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Promoting resilience in post-secondary students: A case study

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Promoting resilience in post-secondary students: A case study

by

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A THESIS

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FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled “Promoting resilience in post-secondary students: A case study” submitted by Jhonattan Andres Bello Mendoza in partial fulfillment of the requirements for the degree of Master of Arts.

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Abstract

In post-secondary education, students face a variety of risks and challenges, including intensive workload, higher levels of stress, withdrawal from their programs, and emerging substance use disorders. Developing resilience is essential for undergraduate students to navigate through these challenges. It also prepares students to face difficulties in their future professional lives.

Empirical evidence indicates that the development of resilience is associated with the living environment and depends on mentors or figures who model the characteristics of resilience. The relationship between instructors and undergraduate students may be particularly important due to the role modelling of the instructors. However, we still do not know the specific ways in which educators develop resilience in post-secondary students. Using a case study methodology, this research aimed to better understand the ways in which instructors promoted resilience in undergraduate students. Interviews, document analysis, and scenario analysis were conducted in an undergraduate faculty in a large university in Western Canada. The findings suggested that creating a safe and trusting environment, focusing on a meaningful goal, clarifying expectations, modeling flexible thinking, and finding the right stories to tell, are specific ways in which instructors promote resilience in their students. This study emphasizes the importance of instructors in the development of resilience. Instructors' ecological perspective of resilience is embedded in the different strategies used to promote resilience in the classroom. The themes of this study formed the foundation of a novel framework for the development of resilience presented at the conclusion chapter of the present thesis.

Key terms: Resilience, Education, Post-secondary education, Instructors, Ecological resilience, Resilience promotion, Students support.

Preface

The experience I have gained with students in the effort to support them overcome learning obstacles and to continue until achievement inevitably led me to study resilience. This research was conducted during a difficult time for me and the world. I have been taken beyond my professional interest in resilience to a point where there is a personal need to learn more about this topic. Although much knowledge about wellbeing and resilience acquired through conducting this study helped me in my life already, I hope this study will reach many people who may be in the position to create more environments of resilience and provide support to others in the face of adversity.

This thesis is an original, independent creation by Jhonattan Andres Bello Mendoza. The study was approved by Ethics Certificate number REB20-1069 issued by the University of Calgary Conjoint Ethics Board for the project “Promoting resilience in post-secondary students: A case study” on August 4, 2020.

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To my wife Monica Bogota and my kids, Tomas, and Violeta, thank you for being at my side during all this time showing your support and admiration for what I do. To my father who instilled in the importance of education. And a special thank you to my mom Elvira Mendoza, you have always inspired me to keep up to the best version of myself.

Finally, to the team of the Writing Support Success Center: Telford-Anthony Pattinson, Ali Mohammadi, and Kendell Heydon. Thank you for empowering me to write all the following pages.

Dedication

In memory of Ines Bello, you were the brightest soul.

Dedicated to my little brother Cristian Bello and my grandma Maria Mendoza, you have shown me the courage and strength people can have in the face of adversity.

And to my love, Monica

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Chapter One: Introduction

During my professional career as a second language teacher and the head of a language department in Colombia, it was interesting for me to see how students are challenged and encouraged to overcome obstacles during their studies. I have observed the development and growth of many students and colleague teachers, and I was inspired by their resilience despite great adversity. Sadly, I also witnessed other students and teachers who gave up in the face of difficulties that were present in their lives and could not overcome the barriers present in their paths to success. I was curious about the source of individual resilience and how I, as a teacher and leader, could help my colleagues and students to achieve success. This curiosity rapidly turned into a desire to develop my practice in education when leading appropriately and supporting students and colleagues effectively.

My natural interest in the resilience of others led me to initiate my journey in the Master of Educational Research program at the University of Calgary. As an international student, the decision to study in Canada was, itself, a significant undertaking that required considerable personal resilience, due to the necessity of dealing with exposure to high-risk situations, especially during pandemic and post-pandemic times. Students face multiple difficulties that can threaten their performance, school completion, and general wellbeing in both academic settings and their personal lives (Ungar, 2019b). Students' lack of resilience accounts for negative results such as poor academic performance, withdrawal from studies, low self-esteem, and substance abuse (Beltman et al., 2018; Schwarze & Wosnitza, 2018). However, research has shown that the development in resilience helps students in a number of ways: resilience enables students to handle stress and dissatisfaction in various educational settings (Beltman & Mansfield, 2018); it contributes to wellbeing and personal development (Hazel, 2018); it improves general quality of

life (Schwarze & Wosnitza, 2018); and it is even labeled as an essential skill for leaders (Basso et al., 2015). Resilience is, then, regarded as a positive quality that may help individuals overcome obstacles and achieve success. Yet, we still do not have any concrete formula for the development of resilience in the educational context.

As I began to examine the relevant literature, it became evident that resilience is not the result of personal attributes alone. Rather, it has a lot to do with environment and the actual resources available for individuals (Beltman et al., 2018; Theron, 2021; Ungar, 2019b). In educational settings, researchers have observed a correlation between instructors and mentors who exhibit elevated levels of resilience and students who demonstrate the development of resilience. Consequently, this influence has been thought to be a key aspect in students' development of resilience (Luthar & Cicchetti, 2000; Sinek, 2009; Theron & Liebenberg, 2015). However, there is no clear understanding of how instructors influence students' resilience or how they promote resilience in their courses.

Research Questions

The gap in the literature, with respect to instructors' role in the development of students' resilience, has led me to conduct a study to shed light on the following question: How do post-secondary instructors promote resilience in students within their courses? In addition to this primary question, I sought to answer the following secondary questions: 1) How is resilience modelled and/or taught by instructors in undergraduate programs? 2) How does the post-secondary course setting provide resilience-building tools? To answer these questions, I employed the methods of interviews, scenario analysis, and document analysis to gather data from the participants. Since active post-secondary instructors were best suited to provide data for these questions, this study limited selection criteria to participants who were teaching post-

secondary courses at the time of the study. The study selected six instructors from one undergraduate education faculty in a single university in Western Canada. Participants were invited, using voluntary sampling, to provide perspectives about the ways in which they promoted resilience in the classrooms.

The data gathered was analyzed from a constructivist philosophical view with the aim of better understanding the practices that instructors use in their classrooms to promote resilience. Given resilience is crucial for navigating both school and life challenges (Yeager & Dweck, 2012), an understanding of the role of instructors in this process was also one of the objectives of this study. Finally, this study generated a list of strategies that can be used to promote resilience in the classroom.

Significance of the Study

The primary impact of this research relies on the description of the novel strategies that can assist instructors to develop resilience in their classrooms. It may be the starting point of initiatives and programs that better serve to promote resilience in post-secondary institutions. It can also inform educational leaders, course designers, and policy makers about important aspects to consider in regards of student wellness and support. Furthermore, it can foster the promotion of environments of resilience in the wider Canadian educational landscape.

Finally, the results presented in this research are of greater significance to all post-secondary students who may be in environments of adversity and are needing a transformation in their environments to be able to thrive and achieve success. The strategies that this study has found, described, and presented have a transformational effect in the current practices of many instructors who will be able to benefit their students.

Chapter Summary

Chapter one presents the author of this research and acknowledges the background and journey that led him to the inquiry of the phenomenon. It also provides a brief description of the current state of the art with a focus on the gap found in the literature. Then it follows with the research questions, purpose, and objectives defined for this study. Finally, the significance of the study is presented in the last section of this chapter.

This document will continue next with chapter two, the literature review, which expands on the multiple views of resilience, the specific definition used for this study, and the links of the literature with the educational practices used by educators. Afterwards, chapter three describes the methodology of this study and how the researcher gathered and analyzed the data. Chapter four presents the results of the interviews, scenario analysis, and document analysis. Chapter five discusses the implications of the findings. Finally, Chapter six concludes the study, presenting recommendations for education practitioners and directions for further research.

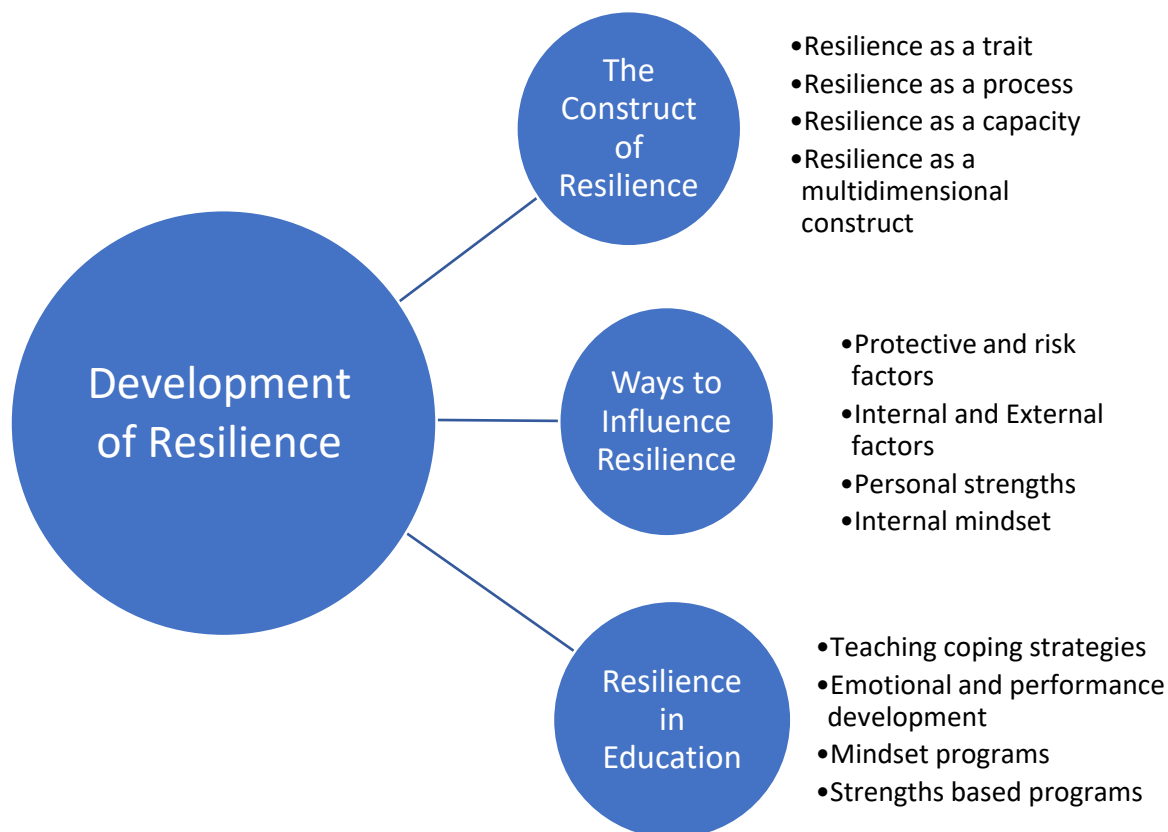
Chapter Two: Literature Review

Resilience is a topic that has been studied in multiple fields to explain the complexities of individual, group, and system responses to traumatic and challenging situations. Regarding human resilience in individuals and groups, there is a vast number of studies in the fields of nursing, psychology, and social work. In education, the research of human resilience has supported interventions to manage behavioral and mental health issues of students (Alvord & Grados, 2005; Mansfield & Beltman, 2019; Schwitzer, 2016). Additionally, this body of literature has presented numerous positive outcomes in the teaching profession such as job satisfaction, engagement, and management of teacher attrition. Many studies in the field have focused on the relational world of teaching and its influence on individuals' resilience. In my review of the literature, I aimed to summarize the multidisciplinary concept and underpinnings of human resilience, along with the different factors that might impact individuals' resilience to understand how instructors might influence the development of resilience in their students.

Figure 1. Illustrates the connections among the different topics expanded in this literature review.

Figure 1

Conceptual Framework



The Construct of Resilience

Defining Resilience

The interpretations and definitions given for resilience over the years are varied. It is a complex, multifaceted construct (McKee, 2017) that has been assigned a different definition according to the field and context in which it is being studied. There is no universal definition of resilience, however, there are some common themes that can be identified across the literature in hopes of defining it. Aburn et al. (2016) recognized “rising above, adaptation and adjustment, dynamic process, ordinary magic, good mental health as a proxy for resilience, and ability to bounce back” (p. 991) as common themes. Many researchers who have studied resilience recognize it as the capacity of an individual to face adversity and thrive, to adapt to a challenge or recover after experiencing an acute stressor (Alvord & Grados, 2005; Masten, 2014). It is this

contextual nature of resilience that results in slightly different definitions of resilience in each field, thereby making it necessary for researchers to establish a definition for resilience in their specific context, field, and population.

Resilience as a Trait. The construct of resilience has evolved due to the diverse characterizations that researchers have given to individual resilience over the years. During the twentieth century, most of the research described it as the adaptive ability that some individuals possess and others do not (Walsh, 2003), which was a perspective that focused on a trait approach to resilience. Resilience was defined at first as an attribute that some people were born with, similar to a stable personality characteristic of a person (Garmezy, 1991). According to Jacelon (1997) resilience was seen as a “trait inherent in some individuals”(p. 123), making it desirable by many but attainable by few. The researchers Jack Block and Jeanne Block (1982) went further in the view as a trait and created the concept of Ego-resiliency; a list of characteristics that possessed the general resourcefulness and sturdiness of character which allowed an individual to function in a range of circumstances of adversity. The controversy of this view soon prompted issues on the terminology among researchers. As noted by Luthar et al. (2000), “any scientific representation of resilience as a personal attribute can inadvertently pave the way for perceptions that some individuals simply do not have what it takes to overcome adversity”(p. 546). Using the term resilience as a personal attribute implied that it was a special feature on some selected individuals, therefore it was not able to develop it or promote it.

Resilience as Ordinary Magic. Years later, research has found that resilience is more common than was previously thought (Dowrick et al., 2008; Gwadz et al., 2006; Masten, 2001). In other words, individuals make use of resilience not only in the face of severe adversities, such as traumatic experiences, but also in daily challenges, such as workplace stress. Ann Masten

(2001), defined resilience as “a common phenomenon arising ordinary human adaptive process to deal with difficult circumstances” (Masten, 2001, p. 234), enhancing human development. In other terms, it is a natural capacity that provides a buffer to protect us from health consequences during difficult times (Rutter, 2012; Yi et al., 2008). Clearly, every individual shows different levels of resilience in distinct circumstances of life, which makes resilience a characteristic that often arises when facing overwhelming stressing factors (Mansfield et al., 2012).

Looking at resilience as a common adaptive process turn the researchers and practitioners focus on the reasons that may prevent individuals from showing resilience in different circumstances. However, focusing on problems associated with negative outcomes is not very efficient and it could lead individuals to believe that it is not possible to change those shortcomings (Walker, 2011). Hence, rather than spending most of their time and energy examining the negative consequences of adversity, researchers evaluated methods to enhance resilience (Bonanno et al., 2011; Padesky & Mooney, 2012). Researchers have found that resilience may change over time as a function of individual development and one’s interaction with the environment (Kim-Cohen & Turkewitz, 2012). Such an approach moved the research away from a purely deficit-based model toward the inclusion of strengths and capacities for successful adaptation that focused on prevention (Kimhi & Eshel, 2015; Southwick et al., 2014).

Resilience and Positive Psychology. Martin Seligman and Mihaly Csikszentmihalyi started the new century defining the discipline of positive psychology to shift from the exclusive focus, until then, on pathology and move towards positive characteristics of human beings that allow individuals to flourish (2000). The object of study of this discipline has been the positive experiences, positive individual traits, and positive institutions (Seligman & Csikszentmihalyi, 2000). This new framework allowed researchers to develop different approaches to individual

wellbeing, including the character and strengths virtues in an attempt to increase the knowledge that about the factors that allow individuals to flourish (Buckingham & Clifton, 2001; Peterson & Seligman, 2004). This advancement in psychology permeated the research in resilience and gave it a turning point.

With the inclusion of strengths, resilience was re-defined again as the capacity to cope and adapt in the face of adversity and/or to bounce back and restore positive functioning when stressors became overwhelming (Padesky & Mooney, 2012). In this sense, resilience was seen not only as an asset but as strength as well, which Simon Cassidy (2015) described as “a desirable and advantageous quality, characteristic, or process that was likely to impact positively on aspects of an individual’s performance, achievement, health, and wellbeing” (p. 2). The slightly changed perspective in resilience research allowed the term to move from resilience just as a natural trait to resilience as a naturally developed skill. Or as Panter-Brick and Leckman (2013) put it, “it became a process or a capacity that could be developed, making use of resources in order to sustain an individual’s wellbeing” (p. 336). The analysis of those resources was key in the evolution of the research of resilience.

