digitally record and transcribe the interview. This data will then be analyzed and reported in aggregate form. In some instances the student researcher will email you and request your input regarding the accuracy of the interpretations made by the researcher.

Potential Risks: This study invites you to reflect on your experiences as an ER physician and the meaning of resiliency in your professional life. It is difficult to speak of resiliency without speaking of the stressful circumstances that necessitate resiliency, therefore it is likely that you may choose to discuss personal circumstances which might elicit emotional discomfort during the interview process. During times like these the researcher will let you know that she can slow the interview down, 'check in' with you by encouraging you to share what you are feeling, stop the interview, and/or stop recording at your request. A 'check-in' and debriefing session at the end of each interview will provide you with the opportunity to reflect on what you have shared and address questions concerns which may have arisen during the interview process. If you wish to speak to a qualified mental health professional, please contact one or more of the following counselling supports listed below.

Brenda Senger – Saskatchewan Medical Association Physician Health Program: (306-244- 2196) or (1-800-667-3781).

Stephen Boechler, Ph.D (RPsych) at Crossroads Therapeutic Solutions – (306)665-6661 Lana Shimp, Ph.D. (RPsych) at Chartier Arnold Brock Shimp – (306)664-6647
 Potential Benefits: Participation in this study may promote positive reflection and increased understanding of your own experiences as an ER doctor and how the process of resiliency manifests itself in your professional life. Findings from this study have the potential to inform other physicians, friends and family, employers, the public, and all those who are invested in the health and wellness of emergency room physicians. Additionally, understanding ER physicians' perceptions of resiliency as it is related to health and wellness may help employers and administrators support and promote resiliency through individual and systemic means.

Privacy and Confidentiality:

  Contact information. Your contact information will not be shared with anyone and will be known only to the student researcher. The email address and telephone number you use to contact the student researcher are accessible to the student researcher only. Both are locked with security codes known only to the student researcher. The cellphone will be with the researcher at all times and will never be accessible to anyone else during the course of this research.

  Interview Data. The information you choose to share in this study will remain confidential through use of a number of strategies. The interview will be conducted in a locked conference room in order to ensure your privacy. The researcher will specify that participants are currently employed as ER physicians in the city of Saskatoon, however actual ER departments in the city will not be identified. You will be invited to choose a pseudonym which will be used throughout your interview transcript. The student researcher will be the only person with knowledge of your identity. No identifiers (proper names of the participants, names of colleagues, specific places or events which may identify you) will be used in the transcripts or in the reporting of data. The information you share will be reported in aggregate form and will not include details which may identify specific individuals. When quoting individual participants, pseudonyms will be used. Data will be reported anonymously, focusing on themes and interpretations of the processes involved in resiliency as described by the participants.

  Data Storage. The digital recordings will be used by the researcher to transcribe each interview verbatim. Transcripts of the interviews will be stored in a locked filing cabinet in the researcher's office. The student researcher and supervisor will be the only individuals with access to the data collected during the interview process. Following completion of this study digital recordings and transcribed data will continue to be stored in a secure filing cabinet in the office of the student researcher for 5 years, after which digital data will be erased and transcripts will be destroyed.

Right to Withdraw Participation: Your participation is this study is **voluntary.** You may refuse to answer any questions presented in the study and have the right to withdraw

participation for any reason at any time during the course of this research. You will be invited to amend, add to, and/or omit data from your interview immediately following the interview and throughout the data analysis process until analysis is complete. If you choose to discontinue participation altogether, your interview data and transcripts will be destroyed by the researcher.

Questions and Comments: If you have questions or comments about this study please contact the student researcher by phone (Anu Belgaumkar, 306-291-2109) or email (arb132@mail.usask.ca). You are encouraged to discuss questions and concerns about this project with the student researcher at any time. Questions regarding ethical considerations and rights as a participant may be directed to the Behavioral Sciences Research Ethics Board (Office of Research Services 306-966-2084).

Transcript Release: I am aware that I have the opportunity to review my interview transcripts for accuracy and will do so if I choose. I understand that the student researcher will add, alter, and delete information from my transcript if/when I deem this appropriate. I authorize the release of my interview transcripts to the student researcher, Anu Belgaumkar, to be used in the manner outlined in this Consent Form.

_____Yes   **_____No**

Consent to Participate: I have read and understood the description of the study provided above. I have been provided with an opportunity to ask questions, and these questions have been answered to my satisfaction. I consent to participate in this study entitled ***The Lived Experience and Meaning of Resiliency in Emergency Room Physicians.*** I understand that I am able to withdraw from this study for reasons which I deem appropriate. The researcher has provided me with a signed copy of this consent form for my personal records.

Signature of Participant/Date

Signature of Student Researcher/Date

Signature of Principal Researcher/Supervisor/Date

Appendix D: Interview Guide

I thought we could start with some broad questions on how you came to the field of medicine and what it's been like for you as a practicing ER doctor. Does this sound alright, or is there something else you would prefer to begin with?

- When did you first think about becoming a physician? An ER doc? What was your thought process at this time? What drew you to this field?
- Can you talk me through a typical day or night shift in the ER? What are your thoughts/feelings as you go through your shift? What are your responsibilities? What falls outside the realm of your responsibilities? How do you feel about your work? How do you feel in anticipation of going to a shift?
- What does it mean for you to be resilient or to possess the capacity for resilience?

- Can tell me about a time when you experienced resiliency in your work? What supports resiliency in your work? Who, What, Where, When supports resiliency in your work?
- When has your sense of resiliency been challenged? How did/do you continue to cope with this?
- Think of a time something happened at work that really shook you? How did you deal with this? How do you continue to deal with this? What have you learned from this experience?
- How do you spend your time when you are not at work? Thoughts/feelings during this time?
- What helps you to be resilient? What makes a difference to your resiliency?

- What have you learned about yourself after X many years of being an ER doctor?

- What advice would you give a physician who is just starting their ER work?

Debriefing

Question, concerns, comments, how are you feeling about what you've just shared?

Is there anything that surprised you about yourself/what you've shared/experienced during this interview?

Is there anything at all you would like to add /any information you feel is important that we haven't covered during this time?

Is there anything we talked about that you would like to omit or alter, that you feel uncomfortable with?