After analysing the different resources research showed that there exist some factors that influenced resilience in individuals (Luthar & Cicchetti, 2000) Initially, Rutter (2006) stated that “resilience starts with a recognition of the huge individual variation in people’s responses to the same experiences” (p. 3). Therefore, resilience is unique for each person, and this uniqueness requires individualized approaches to the development of resilience. Additionally, when dealing with adversity and having to face overwhelming situations, an individual may develop a “steeling” effect that in consequence may increase the individual resilience for subsequent similar situations (McMahon, 2006). In other words, researchers were considering the resources

and factors around an individual to see resilience in relation to the context and specific situation in which the individual was situated, rather than just looking at the individuals in isolation.

Resilience as a Function of Ecology. In more recent years, researchers have begun to address resilience from an ecological standpoint, building upon the work of Bronfenbrenner (1981) on Ecological Systems Theory (EST). When taken alongside the constructivist worldview of Vygotsky (1978) in identifying human development as a process that is influenced by environment, ecosystems are seen to have a direct influence on an individual's resilience (Theron & Liebenberg, 2015; Ungar et al., 2019). In this regard, researchers conceptualized a socio-ecological notion of human resilience, arguing that the interaction between individuals and their social ecologies will determine the degree of positive outcomes experienced (Helker et al., 2018; Masten, 2014; Ungar, 2008, 2011, 2015). Although ecological resilience has involved the systems around individuals, its focus has been the development of human resilience. From this social-ecological perspective, resilience is described as a “process of acquiring and sustaining essential resources to help maintain an individual's functionality in all wellness dimensions during times of significant stress” (Ungar, 2019, p. 2). These resources are connected to different systems at three different levels: the individual level (e.g., traits, skills), the relationships level (e.g., caregiving system), and the societal level, which is also known as the proximal or distal environment (e.g., education or welfare systems). Through this lens, researchers started to see human resilience as dependent on contextual specificities such as one's group of friends, family, socio-political environments, and cultural values (Panter-Brick, 2015).

Overall, the term *human resilience* has been evolving in the research literature over the years, coming from the limited approach of personality trait to a social-ecology approach that envisages resilience as profound and complex. Today, researchers recognize that some

individuals keep thriving in the face of adversity, which means that resilience is more dynamic than just returning to previous levels of functioning (Beutel et al., 2017). Although there is no consensus on the definition of resilience yet, different categorizations of resilience may describe how this capacity and process is evidenced in individuals across different fields of study.

Categorizations of Resilience

Several literature reviews have been undertaken to make sense of the term of resilience (Aburn et al., 2016; Black & Lobo, 2008; Davydov et al., 2010; Jackson et al., 2007; Tusaie & Dyer, 2004). Although agreement on the definition of resilience has not been achieved, the body of research accumulated by these studies have helped me to create categorizations in hopes to define resilience for my study. A wide-ranging narrative review by Tusaie and Dyer (2004) explored literature from a variety of areas and used a historical perspective to map the evolution of the term resilience since 1800's to late 1990's . They found early signs of the need for a holistic perspective of resilience and “for exploration of the dynamic interactions of the characteristics of resilient individuals” (Tusaie & Dyer, 2004). In a more focused approach, Jackson et al. (2007) reviewed literature of studies about resilience in the workplace setting, giving an account of resilience as a trait for responding to workplace adversity and in the identification of strategies to enhance personal resilience, something one has or does not have. Alternatively, Black and Lobo (2008) investigated literature around family resilience. They highlighted the factors of resilient families that contributed to “the conviction that all families have inherent strengths and the potential for growth” (Black & Lobo, 2008), a belief that soon was translated to every individual. Davydov et al. (2010) investigated research studies related to resilience in the mental health setting and found resilience to be conceptualized as a mental immunity similar to the general immunity gained from a healthy lifestyle. Their findings drew

attention to the importance of the promotion of resilience prior a crisis or adversity. However, Windle (2011) concluded that resilience was interlaced with everyday life. She highlighted that “the presence of chronic adversity or psychopathology may interfere with a person’s ability to be resilient”. This philosophy reflects the connection resilience may have with developmental processes, learning, and mental health.

Aburn et al. (2016) also undertook a review with systematic methods to explore how resilience is understood in different fields and with different populations. This unique study reviewed more than a hundred of studies from nine different disciplines to understand the conceptualization of resilience in the research published up to 2015. Their findings showed that there is no universal definition of resilience. However, they presented “some common themes identified: rising above, adaptation and adjustment, dynamic process, ‘ordinary magic’ and mental illness as a marker of resilience” (Aburn et al., 2016, p. 980). These themes were different definitions found to be common among researchers of resilience.

Clearly, there are many ways to view resilience due to the evolving nature of this topic. Common to these studies are researchers in different fields who have based their practice on their definition of resilience, which give the foundation for their development of interventions of resilience (Rutter, 2012). As such, in reviewing the literature I have categorized resilience research into four themes: resilience as a process, resilience as capacity, resilience as a multidimensional construct, and resilience as dynamic and contextual. Each of these categories include the exploration of different facets of resilience definitions found in the literature.

Resilience as a Process. The body of the literature that considers resilience as a process looks at it over the course of the individual development to understand change or adaptability during the human experience of adversity (Panter-Brick & Leckman, 2013). In this sense,

resilience involves a constant interaction between personal and contextual resources that are acquired by the individual to navigate through challenges in different contexts (Mansfield & Beltman, 2019; Ungar, 2019). Those resources are reliant on the relationships between protective factors and risk factors that influence the process of resilience (Ungar, 2015). Protective factors are understood as any characteristic or situation that contributes to positive outcomes, such as an engaged caregiver, and risk factors defined as anything that can generate poor or negative outcomes, such as lack of social support. Both protective and risk factors can be present at different levels (individual, relationships, or societal) and their interactions are what constitutes resilience as a process.

With this in mind, researchers talk about the interaction between the individuals and the environment which contributes to the resilience process or not. This process confirms that resilience is not only a trait; it involves careful examination of what the most relevant resources that need to be at hand for individuals in different settings are (Southwick et al., 2014). Masten (2014) agreed with this description of resilience as a process which involves “many systems within the individual as well as many systems outside the individual” (p. 170) and through which “adaptive function of the individual is interdependent with many other systems at different levels of function that are continually interacting” (p. 170). This categorization of resilience then, is based on the idea that what makes people more resilient is better support systems that set up stronger protective factors at the individual, relational and societal levels; smoothing the process of resilience in individuals.

Protective and risk factors offer resources that may or may not be accessible to an individual. For instance, an individual with high coping skills and a supporting family that is struggling to access education may be more benefited from a societal-level intervention (e.g.,

community fundraising). Looking at interaction of different factors at different levels can also demonstrate a capacity for resilience.

Resilience as Capacity. Some studies presented resilience as a natural capacity that varies through exposure to risk and protective factors. In this sense, resilience is the capacity to adapt and thrive in the face of challenge (Crane & Searle, 2016). This is a common conceptualization of resilience across literature that indicates an ability to overcome difficulties or struggles to the point of becoming more successful or functioning at a higher level than prior to the trauma or period of adversity (Bonanno et al., 2011; Rutter, 2012). Some examples of this categorization are definitions such as “resilience is the capacity to endure and overcome hardship” (Longenecker et al., 2012, p. 122) or the ability or capacity to overcome challenges (Mansfield & Beltman, 2019). This inherent natural capacity allows individuals to adapt and adjust successfully to new and difficult situations.

As Walsh (2003) postulates resilience is the adaptive capacity for balance in the face of adverse conditions. An example of this theme is the kind of individual who adapts well, not only to major life events, but also to daily stresses (Cummings et al., 2000; Lazarus & Folkman, 1984). Masten (2001) argued that resilience is not extraordinary but a phenomenon ground in ordinary things, for instance relationships, family, and loved ones. She argued that the personal strengths gathered from previous experiences and the support mustered by family and loved ones have a huge impact on the resilience of an individual. Masten (2001) highlighted the importance of positive experiences in the work and education environments in contributing to an individual’s resilience. This seminal work was highlighted in the systemic review of Auburn et al (2016) as the most supported by several authors, including Gwadz et al. 2006, Dowrick et al. 2008, Canvin et al. 2009, Montpetit et al. 2010, Theron & Malindi 2010, Janssen et al. 2011.

The capacity of resilience, although seen as being natural, is directly interrelated with the environment and the resources at reach; therefore, it can not be seen only at the individual level. Broader social and cultural factors play an important role in the development of this capacity in individuals and are subject to the availability of ecological resources (Ungar, 2011). Moreover, research using a person-focused model concentrated at the individual level to measure the capacity of resilience has been criticized for not being generalizable (Masten, 2014). In this vein, resilience as capacity is concerned with the individual, his interaction with the environment, and the capacity of ecology around that individual (Weatherby-Fell et al., 2019).

Similarly, the complex interaction among protective and risk factors, implies an intrinsic capacity of an individual which increases or decreases over time. For instance, an individual who is exposed to more risk factors than protective factors will have more capacity for resilience when adversity comes. On the contrary, an individual will show more capacity for resilience if he is exposed to more protective than risk factors. In the same vein, those individuals who have capacity for resilience can increase that capacity by navigating and finding more resources that come from potential new protective factors.

Evidently, the perspective of resilience as a capacity demonstrates that the individual resources to cope with adversity are activated to the extent there is capacity in the social and physical ecologies to facilitate processes that protect against risk and promote positive development (Ungar, 2011). This broader categorization of resilience connects the perspective of capacity to the view of resilience as a process and allows the concept to be scalable across disciplines and levels of analysis (Masten, 2014). This results in describing resilience as an ecology-dependent understanding that refers to the capacity of a dynamic system to adapt

successfully to disturbances that threaten the viability, the function, or the development of that system (Southwick et al., 2014).

Resilience as Contextual and Dynamic. The third categorization of resilience is that resilience is a contextual and dynamic process, and therefore it is an everchanging phenomenon. For instance, a person could show great resilience in the work settings but struggle to manage their personal life. Some authors attributed this to the different environments and support networks that surrounded the individual at different times in their lives (Dresen et al., 2019; Hegney et al., 2007; Jowkar et al., 2010; Luthar & Cicchetti, 2000; Mancini & Bonanno, 2006; Masten, 2014; Mullin & Arce, 2008; Ungar, 2015). As it was established in the previous section, resilience is dependent on the individuals' environment. For this reason, when the individual switches from one context to another, the risk and protective factors also vary; therefore, researchers need to be very precise about the context in which resilience is being studied. Some literature around resilience has shown that even after considering some principles of resilience, people differ and for some individuals, different protective factors may be important for specific outcomes in specific contexts (Southwick et al., 2014).

The different contexts in which the lives of students are embedded including families, relationships, institutions, communities, and culture are not static, they are always changing and evolving. These systems required different ways to deal with issues as well as different resources and ways of resilience (Ungar et al., 2019). Thus, resilience transforms constantly making it a dynamic concept in which effective adaptation may include complex changes in different system levels; for instance, neuroplasticity and its openness to external influences to generate changes in individuals (Rutter, 2012). Following this, resilience evolves, and changes according to the environment; some people can be resilient in some contexts and not in others.

Seemingly, resilience develops over time with experience in the context that requires resilience and will have different manifestations depending on the individual and the context (Mansfield & Beltman, 2019). Notably, researchers argue that the constant swinging from risk to protective factors available in different contexts and the interplay of the resources accessible to individuals create the dynamic and contextual quality of resilience (Helker et al., 2018; Southwick et al., 2014; Ungar, 2015; Weatherby-Fell et al., 2019).

Resilience as Multidimensional Construct. The final categorization of resilience that can help creating a definition statement of this concept is that resilience is a multidimensional construct. Research about fostering and supporting resilience is deeply imprinted with the realization that resilience on an individual is highly interdependent on many other layers of systems and how they are operating (Southwick et al., 2014). Several views and definitions of resilience encompasses characteristics that overlap and belong to different dimensions of individuals wellbeing, taking researchers to determine resilience to be multidimensional (Mansfield et al., 2012).

Different protective and risk factors that generate the resources available to influence resilience are not present in one dimension of the individual only, it could affect different dimensions at once (Peixoto et al., 2020). For example, the death of a parent is a risk factor that can challenge the son's coping response. The risk factors associated with loss of one of the heads of the family could stress more than one dimension of wellbeing. Stress placed on the emotional dimension could be the more obvious, but also it could defy the financial, (decrease of family income) physical, (moving to different house, new friends, new bus routes) or social (not enjoying being with others, closing himself to interact with others) dimension. In Opposition, the same could happen with the introduction of positive factors.

Resilience is a multidimensional concept that can be developed through the interaction of personal and contextual resources which occur in different dimensions of the individual (Beltman & Mansfield, 2018). Likewise, researchers have provided evidence that support the multidimensional and situated nature of resilience specially in education-related contexts (Gu, 2018; Mansfield & Wosnitza, 2015; Peixoto et al., 2020). Finally, the validity that resilience impacts the different dimensions of human wellbeing relates to its own dynamic categorization, according to the definition that Dr. Stoewen uses for wellness dimensions as “dynamic and everchanging” (2017).

Resilience Definition for this Study. The different uses of resilience presented diversity, differences, and many similarities across a range of areas, which in turn proves the complexity of the concept (Windle, 2011). How resilience is defined in a specific context reflects its measurements and intervention programs. The large number of definitions from different fields makes “resilience” a very complex construct. In general, there is a lack of clarity of what can be identified as resilience embedded in a universal definition. It is then necessary that each researcher defines “resilience” in the specific field, arena, and population of a study. For this study then, we will use a statement for the definition as the base to construct meaning around resilience in the specific context of this study; Resilience is both a capacity and a multidimensional process of coping, adapting, overcoming, or thriving in the face of adversity in a positive manner that is dependent on and influenced by the environment.

Having a statement of how resilience is defined in the boundaries of this study is undoubtedly necessary, although it is not enough to work with this complex construct in education. Given the multidimensional nature of resilience and the dynamic complexity of multiple contexts different factors could also play a role. Researchers have come to question

themselves about some key elements of content or format that should be featured in professional learning interventions, (Mansfield & Beltman, 2019). Therefore, the complex and multidimensional categorization of resilience also demands that the elements that influence resilience in individuals situated in a specific context are taken in consideration.

Ways to Influence Resilience

The complexity in defining resilience is echoed by the many different factors that can either enhance or undermine it. Throughout the history of resilience research, studies have shown a number of determinants or factors that influence resilience (Masten, 2014). For instance: our own inherent adaptation system, cognitive factors such as problem solving skill and ingenuity, motivation, or faith can influence our capacity of resilience and how it could be developed over time (Masten, 2014). These are considered part of the internal factors; however, external factors also may play a role including: close relationships, parenting, caregiving quality, and effective communities (Black & Lobo, 2008; Masten, 2014). In the same vein, risk and protective factors are also very influential of individuals resilience which appear across different dimensions of wellbeing (Luthar & Cicchetti, 2000). Additionally, the research literature indicated that flexible thinking and a growth mindset, as well as the approach that each individual takes to face adversities, have significant influence on the process of resilience (Tseng et al., 2020).

Likewise, the capacity of resilience on each individual increases or decreases over time as the complex interactions of many factors at different levels influence the process of resilience. While we are mediated by social and individual systems that link to our language, learning, and cultural aspects, there are some external factors that influence as well (Yehuda et al., 2013). In this sense, there is no one single personal, demographic, or social factor that has shown to predict or influence resilience by itself for more than a small degree (Southwick et al., 2014). Hence

attention must be placed on a set of factors that all together can influence resilience as a whole. Therefore, it is important for the purpose of this study to have a knowledge of the factors that can influence resilience and understand how they play a role in the development and implementation of this process.

Protective and Risk Factors

Protective and risk factors play an important role in the process and capacity of resilience. They both can make a difference in the adaptive outcomes of individuals (Panter-Brick, 2015). For instance, two students confronting similar situations of adversity could have varying outcomes of adaption depending on the protective or risk factors available. There are many different factors that might make people more or less resilient, however there is not a right or wrong way to cope with adversity, it all depends on the specific situation (Southwick et al., 2014). These factors provide or take away some resources used by individuals to be more resilient (financial, emotional, etc.), which can be found at the individual, relationships, or societal level; and their interactions are what constitutes the process of resilience (Panter-Brick & Leckman, 2013; Ungar, 2011).

Protective factors refer to capabilities, supports, characteristics, or situations that contribute to positive outcomes or at least help to moderate effects of risk exposure (P. C. Lee & Stewart, 2013; Liebenberg et al., 2012). These characteristics associated with positive outcomes are particularly studied in the context of risk, threat or adversity and can generate a cumulative protection; which means that the individual face adversity in the presence of multiple protective factors that can give an advantage over the obstacle itself (Panter-Brick, 2015).

On the other hand, risk factors are defined as anything that can generate poor or negative outcomes. The range of risk factors could include situations as poverty, violence exposure,

school failure, substance abuse, and self-limiting beliefs (Shetgiri et al., 2009). It could be any kind of threat that is preventing others to progress. These factors take away resources from the individuals increasing the probability of negative and more stressful situations, leading to a less desired outcome (Schwitzer, 2016). The summation of all risk factors that the individual has experienced or an index of the overall severity of adversity experienced can generate a cumulative risk; this can include multiple separate risk events or repeated occurrences of the same risk factor (Panter-Brick, 2015). Like protective factors, not all risk factors are the same and do not have the same effect on individuals. Moreover, risk factors could be major traumatic life events, such as the loss of significant others (Bonanno et al., 2011), daily hassles as micro stressors that take resources from individuals, or chronic stressors, which are either continuing conditions or situations or recurring events, such as parental psychopathology or chronic poverty (Schwarze & Wosnitza, 2018).

Internal and External Factors

The protective and risk factors that influence the way in which people deal with a stressful events can be also divided into internal and external factors (Schwarze & Wosnitza, 2018). The focus on internal factors is part of the first wave of resilience research, which placed a strong highlight on internal aspects that allowed the resilience capacity on individuals (P. C. Lee & Stewart, 2013). These internal factors were thought to be protective and in opposite to external risk factors which presented themselves as threats to progress and wellbeing (Sandler, 2001); However, resilience research has described three levels of protective and risk factors (individual, relationships, and societal), presenting the notion of internal and external factors as part of both risk and protective factors in any of these levels.

In terms of internal factors, resilience research provides evidence of those coming from personal and individual perspective such as: optimism, self efficacy, perspective (Peixoto et al., 2018), level of self-esteem, emotional and motivational aspects (Zembylas, 2013), as well as personality traits. Even though, researchers do not conceptualise resilience as a personal trait anymore, current research has shown that internal locus control, positive self-concept and optimism are factors associated with resilience (Mansfield et al., 2016). Recently, Masten (2014) described a list of internal factors which included; problem-solving skills, hope, motivation, and ingenuity.

Later, researchers came to recognize that some protective factors were outside of the individual (Luthar & Cicchetti, 2000; Mullin & Arce, 2008; Rutter, 2012; Ungar, 2015). This addition in the conceptualization of resilience switched focus of resilience research from only the individual to the different kind of factors that are context related. External factors, are generated in the context and outside of the individual, like religious faith, effective communities, and engaging schools (Masten, 2014). Characteristics of communities, especially those from neighborhoods, have been also associated with increased resilience (Shetgiri et al., 2009).

Undoubtedly, Context plays an important role in the conceptualisation of resilience; it could provide resources from external factors or create adverse situations, and therefore influences the process (Schwarze & Wosnitza, 2018). There are many different external factors associated with resilience and the most important are the closest to the individual, namely, supportive networks. For instance, work and study environment (Beltman & Mansfield, 2018; Peixoto et al., 2020), family members, friends, and teachers as role models or mentors were identified as important external protective factors (Schwarze & Wosnitza, 2018; Ungar, 2011; Werner, 2011).

External factors can be also intertwined with internal factors. For instance, a supportive family can be a protective external factor, but enjoying spending time with your relatives is a protective internal factor that gives motivational and emotional resources to that specific individual. There is no evidence that only on simple risk or protective factor, either external or internal, can be the causal element of a chain of events which will promote or undermine resilience in individuals. Masten (2014) argued that resilience involves “many systems within the individual as well as many systems outside the individual” (p. 170). In fact, the interaction among risk and protective factors, being those internal or external, is what constitutes resilience as a process (Rutter, 2012). This interrelation creates resources for individuals to increase their capacity of resilience and influence its process (Gu, 2018). For a visual representation of the interrelation of different factors see Figure 2.

Figure 2

The interrelation of factors that influence resilience



The interrelation of factors that influence resilience created by Jhonattan Bello. The figure provides a schematic representation of how the factors are linked together. As a result of

this complex interaction, resilience becomes very situational (Rutter, 2012). It could also lead to the conclusion that only promotive factors are needed for a resilience process, Nevertheless, risk is needed in the resilience process. As an example, poverty is regarded an external risk factor. But it could turn to be that living in poverty forms a goal to do improve living conditions that can trigger internal factors of motivation and determination (Schwarze & Wosnitza, 2018). Additionally there is also ambiguity about the types of protective factors that are best for people due to the difference in contexts and individual levels of risk factors (Ungar, 2019b). Finally, most of the risk factors are outside of the locus of control of the individuals, which in turn made people focus only on their individual internal protective factors (Panter-Brick, 2015). Overall, assumptions of the factors and its interactions can not be made, there are multiple ways to set up protective factors that enhance the resilience process (Mohamed & Thomas, 2017). Studies of organizational resilience suggested that due to the interaction of internal and external factors, well-designed interventions should target resilience development across levels in order to achieve the best results (Harms et al., 2018).

Focus on Strengths to Develop Resilience

As noted above, the complex interaction of factors as well as the situational characteristic of resilience, requires interventions to be based on the specific context and population. One of the constructs that has been related to the promotion and development of resilience is the focus on individual or character strengths (Martínez-Martí & Ruch, 2017). A strength conceived of as near perfect performance in an activity comes from identifying your talents and refine them with knowledge and skills pertinent to that activity. (Hodges & Clifton, 2012). In other words they are naturally recurring patterns of thought, feeling, or behavior that can be productively applied promoting high levels of functioning both behaviorally and psychologically (Harms et al., 2018).

Many studies have suggested that individual strengths are potential indicators of resilience (Goodman et al., 2017). One of the most known assessment of innate strengths is the StrengthsFinder, developed by the Gallup organization, which measures the talent themes of individuals (Marken, 2020; Seemiller, 2017). The top five talents themes selected out of possible 34 themes have the greatest potential for becoming strengths (Buckingham & Clifton, 2001, p.48) A strength results from investment in skills, knowledge and practice on the talent theme, using it consistently until it reaches a consistency in near-perfect performance (Schwitzer, 2016).

Similarly to the perspective of the resilience, the body of literature around strengths assumes that individuals already possess resources that can be leveraged to promote success in many areas of life (Lopez & Louis, 2009). In this sense, strengths act in the same way protective factors do and can be enhanced to promote resilience. Studies evidenced that helping students identify their signature themes can encourage them to become more aware of their talents and lessen their focus on weaknesses (Hodges & Clifton, 2012; Seemiller, 2017). This in turn give students resources to react to, manage, and recover from setbacks, which contributes to the development of resilience (Berg & Pietrasz, 2017; Dresen et al., 2019).

Educators use strengths-based programs to increase awareness of student's areas of strength which lead to personal growth (Passarelli et al., 2010). Soria and Stubblefield (2015) suggest that teachers can start by introducing a common language to understand individual strengths as well as to provide meaning for their different experiences and backgrounds. The knowledge about their natural talents can raise student chances to manage difficult situations (Dresen et al., 2019). Through explicit attention paid to students' strengths, they could gain the motivation necessary to start working on a strategic plan and draw resources to adapt to and

overcome challenges. In order to truly develop an strength, students need to participate in meaningful opportunities and experiences in which they can utilize them (Lopez & Louis, 2009).

By providing a strength-based curriculum, educators have reported greater levels of self-efficacy, academic motivation, personal growth and resilience (Dresen et al., 2019; Passarelli et al., 2010). After understanding one's strengths, students need to explore and develop them to be able to use them for potentially thriving in the face of adversity (Schwitzer, 2016). Because CliftonStrengths research is based on positive psychology, it focuses on talents, strengths and resilience rather than on deficits and remediation, this creates a positive mindset that allow individuals cope with adversity (Soria & Stubblefield, 2015). Research on post-secondary students also showed that knowing and understanding strengths may have an impact on self-perception and growth mindset, allowing students to move forward in times of difficulty creating emerging resilience towards challenges (Jackson et al., 2007; Schwitzer, 2016).

To conclude, strengths-based programs have been used for professional development and to build resilience in different settings (Ho et al., 2016). Strengths-based curriculum used in educational settings help students in creating awareness of their talents, shifting from the deficit mindset to a strengths mindset (Harms et al., 2018), and increase the self-perception which may support individuals to face adversity. Research around CliftonStrengths has mainly focused on the individual perspective of development as well as internal resources (Lopez & Louis, 2009). Consequently, strengths research investigates ways that an individual can ultimately develop himself, leaving mentor roles, such as teachers, in second place. Finally, Goodman et al. (2017) found that, although many personality strengths can impact resilience in individuals, there are also many that were not highly significant to operate as resilient factors. Evidence pointed out that certain combinations of strengths and contextual factors have been found to predict

resilience (Kleiman et al., 2013). This suggests that external factors count for more at the time to promote resilience rather than single strengths in isolation.

Fostering Growth Mindset

Beliefs, attitudes and values also play a role in influencing achievement and human behaviour (Dweck & Leggett, 1988). Students' beliefs about intelligence and knowledge itself has been termed mindset (Dweck, 1999). Dweck (2019) explains that during her research she has identified two types of mindsets; a fixed mindset and a growth mindset. Students have a fixed mindset when they “believe that a particular attribute, such as intelligence or personality, is simply fixed and can not be developed” (p. 481), looking at intelligence as a fixed trait that cannot be changed and is responsible for success. On the other hand, growth mindset is the belief that intelligence “can be shaped and developed” (p. 481), for example through practice, which allows students to find opportunities in every challenge. Students with these mindset embraces problems as opportunities to learn rather than avoid them.

Research shows that these mindsets can be influenced by training (Dweck, 1999), as well as with interventions that encourage students to view intelligence as malleable. It has been reported that students who see intelligence as malleable have better grades, more engagement, and greater enjoyment (Aronson et al., 2002). Additional to academic performance, Yeager and Dweck (2012) stated that “students' mindsets seem to promote their resilience in the face of academic setbacks” (p. ?). Other researchers also found that having a growth mindset may lead to resilience (Barbouta et al., 2020; Dweck & Yeager, 2019; Limeri et al., 2020). Which gives the resilience research a tool to promote resilience in educational settings. The work on mindsets has also led Duckworth (2007) to research this relationship of grit, defined as “grit as perseverance and passion for long-term goals” (p. 1087), and growth mindset. According to

Barbouta et al (2020) there is a connection between grit and academic achievement as well; higher levels of grit and growth mindset predicted better academic outcomes in the long term. It is very likely that students encounter different kind of adversities while they navigate the educational systems, and the way in which students view setbacks in their educational journey may have a different impact in how they approach these obstacles (Barbouta et al., 2020). If students view them as something they can surmount, embracing a growth mindset, they will more likely be more patient and find strategies to overcome them as challenges (Barbouta et al., 2020), therefore promoting resilience in the face of adversities. However, if students view the experience as an obstacle that can not be seized, the fix mindset of that person will diminish its resilience.

People that praise wisely and celebrate effort to overcome obstacles develop growth mindset on others and promote persistence after setbacks (Campbell et al., 2020). For instance, receiving negative feedback about an outcome will make a student with fixed mindset to withdraw or blame himself or others, while a student with a growth mindset will continue working to improve or learn about other ways in which he can have a better outcome. A simple switch in the way that an individual views each situation can create a big difference in the outcome of that situation. Limeri et al. (2020) found other ways in which growth mindset impact resilience of students. She described students were “influenced by seeing their friends or other students overcome struggles and recognizing that it was possible for themselves as well” (p. 17). Teacher could benefit from letting students share stories about the ways in which they overcome their adversities, inspiring others to switch their mindset and be more resilient over time.

Although much of this research has been done over years, there is still little evidence that points to specific ways in which growth mindset can be transmitted or developed in others

(Dweck & Yeager, 2019; Limeri et al., 2020). It is also unknown how a mindset is acquired or established by a person, or how it could be applied in different educational contexts as schools. Moreover, Dweck and Yeager warn us saying that “it is too easy for people to implement a growth mindset poorly” (Dweck & Yeager, 2019, p. 482). This accounts for interventions that end up maintaining a fixed mindset on students rather than promoting a growth mindset. Evidently, the way we judge our own abilities will ultimately define our actions and behaviors when facing obstacles.

Flexible Thinking and Strategic Thinking

Flexibility is key to enhance community and individual resilience (Haworth et al., 2018). Psychologically, the term flexibility is interpreted as “the ability of individuals to adapt” (Guilford, 1959), whereas cognitive flexibility is to make use of the “cognitive processing strategies to face new and unexpected conditions in the environment” (Cañas et al., 2006, p. 297). In this sense, flexibility is viewed as a personality trait while cognitive flexibility as a skill that implies a learning process and is gain with experience (Cañas et al., 2006; Ionescu, 2012). The term *flexible thinking* comes from cognitive flexible research to indicate the capacity of an individual to assess his own behavior to recognize the need of making different adjustments for effective functioning on unexpected situations (Barak & Levenberg, 2015; McComb et al., 2007). Flexible thinking is also regarded as one of the twenty first century skills according to The Organization for Economic Cooperation and Development (OECD, 2019) and the Partnership for 21st Century Skills (P21, 2019). It is part of the life and learning skills, and it is referred to as having the capacity to shift thinking or attention in response to unexpected situations (P21, 2019). Hence, flexible thinking helps individuals to find different ways to continue functioning and adapt to sudden changes.

Barak and Levenberg (2016) suggested that individuals who make use of flexible thinking are open to new experiences, which in turn help them to accept and adapt to new situations. This adaptation comes from changing a perspective or using knowledge of different ways of doing things, as well as being creative (Barak & Levenberg, 2015, 2016; Cañas et al., 2006; Tseng et al., 2020). Having a flexible thinking has been found to predict individuals' resilience and engagement in learning (Alvord et al., 2011; Tseng et al., 2020). On the other hand, inflexibility of rigid parameters undermine the ability to change and adapt in unknown and adverse situations (Haworth et al., 2018). This inflexibility may diminish individuals' capacity for resilience. According to this literature review, adapting to a challenge is an essential part of resilience. Therefore, encouraging flexible thinking is essential to strengthen community and individuals' resilience.

Researcher Şehmus Aslan (2018), examined cognitive flexibility in young athletes and found that “the person who is cognitively flexible needs to focus carefully on the new conditions” (p. 149). This means that individuals need to be particularly aware of changes in the context and then restructure knowledge and behaviors to create a new plan of action when circumstances change. This plan of action is the strategy that will allow them to achieve positive outcomes in the face of adversity. Metzl and Morrell (2008) stated that “flexibility and the ability to withstand ambiguity and create alternative goals to a set path seem to be inherent characteristics of resilience if one is required to adapt and re-bounce” (p. 311). Evidently, there is a link between flexible thinking and goal setting or strategic thinking as part of resilience.

Tseng et al. (2020) found that “goal setting is a powerful process for students to have clear visions on their learning and motivate them for committing efforts in order to overcome obstacles” (p. 2296). Flexible thinking might explain the ability to find new and alternative

solutions to problems that lead to the formation of strategic thinking. In this context, strategic thinking is a creative and divergent thought process that investigate a problem domain (Aslan, 2018; Heracleous, 1998). It is seen as the mindset that allows the action of setting goals for a vision of success and planning different paths towards it. Strategic thinking support individuals in the use of resilience and problem solving. McGraw & McDonough (2019) identified that there is a central role of reflective and strategic thinking in enabling resilience” (p. 596) However, too much complexity in a problem may reduce flexibility thinking and result in low resilience (Haworth et al., 2018; Peixoto et al., 2018). Individuals may use strategic thinking to break complex problems into smaller pieces to act upon them, and flexible thinking to come up with different strategies. In fact, using flexible thinking and strategic thinking means not having a recipe for action but being open to changes while maintaining a clear goal to have more chance of positive outcomes.

In the context of education Spiro et al. (1987) stated that “routinizing or memorizing is not effective for learning, as it does not allow for application during context variation” (p. 3), meaning that when change comes individuals need to be able to shift perspectives to adapt to certain situations and memorising for learning does not help much in the end. Flexible thinking helps teachers to understand the different mindsets that students may bring to the classroom as well as allow teachers to design more efficient courses and instructional approaches (Barbouta et al., 2020). Overall, fostering flexible thinking and strategic thinking in the classroom could allow students to be more able to face challenges and unexpected situations.

To sum up, flexible thinking and strategic thinking influence resilience in individuals (Barak & Levenberg, 2016; Tseng et al., 2020). Inflexible mindsets or too rigid systems do not allow individuals or communities to change and adapt to get better outcomes. They also prevent

individuals to design alternative strategies to overcome unexpected obstacles. One way to develop flexibility is showing people new ways to make things. Also including others in the planning or decision-making process foster a flexible mindset. (Haworth et al., 2018). Both of these mindsets have been found to enhance resilience (McGraw & McDonough, 2019). Strategic thinking and flexible thinking relate to resilience in the way it lays different plans or paths to overcome obstacles.

Resilience in Education

As broad as the topic of resilience could be, there are many studies of resilience done in the field of education. Most of those studies are centered on teacher resilience and the systematic challenges they need to overcome to thrive in the educational field (Beltman & Mansfield, 2018). However, due to the significant stressors that may jeopardize learning outcomes, research on students resilience has been recently growing (Theron, 2021). Students in higher education have reported many challenges students need to face to keep going in their studies every day (Bello et al., 2021). Although, daily negative events are less serious, these constant stressors may disrupt individual patterns (LoSavio et al., 2011) deeply affecting academic outcomes. Consequently, educators are progressively more prone to create academic interventions that address students' resilience. In this section of my literature review, I examine the different practices that have been used in education to promote resilience, giving special attention to those that have been or could be used in higher education contexts.

Educational Practices that Promote Resilience

At the same time that there are some predispositions for resilience, there is evidence that resilience can be promoted, nurtured and enhanced (Cefai, 2004; Peixoto et al., 2018). The interventions and teacher practices with a focus on resilience that develop more adaptive thought

and behavior patterns are needed in the field of education (Patry & Ford, 2016). Specially those interventions with focus on community factors, as supportive relationships outside of the family. A key component in fostering resilience in education may be the human interaction between the instructor and the student. Alvord & Grados (2005) found that “resilient youths often join clubs, teams, and other groups and frequently find mentors such as coaches, teachers, scout leaders, and other prosocial adults in their communities” (p. 241). A pattern that indicates the importance of mentor roles in resilience and emphasizes on the need of institutions to address students needs with services that foster resilience.

Being teaching a complex and challenging profession it is just normal that resilience research in education centered initially on the teacher resilience (Beltman, 2015). Nowadays, researching student’s resilience has become of greater importance for teaching and learning endeavours. The increasing evidence that shows how institutions can make a huge difference in the development and growth of students also moves away from the focus on the change of the individual rather than the conditions and quality of the environment, community and relationships around the student (Ungar et al., 2019). Yet, few studies focused on the development of student’s resilience from the teacher perspective and how they developed practices to foster it in the classroom. Teachers have used their knowledge and intuition to help students overcome academic obstacles in different ways.

Teaching Coping Strategies

One basic practice that teachers commonly use in the classroom to promote resilience is teaching healthy coping strategies. Teachers have been trying to show different coping strategies at school to support wellbeing and mental health. The author Alyson Reid-Larade (2017) made a distinction between healthy or positive strategies which she call toward strategies and the

unhealthy or negative, namely away strategies. These strategies have been taught for many teachers looking to give personal resources to students to move toward a better life and avoiding those strategies that moves them away from a better quality of life (Reid-Larade, 2017). The expectation is that students can become stronger with the use of these strategies that allow them to face different risks and stressors. However, researchers Beutel et al. (2017) found that “coping strategies vary on personal resources and situational circumstances” (p. 10). This indicates that risk factors are different for each individual depending on the context and specific relationships it has, which may have not been taken into account when teaching coping strategies in general. Again, this educational practice to promote resilience assumes that individuals are completely responsible for their resilience process, leaving out any importance of the systemic factor that may promote resilience.

Reinforcing Emotional and Performance Development

Leroux (2018) found that another way to promote resilience in students of an education program was to reinforce competencies for classroom management and collaboration with colleagues, especially on those students that are already part of a field experience as part of their coursework. Educators can reinforce cooperative skills, teach students to manage their emotions, stress and workload in effective manners. Her study found that prioritizing relationships of students with peers and instructors was a crucial aspect for resilience in teacher students. Additionally, literature also emphasizes of the importance of environmental conditions over the personal for the development of resilience (Gu, 2018; Leroux, 2018; Mansfield et al., 2012). This indicates that an ecological approach and an emphasis on the factors outside the individual may generate a positive impact on the individual. For instance, supports that focus on student wellness and work-life balance. Research that looks at reinforcing emotional development as a

practice to promote resilience touches on the notion of promoting environmental factors over the individuals and prioritizing the development of relationships with peers and instructors (Theron & Liebenberg, 2015). Additionally, it was found that giving many opportunities to higher education students to develop professionally can increase some of the personal and professional skills that may lessen negative and risk factors, resulting in students making more use of resilience (Henry et al., 2011; Leroux, 2018) Besides providing professional development to students, this body of research does not go beyond to explore the actual practices inside the classroom or education settings on how to provide these supports or how to create a resilience-fostering environment that focuses in wellbeing and relationships.

Mindset Approaches

As mentioned earlier, one major theme in the literature about resilience is the fostering of different mindsets that can promote the resilience on individuals. As Dr. Ungar (2017) pointed out “resilience is as much about what we have (our individual and collective resources) as what we think (our mindset)” (p. 21). These different approaches come from positive psychology advancements and are based in the assumption that the way of thinking has a direct impact on resilience in academic and social settings (Dweck & Leggett, 1988). Many researchers feel that “it is imperative that we reassess the mindsets of teachers and learners in order to enhance students’ learning outcomes” (Ashok, 2014, p. 33). Some of the programs based on mindsets are those who use strengths-based teaching, growth mindset, positive and flexible thinking, or strategic thinking. The body of research related to mindsets also look at students resilience in the academic and social settings (Yeager & Dweck, 2012). The different frameworks that exist for these approaches look for preparing students to respond resiliently to the various barriers and challenges they encounter in their studies.

Strengths Based Programs

A strengths-based curriculum has been reported to be beneficial to professional development (Passarelli et al., 2010) and the promotion of resilience (Berg & Pietrasz, 2017; Dresen et al., 2019; Rath, 2010). This practice in education is usually executed in three parts. The first one in which students look for and recognize their own strengths. Here students usually take a test to find their specific strengths and learn how to name them or refer to them. In this stage, students also receive instruction about the strengths they found and the common language to enhance the development and use of these strengths (Dresen et al., 2019). In this first stage is expected that student get a better understanding of what their strengths are and how to refer to them.

A second stage of these programs usually involves a phase in which students face problematic situations, start new or overwhelming activities, or go through class activities designed for students to react to, manage, and recover from setbacks aiming to develop resilience (Berg & Pietrasz, 2017; Jackson et al., 2007). In educational contexts, it is expected that students use their strengths to tackle the obstacles they may encounter in these activities (Padesky & Mooney, 2012). Finally, a third stage in which students reflect on their outcomes and how the strengths have helped or not to face obstacles and thrive around the activity (Wosnitza et al., 2018). Students have reported that “a clear understanding of the strengths also allowed them to increase the inner pool of positive emotions when facing difficulties, which in turn help students to overcome challenges” (Passarelli et al., 2010). Students use the knowledge of strengths to have a back up source of positive emotions that help them to persist through challenges.

Strengths based programs focus on forming resilient and positive beliefs rather than trying to fix or deconstruct negative ones (Beltman et al., 2018; Padesky & Mooney, 2012; Soria

& Stubblefield, 2015; Wosnitza et al., 2018) About strengths programs, Dressen et al. (2019) have stated that “educators who are interested in resilience development may benefit from incorporating experiential education principles coupled with student-organized activities outside of the classroom where graduate students can manage, adjust, and overcome challenges” (p.306). Instructors also “offer tools aiming to provide the user of the programme with help in identifying his or her individual strengths and areas to be improved regarding his or her resilience profile” (Wosnitza & Peixoto, 2018). Evidently, a strengths-based curriculum includes experiential learning as well as self reflection components that are important for the promotion of resilience.

The strengths-based programs research has done an underpinning on the way professional development is advanced, yet the development of resilience is usually a collateral or additional finding on these studies (Wosnitza et al., 2018). Thus, there is few research that look solely at developing resilience through a strengths program.

Most findings on strengths research focus on the use of strengths that are identified in the individuals as tools to face risk factors and make use of a social and educational experience that gives students the opportunities to use strengths resulting on a resilience process. However, for many of these studies the analysis is based exclusively on the student’s effort and not taking into account external factor that might influence the resilience of the individual or the relationship among the context, the strengths and the resilience process.

Growth Mindset Programs

Another practice that is currently related to the development of resilience is fostering the growth mindset on students (Barbouta et al., 2020). This practice is related also to the strengths-based curriculum as well according to a study which indicates that “CliftonStrengths could be linked to a growth mindset that could consequently improve subsequent performance in teaching

roles” (Burns et al, in press). Growth mindset has been used for some educators to promote resilience outcomes in students (McGraw & McDonough, 2019). Considering that resilience involves “growth in the face of adversity and cumulative stress” (Cavioni et al., 2018, p. 314), a considerable body of research identified positive emotions, and optimistic thinking to be of influence of resilience (Barbouta et al., 2020; Campbell et al., 2020; McGraw & McDonough, 2019; Tseng et al., 2020). Developing these aspects of thinking on individuals may have helped educators to foster resilience in the classroom.

One program that has been used in the promotion of resilience is the RESCUR Surfing the Waves Curriculum (Cefai et al., 2018). This growth mindset program has been used in Europe to develop resilience in students (Cavioni et al., 2018). It has different components including building strengths, developing communication skills and setting a growth mindset. The activities that are part of this curriculum generally start with a mindfulness phase, followed by legends and real-life stories of resilience. After the story has taken place, there is a reflection activity about the resolution of the problem and the way in which the characters, two animal mascots, deal with the adversity presented. Finally, children are asked to role play, draw or create a craft related to the topic (Cefai et al., 2018). The themes of the curriculum are meant to be used by teachers in other activities and situations of the school. Researcher Valeria Cavioni explains that teachers also “refer to the topic in the other activities of the classroom to give the students the opportunity to transfer the resilience skills to the other content areas of the curriculum as well as during play time” (Cavioni et al., 2018, p. 318) This program presented one attempt to foster resilience in educational contexts and it is still in development. Its limitations include the fact that has been tested only in early and primary students. Also, the

studies around the RESCUR program have tested only individual themes and not the whole program in students.

Other scholars have approached growth mindset development with direct interventions that encourage growth mindsets and discourage fixed mindsets resulting in a change on the students' academic behaviour (Dweck & Yeager, 2019). These interventions initiate with providing students information about the brain function and the malleability of it, then students are asked to picture their brain growing more complex connections between the neurons. Finally, students are asked to explain how the brain grows and transform over time to someone else. With this process, students are expected to learn about and switch their mindset about learning. Consequently, research showed that students were more resilient, specially girls and Afro-American students who were facing greatest adversity due to stereotypes (Campbell et al., 2020). The change in behaviour of these students thanks to the learning of growth mindset had an important impact on their use of resilience.

A specific aspect of promoting growth mindset that impacts resilience processes in students is that those individuals who have a growth mindset actually look for other challenges to learn more, rather than avoiding the challenges that appear in daily life (Dweck & Yeager, 2019). It has been also found that positive results of growth mindset are effective in high peer-support contexts, but it doesn't show a specific correlation to academic achievement in unsupportive environments (Bahník & Vranka, 2017). This indicates that "sustained change may therefore require both a high-quality seed (an adaptive belief system conveyed by a compelling intervention) and conducive soil in which that seed can grow (a context congruent with the proffered belief system)" (David S. Yeager et al., 2019, p.368). This statement leads to questioning not only on the environment factors in addition to the mindset of the student, but

also in the effectiveness of fostering the growth mindset in the classroom. Furthermore, a wave of studies have reported that educators find difficult to foster growth mindset in the classroom, also indicating that mindset has virtually no direct correlation with academic achievement and general progress of students (Bahník & Vranka, 2017; Burnette et al., 2013; Sisk et al., 2018). In a more recent article researchers found that students tend to shift towards a stronger fixed mindset and a weaker growth mindset during a challenging situation, like a very complicated course or personal difficulties during periods of study (Limeri et al., 2020). This means that growth mindset won't be sustainable through the adversities that a student may need to face in the future, or it may need from something else to nurture the growth mindset over time.

Claims about the “striking effects on education achievement” (Yeager & Walton, 2011) seem to be very dependent on the contexts and resources available to the students that support their capacity for resilient processes. For instance, many studies about growth mindset are bounded in primary education or at moments in which students have lots of supports surrounding them, which allows a resilience process in the individual (Zeng et al., 2016). Also, some evidence showed that students who witnessed how other students overcome obstacles started believing that intelligence were malleable and were better at facing upcoming challenges (Limeri et al., 2020). That was regarded to a change of mindset but could also be regarded to the creation of a community in which students are the support of each other. Although, many other studies show the confident results that fostering growth mindset deliver in students (Broda et al., 2018; Paunesku et al., 2015; Walton, 2014; Yeager et al., 2019), it is clear that growth mindset still need to be studied to become an effective tool for the promotion of resilience in educational settings.

Flexible Thinking and Strategic Thinking

Just as important as flexible and strategic thinking are for the development of resilience, it is also important to have purposeful and adaptable practices in education. “Resilience manuals have their purpose, but only in so far as they inspire the flexible application of great ideas to new populations in very different contexts” (Ungar, 2017, p.36). Researcher Michael Ungar (2017) has found that programs that develop resilience in students need to have what he calls the *Principle of Negotiation*. This means that the curriculum designed must be flexible enough to adapt to the specific needs of the students in the specific context that is being applied. Resilience curriculums must be created in a manner that have a clear purpose and is meaningful for the target population. Additionally, It requires a review process built into the program to see and adjust to the conditions of change (Ungar et al., 2019). These programs that are created flexible model flexibility to students and consequently becomes stronger resource for resilience.

The flexibility thinking that students can develop in a course depends greatly on the type of training and activities that they undertake in such course (Barak & Levenberg, 2015). For instance, educators promote flexible thinking with activities that make students face a variety of different problems rather than practicing the same problem type repeatedly. Barak and Levenberg found that “students who were trained on a series of varying problem-solving scenarios indicated an ability to adapt their problem-solving strategies in a flexible way to new situations” (p. 41). These students were able to create multiple strategies to solve the presented problems as they were used to create new strategies for each new problem. However, when students have used memorization and have a preset list of strategies to solve problems they found it more difficult to solve; they lack the ability to be flexible and transfer their skills to a new and unexpected situations (Barak & Levenberg, 2016). For instance, changing the way learning is

assessed, presenting new and more complex problematic situations that students may need to solve, exposing them to alternative views and contradictory data that encourage open-mindedness and flexible thinking.

Another study shows that instructors could assist students in setting strategies and attainable goals that they may need to be modifying over time according to their learning goals (Tseng et al., 2020). Educators promote strategic and flexible thinking, also by setting up relevant and real-world situations that enhance the ability of students to adapt and create strategies to achieve success. Instructors are particularly aware of the students' habits of mind, which includes the way they view the world, construct knowledge, and their mindsets about intelligence (Spiro et al., 1987). Particularly, educators seek to provide tools, and develop skills for students to transfer those skills to unfamiliar situations and in which they may need to give a solution to a problem (Barak & Levenberg, 2016). Instructors need to be able to promote these mindsets in the classroom expecting that they use flexible and strategic thinking to face challenges and adversities and be prepared for unexpected change.

Resilience Through Course Design

Although much of the research found around resilience in education has been done in K-12 students or teachers, there has been also some attempts to include the resilience aspect in Higher education. This is the case of the health and wellness framework created by Dr. Dyjur and colleagues (2017) that offers five categories of decisions to be made when designing a course; policies and values, academic expectations, learning environment and learning experiences, student assessment, and reflection and resilience. It is well known that course design in post-secondary settings is a complex and very complicated undertake in which instructors need to take many decisions that may impact the timing stresses and wellness of

students as well as instructors (Russell & Topham, 2012). The framework presented by Dyjur et al. (2017) supports the instructor to take into consideration the different aspects aiming to promote wellness and mental health in the classroom.

The theme of reflection and resilience, that has relevance for the scope of this research, seeks to help students shape the perception of themselves and created a more positive inner talk. One important aspect of the theme is that it is not student-centered, but it is centered on both the student and the instructor. In the stage of planning of the course, the framework provides questions to the instructor to include a more resilient course design:

Table 1

Questions in the facet of Reflection and Resilience for Mental Health and Wellness

Facet of course design and wellness	Questions for Instructors to Consider when Designing Courses
Reflection & Resilience	<p>How can you embed opportunities for student reflection throughout the course? At the end of the course?</p> <p>How can you embed opportunities for instructor reflection throughout the course? At the end of the course?</p> <p>Bearing in mind your role as an instructor, how might you promote or support student resilience?</p>

Note. This table shows the questions instructors need to ask in order to address resilience and reflection in the designing of their courses. Taken from “Table 1. Questions for Instructors to Consider when Designing Courses for Mental Health and Wellness” (p. 4) in Dyjur, P., Lindstrom, G., Arguera, N., & Bair, H. (2017). Using mental health and wellness as a

framework for course design. Papers on Post-secondary Learning and Teaching: Proceedings of the University of Calgary Conference on Learning and Teaching, 2, 1-9. (Dyjur et al., 2017).

These questions are initially creating awareness in the instructor about the importance of resilience and making it part of the instruction at the course level. The instructor will be more predisposed to see problematic situations for students and then prompt students with questions that allow them to find solutions or resources to overcome those difficulties (Dyjur et al., 2017). Instructors that incorporate student reflection and resilience aspect in their course designs will also need to use activities that are also created with resilience processes in mind.

Bair and Dyjur (2018), give examples of activities that can be used along with the framework: Post and pre self evaluation to help students to think about areas of strength and growth and use of learning logs to see their areas of concern to study further in those aspects. These are activities that can be included in the course outline since its creation and act as preventive measures for difficulties in the course as well as promoting practices of resilience. Moreover, many of these activities can not be changed after the course has started, this is the case of creating a community of practice or peer support as a way to promote resilience. It has been found that creating a sense of community is “an effective and essential strategy for developing resilience” (Bello et al., 2021, p. 20). These communities take time to be created and to actually get the trust and connection that needs to be an effective community, so it is imperative to be created in the design stages of the course rather than in the middle of it. Ha course journal and a critical friend for the analysis of student’s evaluation as strategies for the instructor to follow a resilience process (Bair & Dyjur, 2018). The practice of resilience through

a course design also makes an emphasis on the importance of the instructor in all stages of the course to promote resilience in students.

Role of Instructors in Developing Resilience

Research around resilience has help to highlight the importance of supportive relationships as mentors or role models as protective factors in the process of resilience (Barbouta et al., 2020; Schwarze & Wosnitza, 2018; Theron, 2021; Ungar, 2017). In education, Rutter (2012) stated that school and teachers play a key role in resilience of young people. Many studies around systematic resilience and the key factors to develop resilience in students also showed that among the external factors those that have to do with the relationship level have a greater influence in resilience processes (Theron, 2021; Ungar et al., 2019). This suggests that the focus of resilience in education may be place in both students and teachers, and the interaction between them.

Mansfield & Beltman (2019) reported that “the support of an in-class personal coach was found to be particularly beneficial, emphasising again the importance of trusting relationships” (p. 585). The undeniable influence of role models in educational settings present an important source of protective factors and resilience. A recent study highlighted the way in which role models served as a protective factor of resilience (Bello et al., 2021). The study described how students found and connected to protective factors through their role models. In many contexts, the resources that act as protective factors may or may not be accessible to students. Educators play an important role in facilitating access and knowledge of resources available that counterweight the negative life events (Beltman & Mansfield, 2018; Peixoto et al., 2020; Werner, 2011). Instructors are then the conductors of resilience in educational settings. They hold a privileged position between the resources available and the students who may need them.

Instructors have been regarded as the ones that can nurture the environment for resilience in educational settings. Theoharis (2007) suggested that to improve the student achievement instructors could create a climate of belonging. Hence a climate belonging is facilitated by the instructor (Theoharis, 2007). Teachers are the ones who create the spaces of learning that can generate thriving cultures inside and outside of the classroom. Although, much have been said about the importance of the role of instructors in the development of resilience. There is a logical question that pop up from the research. How do instructors promote resilience? What are the practices that instructors are using to develop those environments of belonging and a culture of thriving towards success? Studying the instructors and resilience in the classrooms will provide better understanding on how they promote resilience among students in their courses. Also, what are the principles that the instructors are using to foster resilience in different contexts.

Chapter Summary

In this chapter, the body of research around resilience has been studied in both general and educational settings aiming to understand the ways in which resilience can be fostered. Though resilience is a complex and broad construct, distinctions were made about the different definitions that has been regarded over time. In the evolution of resilience, the concept was regarded as a trait of the individual, ordinary magic, a strength, a function of ecology, a capacity, and a process. The body of research ahs reaffirmed that resilience in youths and adults, like in children is not associated with the personal attributes only but has more to do with the factors that are in the specific context of the individuals (Luthar et al., 2000; Ungar, 2011). The literature studied helped me to state a conceptualization of resilience for this study; resilience is both a capacity and a multidimensional process of coping, adapting, overcoming, or thriving in the face of adversity in a positive manner that is dependent on and influenced by the environment.

Along the different factors that influence resilience, multiple studies from diverse disciplines contribute to the ways in which resilience can be promoted. A huge body of research present resources that can come from internal or external factors and can be fostered in individuals in different contexts. Some of the ways to promote resilience include identifying the strengths on individuals, fostering a growth mindset, connecting with others, getting a sense of community, developing a flexible thinking and strategic thinking, and striving for healthy relationships. These are the ways in which resilience can be promoted.

Finally, a section of this chapter delves around the research studies that emphasize on resilience in educational settings and the actual practices that are being used by educators and institutions to influence resilience inside the classrooms. Researchers reported that educators used multiple ways to promote resilience like including resilience in the design of the courses and creating a community of belonging along the course. The review also points out the importance of the instructor in the process of resilience.

Developments in resilience are primary built upon research in K-12 settings as well in teachers' resilience. The empirical work on adults is still in its infancy (Gu, 2018). We still don't know how to promote resilience in higher education students and how instructors are currently promoting it in post-secondary institutions. There is not a curriculum that has been tested in higher education to promote resilience. Furthermore, being the instructor fundamental for the development of resilience few data exist that explains how they provide resources or foster resilience in the students. Resilience research is still evolving, and few studies have focused on students resilience at the post-secondary level, therefore more research is needed in this area (Patry & Ford, 2016). A gap on research about the promotion of resilience in post-secondary students from the perspectives of instructors shows the importance of the current study. This

research can lead to better understandings about the way in which resilience can be promoted in adults, youths, and higher education students. In the next chapter a complete description of the methodology of this study is presented.

Chapter Three: Methodology

Introduction and Overview

The variety of challenges during post-secondary education can present difficult challenges for students. Some of these risks include intensive workload, higher levels of stress, withdrawal from their programs, and emerging substance use disorders (Auerbach et al., 2016). Higher education institutions constantly look for better ways to help students who are struggling with negative factors and overwhelming situations, which put their studies and wellbeing at risk (Bradley et al., 2008). Emerging research shows that resilience is essential to overcome those challenges (J. Lee et al., 2018) and its development is associated with the living environment and depends on mentors or figures who model the characteristics of resilience (Minulescu, 2015; Ungar et al., 2019).

The relationship between instructors and undergraduate students is highlighted to be particularly influential in the resilience process (Mansfield & Beltman, 2019). Several studies have come to study resilience in education and the different practices that are being used to promote resilience (Beltman, 2015; Gu, 2018; Wosnitza & Peixoto, 2018). While advances in understanding about resilience are primarily built upon research on children (Gu, 2018) and teacher resilience in the educational settings, the empirical work on adults is “still in its infancy” (Gu, 2018). Lack of studies focusing on post-secondary student’s resilience and its promotion leads to the important question: How do post-secondary instructors promote resilience in students within their courses?

The purpose of this research was to understand how instructors enhance resilience in students in one education program from a university in western Canada. The primary research

question guiding the study was: How do post-secondary instructors promote resilience in students within their courses? Additionally, a number of sub-questions were considered.

1. How is resilience modelled and/or taught by instructors at undergraduate programs?
2. How does the post-secondary course setting provide tools for students to help them build resilience?
3. How do post-secondary instructors perceive and enact resilience during the courses they are teaching?

This chapter explores the research methodology used in this research, including the sampling of data, research design characteristics, participants, methods of data collection, data analysis, ethical considerations, limitations, and delimitations of the study.

Qualitative Case Study Research

An exploratory qualitative case study approach was used in this research to explore the behaviors and attitudes of instructors who were teaching undergraduate students. Qualitative research assumes that there are multiple realities and that the world is not an objective article but a function of personal interaction and perception (Merriam, 1998). In order to gather rich responses based on personal experiences from all participants, the design of the research needs to be interpretive in nature (Creswell, 2014). Considering the complex nature of resilience and the desire to examine one undergraduate education program with regard to the development of resilience, a qualitative case study methodology was chosen. Case study provides the tools to study complex phenomena, such as resilience, and has been considered to be especially useful for research studies that are linked to their contextual settings (Baxter & Jack, 2008; Breslin & Buchanan, 2008; Mabry, 2012; Yazan, 2015). Moreover, this approach helped to answer the *how*

questions that require an extensive and “in-depth” description of some social phenomenon” (Yin, 2014, p.38) that included behavioral events over which the researcher has little to no control.

Three seminal researchers have laid the foundations of case study research methodology (Merriam, 1998; Stake, 1995; Yin, 2014). Commonalities can be found in their definitions of case study. For instance Yin (2014) defines it as “an empirical inquiry that investigates a contemporary phenomenon (the “case”) in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident” (p. 56). While, Robert Stake (1995) conceptualizes it as “the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances” (p. 11). Similarly, Merriam (2009) defines a case study as “an in-depth description and analysis of a bounded system that is conflated with both the unit of study (the case) and the product of this type of investigation (p. 37). While all three researchers have been important to this work, the research described here aligns more closely to the work of Merriam (1998, 2009, 2014) and it is her work that has been used primarily to inform my research design.

Yazan (2015) notes that Merriam employs a constructivist lens. As such, the phenomenon must be understood from the perspective of the participants (Merriam, 1998). She also recognizes interpretive research from the point of view of multiple realities that can exist for individuals. By aligning myself with an interpretive view of case study research, I sought to understand the realities of participants and reflect on their lived experiences in their educational settings.

Merriam (2016) went on to compare this interpretive orientation to a positivist and a critical research perspective. In her writings, she presents on one side the positivism which assumes that “the reality exists “out there” and that it is observable, stable, and measurable”

(Merriam & Tisdell, 2016, p.9). This perspective works by uncovering the laws that govern the human behaviour. On the other side, Merriam compares it with the standpoint of the interpretivists saying that “the world, or reality, is not the fixed, single, agreed upon, or measurable phenomenon that it is assumed to be in positivist, quantitative research” (Merriam & Grenier, 2018, p. 6). Making an emphasis that interpretive research assumes that “reality is socially constructed; that is, there is no single, observable reality. Rather, there are multiple realities, or interpretations, of a single event” (Merriam & Tisdell, 2016, p.9) . She makes a clear distinction between these two philosophical views of research also saying that researchers who follow this type of qualitative research construct meaning. This stance of the interpretivists gives importance to the context in which the object of study is situated, giving place to more subjective meanings similar to what Creswell (2014) explains: “[subjective meanings] are not simply imprinted on individuals but are formed through interaction with others (hence social constructivism) and through historical and cultural norms that operate in individuals’ lives” (p. 25). While positivism look for the objective only truth, interpretivism accept that the data can be subjective in nature and beliefs of individuals shape reality and by consequence knowledge.

While positivism and interpretivism meaning, interpretation of the reality, critical research “goes beyond uncovering the interpretation of people’s understandings of their world” (Merriam & Tisdell, 2016, p.10). Critical research looks for change and transformation of the context and the problem researched. It does not accept the *status quo* and makes a great effort to ascertain that “Inquiry that aspires to the name ‘critical’ must be connected to an attempt to confront the injustice of a particular society” (Kincheloe, McLaren, & Steinberg, 2011, p. 164). Although these three perspectives of research are certainly close to each other, due to my

interest in how participants make meaning of resilience in their classrooms there is a strong inclination of my research towards the constructivism or interpretivism view.

The interpretivism approach make use of qualitative study designs such as the case study. Case study was commonly used in educational research to allow investigators to focus on a case, while retaining a holistic and real-world perspective (Yin, 2014). Using an exploratory case study in this research allowed me to gather perceptions of the different factors that influence the instructor's practices and ways of promoting resilience in higher education. These multiple experiences and perspectives helped form conclusions about the overall understanding of the phenomenon (Creswell & Creswell, 2018). The case study methodology states that important understandings come from studying phenomena involving the complex interplay of different systems within a case situated in the real-world context (Merriam, 1998). In this research, the phenomenon is surrounded by different systems in the real world, which includes the educational system, the geographic and political system, and the specific system of the educational field. In education, case studies were described as detailed "descriptions and analysis of a single unit or a bounded system" (Merriam, 1998). The case is also bounded inside a program of education that exist in a higher education institution in western Canada. In the case of my research, the unit of analysis was the in-depth information that the participants provided to support the understanding of the promotion of resilience.

As it was discussed in chapter one of this research resilience is a phenomenon by nature context bound. Case study is a methodology that specifically works in phenomenon that is context bounded. Therefore, the case, its context, and how it is bound become central to the researcher's lens and the choices they make regarding the application of case study methodology (Simons, 2014b). The inclusion of three different resources of data in this study;

semi-structured interviews, document analysis, and scenario analysis, increases the trustworthiness of the results as well as enrich a compelling interpretation of the data (Merriam & Tisdell, 2016; Yin, 2014). By vividly describing the different ways in which instructors promote resilience, I provide the reader with enough resources to determine the transferability of findings to their own situation, as a form of external validity. Merriam (1998) referred to it as user generalizability.

Participant Selection

Six participants from one undergraduate education faculty in a single university in Western Canada were selected using purposeful sampling. Merriam (1998) explained that purposeful sampling allows the researcher to choose a sample that will assist in developing the greatest insights. In this study, a purposeful sample was chosen from a specific university, in a specific educational program. An invitation to participate was sent to all instructors in that specific program. The first six educators who replied to the initial email with signed consent forms were selected. Three male and three female instructors sent back the consent forms signed in full and agreed to participate in the research.

Participant Demographics

Six instructors voluntarily accepted to participate in this research. They were currently teaching to undergraduates in a program of education in a post-secondary institution in Western Canada. All data was anonymized, and participants were assigned pseudonyms; Amber, Jim, Joy, Rony, Sam, and Stevie. Amber and Stevie are instructors that has been in the position during the last six years teaching undergraduates. Similarly, Joy and Rony have been teaching for the last eight years at the same institution. Jim has the most time at the institution with 16 years of teaching, while Sam had only been for the last two years teaching at the institution.

Data Collection

Aiming for the greatest measure of understanding of the case, multiple sources were used to gather data including interviews, scenario analysis, and document analysis (Merriam, 1998; Stake, 1995), which gives me the triangulation necessary for the validity of the data. The semi-structured interviews allowed me to engage with the participants as they shared their perspectives, stories, and experiences regarding the development and promotion of resilience. (Meyer, 2001). The scenario analysis and document analysis allowed me to challenge the interviewees by putting the topic of resilience in context and linked to like-real life situation, which gave me a deeper view of what meant for instructors to promote resilience. Using a constant comparative analysis (Mathison, 2005), I conducted interviews with each instructor and discussed the scenario analysis at the end of each interview. The course outlines were gathered from each instructor at the end of the interview and the document analysis was ongoing along all the interviews.

Data Collection Procedures

The data collection process took place in different stages that were executed like this: semi structured interview, scenario analysis, and document analysis.

Semi-structured interviews. This qualitative study was designed to look for deeper insights about the beliefs and practices of instructors around the promotion of resilience. Taking into account that semi-structured interviews are versatile and flexible, it provided me with the ability to come up with questions in the moment. Semi-structured interviews enabled me to “get to core issues in the case more quickly and in greater depth, to probe motivations, to ask follow-up questions and to facilitate individuals telling their stories” (Simons, 2014a, p.43). I chose this method so I could follow a certain part of the data that was of my interest in

the middle of the interview. The exploratory nature of this study also needed some space to explore ways or ideas that I had not thought about before the interview. A semi-structured interview has been found successful to gather data when a researcher needs a guide to follow but also needs to keep open the possibility to freely go different way (Galletta & Cross, 2013). The semi-structured interviews allowed me to engage with the participants as they shared their perspectives, stories, and experiences regarding the development and promotion of resilience.

The participants shared their knowledge through conversations held with the researcher during a zoom call for the interview. Each interview was 45 minutes long in average and was audio recorded as a mean to get the data collected. The interviews are often used to gather empirical data of important practices that participants describe and need to be reviewed by researcher (Boeije, 2010). Initially the questions were general and allowed the participant to situate in context about the topic of resilience. Along the interview and depending on the answers, I was able to do probing and follow up questions that kept the conversation going.

Interviews guided by flexibly worded questions are one of the most important sources of evidence in case study research (Merriam, 1998; Merriam & Tisdell, 2016). In the interviews, I made sure participants felt comfortable to describe and give specific examples of their practices in the classroom. This has been found allow them to add further information while keeping an awareness that every individual sees the world in their own way (Hendricks, 2017; Luo & Wildemuth, 2009). The format of these interviews benefits case study research as it “allows the researcher to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic” (Merriam, 1998, p. 74). Interviews can focus the inquiry on the topic of the qualitative case study, which gives highlighted insight into the participants’ lived experiences (Stake, 1995; Yin, 2014). Each one of the instructors taught different courses in

different levels of the education program, so semi structured interviews kept me focused on the questions and details that is the focus of my study while I was responsive to the lived experiences of each participant

Scenario Analysis. After the interviews, a scenario study that I created introduced a contextual problem for the instructors. The scenario analysis is also called a case study, not to be confused with the methodology but a case study that is used as a method. A case study is “a data collection method in which in-depth descriptive information about specific entities, or cases, is collected, organized, interpreted, and presented in a narrative format” (Marrelli, 2007, p.39). Aiming to understand better how instructors would respond to challenging situations of students in a hypothetical situation with students, I presented a very common, fictionalized situation in which a student is struggling with the course content. Additionally, the fictional character had also financial and family problems that prevented him from being totally engaged in the course. The scenario was given in a pdf file to be read by the participant. I allowed some minutes for the to take notes, think or just to better understand the fictional story. Once some minutes passed, I ask if there were any questions to clarify about the scenario, the characters, or the context in general. If any question appear I allowed more time to think about the scenario. Once the participants were ready, they just needed to discuss what they would do in such situation presented in the story. Follow up questions were made when needed to clarify ideas, practices, or responses to the situation.

This second key source of data in my study gave me a better understanding of the realistic solutions to everyday classroom issues implemented by the participants. Analysing the scenario gave me an insightful firsthand impression of the participant experience as if it were happening it the real life (Stake, 1995). Although there were no students involved in the study, I

anticipated that instructors may find this scenario very common, therefore discussing a real solution to the problem was easy and almost automatic for participants.

Document analysis. Course outlines were gathered from instructors to inform their practices. They were examined to look for the possible activities, practices and classroom policies that were created for resilience building during the course. Also, I was looking for any opportunity that was explicitly designed in the course to support mental health or resilience; due to the fact that “promoting reflection and resilience in your course design can create opportunities to anticipate areas that students may find overwhelming in their learning” (Bair & Dyjur, 2018). These documents could provide an additional understanding of the course setting and the way in which instructors set up supports of resources from the planning stage of the course. These documents helped me to get an understanding of the living world in the classroom. These documents added insight into cultural features and technical aspects of each setting (Yin, 2014). For instance, positive language, list of resources to common problems of students in the class, or ways to follow in case of difficulties, are explicit measures taken to promote resilience in the course and can be a sign of a more resilient culture. By accessing these documents as needed throughout the data collection process, I was able to ensure the greatest possible understanding of each participant and triangulate data gathered through the case study and interviews.

Data Analysis

Interviews

Prior to conducting the analysis, each interview recording from each participant was transcribed using a verbatim transcription technique which includes every single word spoken in the recording (Oliver et al., 2005). Although, transcribing every single word of an hour-long

recording seemed a daunting task, it was important for me to go several times through the recordings so I as the researcher could have a better understanding of the conversation, avoiding the possibility that something that I consider important escape from my analysis. Once the transcription was complete, I went a little further to make sure everything was accurate and properly written and provided the participants with a copy of the recording and the written transcription that included the interview and the scenario analysis. It was done for member-checking and to validate and verify the trustworthiness in this qualitative study (Doyle, 2007). The key to analysis of a case study is to provide a detailed description of the case (Stake, 1995; Yazan, 2015). Transcribing the interviews and scenario analysis in verbatim allowed me to get the most enriching and detailed description of the case.

Participants had two weeks to check the data and get back with any changes or corrections from anything they may believe has to be changed. Also, I ask them if they wanted to add any other idea or information that could be of importance for the topic while they listened to the recording. Additionally, they had the opportunity of withdrawing from the study in case they preferred their data wasn't included in the study after reading the transcript. The first part of analyzing the data was to read the transcriptions of each interview and get an initial list of preliminary codes. A coding system was established in the analysis of the first interview following a color system that allowed me to keep focus on content while reading thoroughly. I coded the data in a MS Word file that was a copy of the original interview transcript. I used my hand notes taken during the interview process as a support for the coding system and included them as comments in my word file. Then I follow the same color system for the second interview and so on until I had done it with all six transcripts.

I allowed some days for reflection about the experience of the participants and deep thought on the ideas the interviews and scenario analysis conveyed. Soon I realized how some of the initial codes were too close together that they may be part of the same code, so I just joined some colours that were part of the same code. The number of colours for the final codes was too large for me to be able to see patterns either inside the interview or across all participants. Consequently, I decided to compile all codes with excerpts of data into a MS Excel spreadsheet. This research was not funded so I had no opportunity to get access to a software to get the coding automatically. Also, I preferred to be done manually so I could have more control of the process in the smaller details. The code list was linked to the research questions to carefully gain the deepest understanding from the data. Using the same pattern, I did continue the process with the scenario analysis that was compiled in the same word file with the initial codes already highlighted. Afterwards, a constant-comparative analysis was done among all data and codes gathered. The patterns found from the codes generated among all the data supported the creation of naturalistic generalizations that allowed me to learn from the case (Creswell, 2014). Themes were extracted from the patterns visible in the final codes of the data. All the data analysis was done by me with the assistance of my supervisor.

Course Outlines

The course outlines provided by each course instructor were analyzed thematically. Firstly, a complete reading and overview of the documents was completed. This provided a general sense of the information and an opportunity to reflect on its overall meaning (Creswell & Creswell, 2018). As the initial themes were already extracted from the transcripts and the scenario analysis, I use them to study each outline closely.

Trustworthiness

For me the “issue of credibility is related to how well the research matches the reality” (Merriam & Tisdell, 2016, p.242). In my study, it was important to build trust with the participants, so they find easy to set out events as they happened going through the conversation in a simple easy manner. For this I made an intentional effort to not interrupt, advice, or judge any of the situations or ideas that they may mention in the interview. Having just an active listening position from my end helped participants to feel heard and comfortable. Undoubtedly, the instructors who agreed to participate in my research had a natural interest in the topic of resilience and were expecting to tell their point of view and their specific stories about the way they promote it in the classroom, and I wanted to make sure I could represent them in a truthful manner. During my interactions with the participants, I was always eager to construct a dialogue that conveys in a meaningful result. I showed I was genuinely interested in the topic of resilience and rather than being the expert in this situation I was looking for learning from their insights.

Merriam (2016) indicated that it is important to understand the perspectives of those involved in the phenomenon of interest, to uncover the complexity of human behavior in a contextual framework, and to present a holistic interpretation of what is happening” (p. 244). In this vein of thought, the main and follow up questions were always directed to address interpretations of reality of each instructor interviewed. I aimed to achieve trustworthiness through having a clear research question to investigate as well as making sure I follow a member-checking process with the raw data. Moreover, “probably the best-known strategy to shore up the internal validity of a study is what is known as triangulation” (Merriam & Tisdell, 2016, p.244). Ensuring data was collected systematically through multiple methods allowed me to do approach the topic of resilience in different ways.

Lincoln and Guba (1986) proposed a parallel criteria for the internal and external validity, reliability and objectivity of traditional paradigm of trustworthiness. This criteria included “credibility as an analog to internal validity, transferability as analog to external validity, dependability as analog to reliability, and confirmability as an analog of objectivity (Lincoln & Guba, 1986, p. 76-77). Various techniques were also presented in their manuscript to achieve the expected rigour of the research. These multiple validity strategies enhance the researcher’s ability to assess the accuracy o findings (Creswell, 2014). This study gathered data from human participants, therefore I used the techniques that were appropriate for my research.

Questions made should allow the participants to convey detail about the site, people and specific situations around the phenomenon in their narrative account (Creswell & Creswell, 2018). As the instructors interviewed described real situations and shared their experiences and thoughts about resilience in the classroom, the questions were designed thinking on the specific context of the participants making easy for participants to have conversations around their daily labours as educators. The clear accounts of participants in their daily labours along with the confirmation of the transcripts by the participants helped me to achieve credibility.

The transferability of this research was covered by using rich, thick description to convey the findings (Creswell, 2014; Yazan, 2015). The descriptions related in this study and the constant use of direct quotations of my participants may transport readers to the setting allowing them to make their own judgement about the applicability of my finding in their own settings (Creswell, 2014; Lincoln & Guba, 1986). It could be assumed that in other institutions of similar size the same kind of issues may exist, therefore findings from this study may be transferable to those institutions as well.

Three different data sources were used to gather and analyzed the data; interviews, scenario analysis, and document analysis were the basis of a coherent justification for the themes. Any conclusion that may rise from the data will be more trustable if it is based on data that comes form different sources (Yin, 2014). The themes generated from the data that I collected in this study were established from the triangulation process providing validity to the study (Creswell, 2014). Dependability on this study was addressed with a substantial use of quotations from the data. I made sure all the conclusions came directly form the data and not from external sources not related to them. I followed the same process to gather data with each participant in the same order. This was to ensure there were not external influence over the data in terms of inconsistency of the process to gather it.

Given that I collected, transcribed, and interpreted all data alone, it was important to consider alternative points of view for the interpretations of the data. For this, I used peer debriefing with my colleagues and supervisor to enhance my analysis and interpretations of the data. I had them reading pieces of raw data and talking about what I found in the interviews and analysis. Throughout the conversations I could broaden my understandings and introduce different perspectives for consideration, helping limit the researcher bias (Mertens, 2010). After some time to decompress and reflect on all the ideas, Lincoln and Guba (1986) mentioned that “confirmability can be achieved also by having an external audit from a competent auditor” (p. 77). I had the privilege of a peer with advance knowledge of research who helped me reading my conclusions and having conversations with me about where they came from. Also, my supervisor helped me in this process to secure confirmability of my study.

Researcher Biases

In qualitative research, the researcher is the primary instrument through which data collection and analysis are done (Creswell, 2014). In this respect, I made a big effort to practice reflection throughout the process of my research and being upfront with my own biases that could influence the outcomes of my research. It is to be known by researchers that they bring their own biases to the research (Yazan, 2015). Their background and philosophical views will obviously influence the ways in which researchers understand reality

A naturalistic inquiry, as Lincoln and Guba call it (1986) is part of my fundamental philosophical views. It has also been named a constructivist or interpretivist point of view. I believe that individuals are complex and that multiple realities could exist at the same time being affected by context and time. According to this, I believe that meaning is formed through interaction with others, recognizing that my own backgrounds shape my interpretations of the phenomenon studied. My intent then, is to make sense of the meaning others have about the world. Looking the world through these lens makes me consider that individuals develop subject meanings of their experiences, which gives me the goal to rely as much as possible on the participants views in the situations studied (Creswell, 2014).

I must acknowledge that I am a teacher myself and that most of my professional experience in my life has been in the field of education as a leader and educator. Undoubtedly, this shape my views about the world, and I may have convictions on how good teaching must be made. My preferences in techniques and practice could influence the way I read the instructors and their answers. Nevertheless, I have no experience teaching in Canada at the post-secondary level, which limits my bias towards educators in these roles. I have made visible my personal perspectives as well as my view of the world through a constructivist lens to helping

clarify bias I may have brought to this research. I hope it becomes a strength of qualitative research when the researcher presents his work as a direct interpretation of their data, and it brings readers closer to reality Merriam (1998).

Ethical Issues

Most authors who discuss qualitative research address the importance of ethical considerations (Creswell, 2014; Hendricks, 2017; Merriam & Tisdell, 2016; Yin, 2014). Honoring the ethical approach of the research is the vital importance for me as it help me ensure that the research “respects human dignity and integrity” (Simons, 2014b, p.102). All expected steps were followed including the application to the Conjoint Facilities Research Ethics Board and approval under the code number REB20-1069. I took the Canadian Panel on Research Ethics CORE Tutorial to get the sufficient training in order to have successful research in terms of integrity. Additionally, some preventive actions were taken to avoid ethical issues:

- Participation on the study: Due to the held position and the direct relationship of my supervisor with the potential participants, none of the recruiting materials included the name of my supervisor. She was left out of the documentation and communications with participants, so none of the instructors knew she was my supervisor. Additionally, the only one to know the identity of the participants was me and it was kept confidential also to my supervisor. Pseudonyms were used to ensure anonymity of participants and special care was taken to keep the participants privacy, especially in this study where the population sampled may be easily identified
- Participant selection: I did not know any of the participants prior to the interviews. Selection was done in a first come first served basis.

- Disclosure: The purpose of the study was fully disclosed to all participants. In the first contact, the consent forms and reviewed verbally prior to start of the interview.
- Gathering Data: participants were given the option to choose the time for the interviews, so the video calls were schedule in times selected by participants looking for their convenience and not the researcher's.

Analyzing and reporting data: Both positive and negative findings were reported in this study, having a full range of data described in the results section.

Other possible ethical concerns of the research were covered, such as obtaining informed voluntary consent, communicating in a clear manner; in written and verbal format, and carefully storing data during the study process with the security measures up to the standard.

Assumptions, Limitations, and Delimitations

The credibility of the research is strengthened by clearly acknowledging the assumptions, limitations, and delimitations of the study.

Assumptions. Being myself an educator with vast experience in teaching with adults and young people create certain perspectives and assumptions of what an instructor might be doing in the class. These assumptions must be in place to keep the credibility and validity of my research. In the context of this study, I assumed that wellness and resilience is important for both instructors and students in the settings of education. In addition, I assumed that all participants would be truthful and would give honest information of how they would approach these issues in the classroom in a truthful manner. Furthermore, I assumed that the participants would find valuable the opportunity to reflect about the different practices that they used in the classroom to promote resilience. Finally, I assumed that each instructor was actively seeking to

support students with their challenges or at least tried to be of some support when a difficulty appeared.

Limitations. “A limitation is an uncontrollable threat to the internal validity of a study” (Ellis & Levy, 2009, p. 332). Important limitations of the case study may also be highlighted although I expect the readers of this report can “judge to what extent the findings can or cannot be generalized to other people and situations” (Creswell, 2014 p. 198). In case study research, there is a common limitation due to the nature of the research, as Anne Marelli (2007) described, “because case studies are detailed examinations of specific persons or entities, the number of cases that can be included in a study is typically small. Generalizability to a larger group is, therefore, limited” (p. 43). The sample used in this research due to the scope and time limitations inherent of a master thesis process further limited the sample. Additionally, the fictional scenario analysis may not be familiar to the participant, it could not be understandable or relatable to the specific context of the inquiry, and it could not be seldom comparable as they are bounded in the context of the story.

The purpose of this research was directed to analyze the understandings of the instructors around the topic of resilience. Therefore, no data was collected from students even though the development of resilience is on them. The fact that there is no student voice in this research is, in effect, an additional limitation of the study. Finally, the gathering, coding, and analysis of data was done only by me. Even though all strategies for trustworthiness were in place as described before, I was the only researcher doing the interpretations of the data.

Delimitations. Guba and Lincoln (1986) state, “It is the nature of the problem to be investigated that provides a major means for setting boundaries” (p. 89) Given that my research problem involved understanding the ways in which instructors promote resilience within their

courses, the study was limited to one particular faculty and one particular program. To present clear boundaries around the study, it was also delimited by choice of only one large research university in western Canada.

Chapter Summary

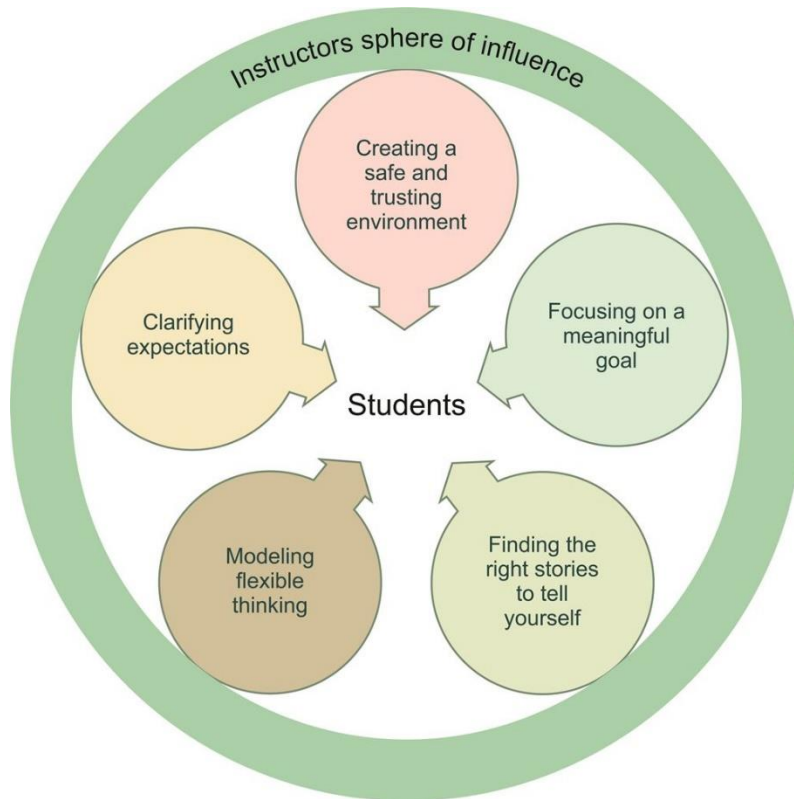
This chapter presented the design of the research supporting the case study methodology. This methodology was primarily influenced by the work of Merriam (1998, 2009, 2014). The aim of the study was described alongside the research questions and the justifications of the decisions made in terms of format and design of the research. I provided the explanations about the choice of case study and delineated the processes of data collection and data analysis from this perspective. Finally, features of trustworthiness, ethics, assumptions, limitations, and delimitations were discussed later in this chapter. The following chapter presents the findings.

Chapter Four: Findings

The data presented here reflected the views of six instructors teaching in an undergraduate Education program in a large university in western Canada. It provided a picture of the ways in which they promoted resilience in post-secondary students. The conversations and discussions about the case study allowed the researcher to get an understanding of what was being done in the undergraduate setting on the topic of resilience and what was considered important to students as they progressed through their studies. It was within that context, and during a specific teaching time frame, that I collected the data on this case to inform these findings. The themes that emerged from this study are outline in Figure 3.

Figure 3

Emergent themes for the development of resilience.



Five major themes emerged in this study, which are reflective of the research questions. The themes that emerged were (1) creating a safe and trusting environment, (2) focusing on a meaningful goal, (3) clarifying expectations, (4) modeling flexible thinking, and (5) finding the right stories to tell yourself. The first theme, creating a safe and trusting environment, focused on how instructors created spaces in which students felt safe to try new skills and make mistakes, thereby fostering relationships between students and instructors as well as among students themselves. The second theme explained how instructors included the practice of refining goals in their course, aiming to organize priorities and refocus on what really matters to students. The third theme, clarifying the expectations, described the ways in which instructors took the time to create realistic and appropriate expectations. The fourth theme captured the importance of instructors being able to model flexible thinking. Finally, the fifth theme, finding the right stories to tell yourself, described how the inclusion of Indigenous knowledge and narrative approaches was being used in undergraduate programs to switch perspective from challenges to a journey approach, making students more resilient.

Participants Understanding of Resilience

To better understand the participants' perspectives, I asked them to define what the term resilience meant for them and to provide an example to illustrate. A general understanding of what the term resilience meant for all instructors was evidenced in the way they described resilience. The instructors answered without hesitation what the term resilience meant for them and included in their definition the ability to overcome challenges, to bounce back from problems to a state of living a good life, and to get back on track when things went wrong or when they experienced something difficult. To define resilience the participant Rony mentioned:

To me, resilience is the ability for individuals to meet challenges that might be preventing them, particularly in education, might be preventing them from learning. And so, it's the ability to overcome those challenges in a positive way. It's the strategies that we would use as learners to overcome these challenges. From an instructor's perspective, is what kind of supports can we put in place for students to help them overcome that and it's very individual. It's not one size fits all. It's very robust, it can be very individualized, depending on who the students are and the challenges they're facing. Even though we're focused on learning, these challenges come from all different perspectives. You know, lifestyle with respect to social economics, cultural, and religion. All of these play as factors into student's challenges with respect to learning.

None of the instructors had a background researching the term resilience or participating in research related to resilience but each had a clear understanding of what the term meant to them.

Furthermore, instructors had a very holistic view of resilience and used personal and professional situations to exemplify what it meant. Instructors took into consideration different dimensions of wellbeing to define resilience, including the values and emotional factors of the students, to provide an understanding of what it looked like in their day-to-day practice. For instructors, resilience included the ability to recover from challenges or setbacks, resulting in improvements or positive outcomes. Stevie, a participant in this study, noted that "living out your life according to your values and to what kind of a person you want to be" was a factor of resilience that had an impact on an individual improving their situation after a setback. Each of the themes presented below were rooted in these individual definitions of resilience and were evident in their ideas and reflections.

Theme 1: Creating a Safe and Trusting Environment

The instructors interviewed mentioned consistently that one of their primary goals was to create strong and resilient groups through the development of a safe environment and a sense of mutual trust. Having a place of trust gave students enough confidence to make mistakes and learn from them without the fear of being judged or humiliated in the process. Jim commented:

We need to be willing to easily feel that a problem is not something to be ashamed of and to be hidden from; that we need to talk about it. We need to expect that not everything is going to run smoothly every day, that there will be challenges that need to be addressed. And I need to do my best to try and convince my students that I want to help them, not simply judge them.

Jim, who has been teaching at the post-secondary level since 2006, represented the efforts of instructors to successfully generate an environment in which students were able to actively engage with their studies.

These efforts were accomplished in different ways including the creation of spaces to establish connections with and among students. Moreover, the instructors left space in their courses for students to make mistakes without fear of impact to their grades. This was echoed by Amber who mentioned “if learning means making mistakes, then learning means making mistakes. So, I point out to them, that the course is designed in such a way that there are safe places to make mistakes with no grades attached to them.” This comment captured how important it was for instructors to create a safe environment prior to having an emphasis on grades.

Additionally, Instructors actively engaged in conversations with students, allowing them to share their ideas. After students felt comfortable, however, instructors noted that they would

start communicating their challenges in looking for improvement. Stevie said “I think about it out loud with them. I make space for them to share their ideas, for instance, talking around working with a group of kids, like how would you bring your students to share their strategies for wellness.” Instructors talked to students about different challenges and difficult situations in the field, and in doing so modelled resilience practices. They told their students about the positive effects of taking breaks, changing places or positions when having to work on the computer for longer times, and other general practices in which instructors demonstrated they care about student wellbeing. These instructors emphasized being upfront and clear on student difficulties so that their students knew their instructors were there to help them rather than judge them. Risk-free environment was further fostered by a culture created between instructors and students, in which instructors promoted rigorous challenges as well as high levels of support. Stevie explained that she tried to “make space for students and have good relationships with them and to be an empathetic, supportive educator at the same time as keeping high expectations and having consistent boundaries.” The professional relationships that were resulted in mutual trust, were nurtured through conversations and support on a daily basis.

The trust piece appeared repeatedly in the data to be very important to foster resilience. Instructors mentioned it was a key part of resilience. Rony noted the importance of this when he said,

The big thing is that relationship piece, building that ability to have trust in having these more open conversations. There have been times in which they're scared, they're afraid of what they're going into. With respect to the practice. There's a lot of fears there. And so that trust is there. So, we have those conversations. And again, that's part of that resiliency piece.

Making use of guiding questions, instructors led conversations to help students see that they were in the position of helping them grow. Moreover, instructors showed that they also trusted students to find solutions by themselves rather than giving them directions on what to do. Joy (2020) mentioned,

I just find clarity, trusting, caring: those environments just are the best way to build resilience in you and your students. That trust is to me, trust is the most important. If you can trust the people you're working with and you feel safe with them, I think that's the key to building that resilience. And moving on, and everybody makes those mistakes and having the support of people around you to get you over those hops and get you back on track. And it's really important.

Modeling trusting relationships allowed instructors to connect better with the students and create the caring environments in which to interact with others.

Instructors also felt that having a supportive cohort provided more opportunities to overcome challenges because students had more people who actively supported them when things went off track. They stated that strong relationship building did not only involve teacher-student relationships, but also student-student relationships. Instructors found that students also constructed trusting relationships among themselves as a result of the influence instructors had on them. Sometimes the supporting environment that the group created also worked as a source of motivation for students. Joy made clear that her students believed it was inspirational to have discussions about their challenges with other classmates in this safe and caring environment. Joy noted,

They just want to do better, even when they come into the course a little bit scared or if they need to bounce back from something. Its this caring environment that gives them

that boost to bounce back. I think it's these caring environments that do that. The trust is a key component to create those caring spaces.

Building that trusting environment empower students to overcome difficult situations as well as small bumps in their lives as students.

In creating a safe environment, instructors found it useful to create a protocol that guided students as they met with other students to talk about their assignments and what they had done. Working collaboratively, they shared their doubts or areas of challenge and/or confusion they were having with the assignments. Other students were then able to give suggestions or simply share the strategies that they were using to work on an assignment. Instructors promoted that collaborative view in which all of the students worked together for the benefit of their individual goals. Sam said

It's just that sense of community, and caring, and building these positive relationships that really help build resiliency in the students. When they have somebody, they know that's safe and caring and trusting. And we make sure that when we are sharing anything in class, that we are respectful of everybody.

Following the friend's protocol is another way instructors use to enhance this safe environment.

According to instructors, these spaces were intentionally promoted and created. They stated that there was always a possibility that things could go wrong and without the intentional promotion of a safe and trusting space it would be more difficult to overcome those challenges as they may remain hidden. Jim explained that "teachers need to be willing to initiate conversations whenever there is a difficulty. You can get one or two students that choose to try and simply present the impression that everything is wonderful when it's not." Promoting safe

and trusting spaces and being open with all of the students was seen as a critical part of the daily work of instructors.

Instructors conveyed the message that being open and clear in a safe and caring environment was in the best interests of students and a deliberate way to build resilience among them. Consequently, they tried to create this environment as soon as possible. Jim mentioned, “I think it's a matter of trying to set up the kind of atmosphere that I talked about, and I addressed that right from the very first class that I had with them.” Indeed, the theme of creating a safe and trusting environment was critical to all instructors and had to be done so authentically.

Theme 2: Focus on a Meaningful Goal

According to instructors, having a focus on a meaningful goal was an essential element to support resilience in students. Some of the instructors gave a clear explanation of the purpose of the class in addition to the general objectives for the course hoping to give direction to the course. A clear meaningful goal aligned with the purpose was cited as an important element for resilience, which provided direction the same as motivation to students during the difficult times. Joy stated, “just making those clarifications about the purpose and objectives of the course can help students to organize themselves.” Having a better understanding of the goals allowed students to find resources and plan possible paths to achieve it.

Furthermore, instructors noticed that sometimes students try to do their best, but they do not even have a clear understanding of what they are trying to achieve, which makes very difficult to achieve it. Instructors observed that it was very unlikely for students to succeed in the specific course outcomes, if they did not know exactly what they were aiming at; it was not possible to randomly accomplish it. They need to aim to the goal continuously and intentionally

to increase their chances to succeed at it. However, instructors agreed that students could not be told what goal to pursue, they needed to figure it out by themselves.

Instructors explained that finding the purpose helped students to be resilient over time. It gave them ability to decide and to move forward over some small bumps that made them stop or just circle around what they should do. Rony described how this looks like in the courses:

where students are struggling with this notion of resiliency is when they are coming to you constantly saying; How would you like me to do this? And my response back to them is: No, you tell me how you want to do this, or if you've got a question, why is this question important to you?

Similar to a Socratic method, instructors used conversations and a series of general and specific questions that guide the student to narrow their goal. Once the students have decluttered anything around the meaningful goal that they are pursuing instructors can support them more accurately to find resources for their aim, thanks to a more robust understanding of their goals for both parties.

Amber and Jim clarified that there are many students that found themselves embedded in a large number of small decisions that did not add value to their goals or overarching purpose. Jim made sure that their students look for their main goal since the very beginning of the course. He found crucial that students “just get everything off their plate that they possibly can, to really look very carefully at what they've got. Once they get rid of everything else, they can focus on what they need to aim at.” Sometimes it also meant that students needed to prioritize and sacrifice some of the other things that were creating extra unnecessary work for themselves.

Amber described:

Something has to give. Now, that might mean beautiful home cooked meals. It might mean coaching your son's soccer team. It might mean cleaning your own home, iron all your sheets, whatever it is that you can get rid of. You're going to have to find things to get rid of.

Instructors encouraged reflection upon those things to find out whether they were supporting or undermining their main goal.

Some participants also mentioned that guiding students to find a clear meaningful goal helped with supporting them when they were considering delaying or quitting their studies. Instructors managed these situations by helping students to see what they called the big picture, allowing students to clearly see what their goal was. Stevie detailed:

Sometimes being able to see the big picture helps us be more resilient, too. So, I always ask my students to reflect closely on their purpose being here and going through all these challenges. What is that that they are pursuing that keeps them going.

Without a focus on a meaningful goal, instructors said that students could become demoralized in pursuing something they didn't care about, which finally impacted their resilience.

For instructors, the importance of setting meaningful goals relied on the positive and realistic impact they had on students. If those goals were to be achieved, it meant a positive change for students. This translated into an ability to make better decisions, see results and a general motivation to push through challenges, becoming more resilient. Sometimes, instructors assisted students to set those goals and other times instructors promoted the organization of priorities in order to help students to refocus on the meaningful goal they already had. Amber explained "some people need to be told that. They don't automatically see that. They try to do everything and then they are stressed out and they don't realize that they can actually put

something on the backburner.” Instructors understand that there are many distractions could come up, however, and putting a focus on the goal, helped students even with smaller steps, prioritization, and motivation.

Theme 3: Clarifying Expectations

During interviews, instructors described that they worked diligently to clarify student expectations within their courses. This practice was seen as essential to the success of students and a way to promote resilience. Amber mentioned that she invested most of her time on this practice: “One thing that helps with resilience is having appropriate expectations. So, I spend a long time and a lot of effort at the beginning explaining the course and explaining what expectations there are.” Participants declared they often found that students who have very unrealistic expectations of themselves, the course, and others, were apt to create extra work for themselves. For instance, Jim cited a common example of this in his courses:

Very often there is a gap between expectation and reality. Very often they have unrealistic expectations of themselves. You'll have student teachers at the beginning of the field experience who expect themselves to be master teachers. But of course, they're not master teachers, I'm still not a master teacher having done this my whole life long.

They expect to be teaching the perfect lesson and then they fall apart. Well, of course, it's not the perfect lesson and there is no such thing as a perfect lesson.

Instructors also mentioned unrealistic expectations in other dimensions of students' lives that became barriers to their studies. Sometimes it meant that students believed they could handle increased course loads or that they could engage in many other additional responsibilities. For instance, full time employment combined with full time programs or home activities or extra curricular commitments that required additional time were seen to be particularly problematic.

Instructors help students to understand the context in which they are taking their courses or the context for which they are being prepared for. Inside the courses, instructors made use of rubrics that clarified the expectations for each assignment. They took the time to have conversations with students to ensure the expectations were clear. From the beginning of the courses, instructors used the rubrics and the course outlines to envision the context in which learning, and teaching would be happening, the expected demand from the course, the possible time commitment needed, and what could be considered realistic or not.

Instructors believed in this notion of expectations in their own lives too. Stevie mentioned: “Everybody's life will have ups and downs, difficult times and easy times ... we all need to manage our own expectations, our own expectations of the world, and of life, and expectations of the people around us.” Clearly, clarifying expectations was something that was part of their lives, and they promote it as such. Furthermore, instructors placed an emphasis on the relationships of students with the people around them to create more realistic expectations, rather than having a focus on a self-centred view or goals disconnected from the wider community.

Instructors found that being frank with students about the things that were expected from them could help them create a coping plan, specially for those students that were struggling with different aspects of their lives. There were situations that challenged individuals beyond to what could be done. Amber suggested “So part of resilience is having realistic expectations but sometimes those realistic expectations are kind of realizing of a hard reality” Adjusting the expectations helped students to plan for those challenges, by analyzing what were the possible options in the situation that they were going through. Jim mentioned, “a central part of my role is to manage expectations, to help both student teachers and partner teachers be realistic in what

they expect. Be reasonable in what they expect and work within that.” Jim highlighted that rather than wasting energy trying to change the situation, recognizing what could and could not be done in a difficult situation was vital for students’ resilience.

According to instructors, when students created unrealistic expectations of themselves, they often took up many responsibilities that were neither easy to manage nor necessary. These unrealistic expectations led to disappointment and anger in students and prevented them to create a plan to overcome the real challenges that were there. Sam reflected:

We as adults are used to juggling work, personal life, kids, challenges, finance, all of that stuff. So, we accept that's part of being an adult. I think our resiliency gets tested when those things start to come out of balance. So, if the workload gets really heavy at a certain time of year or the coursework gets a little heavier, in some cases I hear from students where actually their families are actually coming apart right, they’re in a messy divorce or they have siblings or loved ones or parents who are quite sick. ... I believe, our resiliency gets tested when those things get out of balance, when the demands in one of those areas start to impact how we can function in the other areas.

Instructors talked to students about creating plans to manage other areas of their lives that were more demanding as well as reducing some of the unnecessary loads they put on themselves that became a threat for their studies. Jim described a specific example in which he helped to prevent a student dropping her studies by clarifying the expectations.

She had an awful lot on her plate. What I needed to do in that situation was, try and help her. Really reduce some of the expectations she had on herself. She was demanding more of herself in the student teacher role than was necessary and was required and was appropriate.

This was a specific example in which he clarified those unrealistic expectations to prevent a student drop her studies. The student in his story successfully completed her studies after setting appropriate expectations.

In contrast, Stevie approached the expectations of the students looking forward into the professional path. She explained that to develop resilience in the career, it is imperative to understand what the profession entails:

I think one of the things that we do in teacher education is prepare them for the knowledge and skills they need. But we also need to prepare them for what it is to live as a teacher, as a human being in that role, not just as a professional in that role, but as a as a living creature, trying to survive it and do it in a good way. Because, when we're not well, we're not good teachers.

A clear understanding of not only the preservice context, but the context in which the students will be working in the future was imperative to develop resilience during the university studies. For the instructors interviewed, having a clear notion of what the world demands was important when handling difficult situations in education. this gave students the ability to anticipate any unexpected challenge. Once students started setting more realistic expectations, they were better able to be prepared for unexpected situations that might arise. This was supported by Jim who noted that “when a student gets into that kind of mindset of learning how to deal with reality, it builds their resilience. They move away from expecting the world to be exactly the way they want it to be.” Joy noticed that one way to encourage students to better reflect on their current context in a realistic way, and thereby boost resilience, was to make “open ended questions to students about the application of their learning in a real professional situation.” Jim also engaged in discussions on the reality of student contexts, encouraging students to ask,

How do I work with the world as it is, rather than some weird notion of how I think the world ought to be? And I think that resilience is a great deal to do with realism and an understanding that things don't always go exactly as one might prefer them to go.

Then instructors supported students to grow from an understanding of what is realistic for their specific context.

Ronny assured that managing expectations helped his students progress over time. "It's really trying to understand what happened. I think just moving. How do we move forward from this point? Where I am. We have to move forward." Participants helped students to no longer strive for perfection but aim for a sustainable level of progress. Joy explained that she made sure "everything is scaffolded [for students] so that they understand that each part of the course builds on the first part." Having achievable, clear steps that started at a beginner level and increased in difficulty over time helped students to progress even when they faced setbacks.

Finally, instructors spoke of the importance of clarifying expectations by describing the inevitability of mistakes and the way these can be framed as an opportunity for learning. Instructors let students know that mistakes will be part of the process, however they highlighted those mistakes as opportunities to enhance the learning of students. Joy shared her perspective, noting:

Taking those risks to make mistakes and then learning from those mistakes and building on what you can do to make it better. So, yeah, that they can take those risks and do great work. And so, what if you fail? Do you not learn from it? Pick yourself up and move on. Instructors showed concern when it came to students expecting to be in perfect situations, thereby achieving their goals without any challenge. Joy indicated that high levels of academic success were achieved with progress over time and the perfect outcome was often achieved after

many failures; “every year that I teach a course, I tried to improve and get better and better by listening to their questions and listening to their feedback as well. That is how I improve as well.” Amber also mentioned that sometimes she had students who struggled, particularly when activities were not counted as a part of the grade:

They often come from a mindset that everything you do must count for something. And it does count. It just doesn't always count for grades. So, emphasizing learning for learning sake helps them with their own expectations, but also helps them with the course expectations because they might wonder why in the course there are the elements of formative feedback or elements of doing things that have no grades attached to them.

Amber placed an emphasis on learning as continuous growth rather than on the grade itself. This was a sentiment shared among instructors who all felt that clarifying expectations played a central role in the way students faced challenges during their studies.

Theme 4: Modeling Flexible Thinking

While keeping challenges for students in the courses was seen as crucial, instructors also suggested that modelling flexible thinking helped students become more resilient. Participants explained that when they were open to explore different ways to undertake a challenge, students felt motivated to think about a problem in new ways and to find new routes to overcome it. Likewise, instructors responded to a made-up case study provided by the researcher, in which one student “John,” had difficulties with a group assignment. The instructors answered the case study with a wide range of possible solutions, such as time extensions, additional support, or supplementary activities. Even more, they would not hesitate to discuss other potential resolutions provided by the student. Certainly, instructors were clear in that there was more than

one way to solve a problem, and by modelling flexible thinking, students knew they could shift gears to look for different strategies.

All interviewed instructors included in their responses different alternatives that supported “John” to get over the obstacles that were preventing him to do the group assignment. In fact, they were ready to be a flexible role model and work with the student all the way through the problem. Jim responded: “I think my answer will be to see if there is something different, he could do. And then I would explore with him what might be a suitable alternative thing for him to do.” In the same vein, Sam said, “I will start by showing I am open to listen his perspective, that I am willing to change the way in which he can demonstrate his learning and help him if necessary to go through this difficult time.” Working together with students, as well as maintaining these conversations with them, was a compelling way to display flexible thinking in front of their students.

As part of being flexible, participants agreed to undertake possible solutions proposed by students. Instructors mentioned that the solution could come directly from the student even if he were thinking something different than the instructor. Similarly, Sam said, “if he [John] thinks that working on it individually, he might be able to get it done. That will be the way I would go, and that would include maybe a time extension to do that.” Rony also included that “The next thing is not to provide solutions to John but get him to develop some solutions. So, we also make sure he owns the issue.” Instructors encouraged students to come up with their own solutions, promoting flexible thinking skills as well as autonomy to be more resilient. Joy responded: “Do I need to give them extra time with respect to writing? Yes. So being flexible and saying that nothing is black and white in my class, there's degrees of gray.” Different ways to overcome obstacles could come from either the instructor, the student, or their interactions when they work

through transitions and changes. Instructors made clear that they needed to listen to their students to find out possible solutions and become resilient in the face of challenges.

Instructors were not too rigid to what was set previously in their courses when conditions and responses from students changed. They considered the context of every situation to evaluate their course of action. They thought of alternatives of how to do, say, or use things, showing the value of being flexible despite difficulties. Stevie mentioned:

I would be ready to flex in order for them to work out their process, because I think this would be now a new learning outcome, like actually fixing the situation together and not making it all perfect but coming to a way that they can move forward. That now, is the learning all of a sudden.

Instructors considered that being flexible is something all students needed to learn in order to move forward through hardships. When instructors used this flexible approach, students were better able to cope with change and new information. Rony said, “If students see I am flexible they assess the situation and make a new plan, but if I do not show that flexibility, they usually get stuck and frustrated.” By keeping away from a rigid mindset, instructors were ready to accept different paths to take, expecting that their students could learn to apply flexible thinking to better overcome obstacles.

Instructors noted that showcasing a flexible mindset in front of the students coupled with a chance to talk about it seemed to promote the same behaviour in them, becoming more flexible with strategies to solve problems. Stevie described, “I would try to hold space for them to have that conversation and listen to each other’s perspectives, learn to be flexible and then hold space for them to problem solve it together.” Participants created opportunities to practice flexible thinking as part of their strategies to promote resilience. Students constantly felt bombarded with

new information, and sometimes this was overwhelming. A space to talk about different ways to approach a problem made students feel safe and boosted the development of flexible thinking skills.

Being open to change also allowed instructors to navigate through unexpected situations and do the adaptations necessary to keep moving forward. Jim indicated, “What I’ve learned in my practice is to not try to make unworkable situations work. Now, I recognize when they are not and try to get out of it and find another way.” Sometimes things did not result as expected due to multiple factors that were out of the individual’s control. Instructors stated that they prefer progress over perfection where they were willing to change what they planned to make the lessons more consistent with the changes in the context. When I asked Rony about the unexpected adversities in the course he responded: “I would try to be as flexible as possible. But keeping in mind, what are the skill sets that are important to teacher as they’re moving forward.” Flexible thinking was part of the daily labour for instructors. They set up their classes and lessons so that there was room for change, thus made it easier for them to promote flexible thinking. For instructors, modelling flexible thinking influenced resilience in students and gave them different perspectives to overcome an obstacle.

Theme 5: Finding the Right Stories to Tell Yourself

During the exploration about ways to promote resilience in students, some of the instructors referred to the power of stories that supported this purpose. Participants made use of narrative to portrait challenges as a keystone of professional development. In that sense, students were prompted to craft stories around their experiences, adversities, and feelings about their lives around their courses. Particularly, their stories shared obstacles and the resources that students used to address them, helping other students to incorporate new strategies in their day-to-day life

to be more resilient. Eventually, students shaped the story they were telling themselves in the direction they wanted to go, using the elements from others' stories that allowed them to keep moving forward.

Instructors who used narratives argued that recognizing resilience in someone else or in other communities was of vital importance to build students resilience. Stories were incorporated in the participants classes to illustrate how other groups or individuals overcame obstacles in different settings. Stevie explained that the use of stories "helps them [students] to understand experiences that are different from their own, so they're really witnessing somebody else's resilience and they're taking that in." Listening to others was determinant in shaping the stories of students according to Stevie: "Ask yourself what story you're telling yourself. Sometimes we have to listen to other people's stories in order to make sense of our own story. So being humble and ready to listen to others is a really good strategy." Identifying inspiring stories provided students with new opportunities and paths to get over their own adversities. Hence, instructors guided students to pay close attention to the elements in those stories that helped the narrators deal with adversity.

Firstly, instructors encouraged students to listen to others' stories, making use of a storytelling activity based on Indigenous knowledge. The instructors referred to this activity as either the Talking Stick or the Conversation Circle. Sam described: "I would start with a talking stick, which is an Indigenous practice where you take turns to talk, and if we're in face to face, you would actually have a talking stick that would be shared." It consisted of sitting in a circle and taking turns to speak, telling things that were happening in their lives or what ever they felt comfortable sharing. However, the emphasis was made on listening to those difficult things that

the student was facing at that moment. Stevie explained how students were prepared for listening to others:

We do this assignment where one of them has to witness every week during a group discussion. So, they have to learn to just not focus on their own perspectives and listen with their bodies and minds and hearts and soak in what other people are saying and then reflect that back to the group.

Effectively listening to the stories was the first step to use storytelling as a strategy to develop resilience.

Secondly, instructors gave time for student's reflection about the learnings of the stories, specially about the elements that helped the actors in the story to overcome adversity. Joy commented: "based on the stories, I have them self-reflect on what it is that's causing anxiety or not getting their work finished or whatever it is in their life that is causing them to not succeed." When students reflected about others' narratives, they find out behaviours, attitudes, resources, or actions that could be useful to surmount their own situations of adversity. Sam added about the stories: "what it did was it made the students reflect on what is it for them that works for them" For this reason, participants included narratives in their lessons, expecting that students could see different ways in which they could overcome their obstacles and become more resilient.

The narratives of challenges shared in class, not only inspired students but also presented different ideas on how to stand up and continue thriving. These stories were initially told by instructors; however, these could come from other community members, media, or someone related to the field and the subject of the class. Stevie said, "I sometimes tell stories about difficult moments in the teaching career so that they can think about what resilience might mean

to them as instructors ... I taught at the secondary level, and it had its own particular difficulties.” By sharing experiences in form of stories, instructors helped students to realize that they were not alone and that someone else had gone through something similar. Moreover, it became easy for students to relate themselves to that situation, reaching those who are too afraid to speak up about the difficulties they are going through.

Afterwards, Instructors asked students to examine the elements of the stories that were instrumental in getting through adversities. Participants invited students to see if they could use some elements from others’ stories as a different way to cope with their own difficulties. Instructors realized that sometimes students did not know all different ways to cope with adversities. Jim stated: “all teachers need to look at themselves when things don't go well. and think, OK, can we be doing things differently?” Students mapped out elements of the story that they would like to see developed, focusing on both the challenges they faced and the resources they had to overcome those obstacles. Then, students presented the plan in the form of a story including their adversities and how they envisioned their story would develop in the future with the new elements included. Looking at challenges or adversities from the point of view of a narrative could help students trace a route to build resilience. Instructors expect to see students integrating the learnings from other people’s resilience by telling themselves stories that narrate what happened next in their current stories.

Finally, Instructors guided students to see adversities in the present moment as part of a larger sequence of events that belong to a larger story as a journey approach to change. This new perspective was about understanding that students could head the story to where they would like it to go depending on how they tell it to themselves. The stories were created based on self-

reflection and integration of others' narratives, including elements that were helpful in their current journey. Stevie affirmed:

I know about the power of the stories we tell ourselves in our lives. So, I can experience something and story it as a moment where I grew and changed and became a better person. Or I can story it as something unfair that happened to me where other people messed up my life and so on.

Evidently, the instructor found that when students told themselves a different story, they were building resilience because they could trace a possible pathway that could lead them to the desired result. Instructors believed that students could progress through adversity having control and understanding of their own story. Furthermore, instructors and students could shape their narratives as they listened to others and continued telling those stories to themselves with a journey approach to challenges. When looking at their stories from different perspectives, sometimes it demonstrated that their good outcomes are not despite their challenges but because of them.

Course Outlines

As part of the methods of this research, a document analysis was conducted on the course outlines used for the six instructors interviewed. The examination of the syllabuses focused on finding resources, assignments or class policies that supported student's resilience. After the analysis of all documents, it was found nothing explicit in the course outlines regarding the promotion of resilience in the class. Although most of the information in the documents was content and grading criteria, few mentions that might relate to the findings of this research were found in some of the documents analyzed.

In one of the course outlines was found a topic on the course content that included the word resilience which related to Indigenous education. "Decolonizing frameworks for

understanding Indigenous survivance and resilience, as well as the impacts of colonial violence, including the Indian Residential School System” (Course A, 2020. Pg. 2). This showed that as part of the course, students needed to witness some of the stories of resilience in others. This was mentioned once in this course only and never again through out the outline.

On a different course outline, there was an indirect relationship with the ways in which instructors build resilience. An assessment criterion that was directed to fostering effective relationships, not only with students but with parents and colleagues. “Fostering Effective Relationships - A teacher builds positive and productive relationships with students, parents/guardians, peers and others in the school and local community to support student learning” (Course C, 2020. Pg. 15). This item of evaluation was looking at the ability students had to demonstrate respectful understanding in the interactions with others.

There was not a clear and distinct attempt to include a definition or policies in the course outlines regarding resilience in students. The content of this outlines included the assessment process as well as its criteria. According to tools to help students building their resilience, the only one related to it was the link that was listed for accommodations. Additionally, the themes and the information discussed with the participants were not found in the course outlines. Therefore, most of the things that were discussed and found in the interviews and case study analysis were additional to what is stated in the course outline and comes directly from the instructor or the systemic culture.

Chapter Summary

The findings from this exploratory case study allowed me to begin to interpret how post-secondary instructors promote resilience in students within their courses and explore how post-

secondary instructors perceived and modelled resilience during the courses they were teaching in a western Canadian university.

Throughout the themes explored in Chapter Four, post-secondary instructors discussed about the meaning of resilience and its promotion in education. Instructors' assumptions about the challenges that students faced was also identified as a possible constraint on how the instructors enhanced the resilience on students. It was evident that instructors had various ways to promote resilience in students. Albeit each instructor used different ways to promote resilience, themes were identified from the commonalities of the practices that instructors reported in their interviews. Five themes were identified in the data from the three methods used to gather it.

The data was presented according to the themes that were emergent. The first theme, creating a safe and trusting environment, described how instructors build connection and caring spaces to enhance resilience in students. The second theme presented in this chapter was in relation to goal setting and prioritization aiming to get focus. A third theme that explained the importance that instructors placed on clarifying and setting realistic expectations. Along the fourth theme, a description on how instructors modelled flexible thinking as an instructional part to build resilience. The last theme presented was based on Indigenous knowledge and narrative approaches and explained the value to find the right stories to tell yourself and the inclusion of narratives in undergraduate programs.

Finally, a revision of the specific findings from the document analysis was presented in the last section of this chapter. There were not explicit contents in the course outlines analyzed that linked directly to the promotion or strengthen of resilience. However, some minor

connections were made in parts of the criteria and contents. In the next chapter a discussion about the data here presented in the light of the relevant literature will be developed.

Chapter Five: Discussion

Developing resilience is essential for undergraduate students to navigate through challenges in their current and future life situations. Much research has been done on the topic of resilience in education at the post-secondary level. However, this thesis is novel with respect to answering the question about the influence educators have on students in regards to resilience. This study employed a case study methodology using interviews, scenario analysis, and document analysis to gather data about the research question: How do post-secondary instructors promote resilience in students within their courses? In addition to this primary question, the study addressed the following secondary questions: 1) How is resilience modelled and/or taught by instructors in undergraduate programs? 2) How does the post-secondary course setting provide tools for students to help them build resilience? In this chapter, I will integrate the results of my data analysis with the conclusions of relevant literature, with respect to my research questions. New ideas that emerge from this chapter will also be the foundation of the framework for the development of resilience that will be presented in the conclusion chapter.

Five themes emerged of the data in this study: (1) creating a safe and trusting environment, (2) focus on a meaningful goal, (3) clarifying the expectations, (4) modeling flexible thinking, and (5) finding the right stories to tell yourself. These themes that reflected the different ways in which instructors promote resilience in their classrooms provide a foundation for the following discussion organized around the research questions.

How Do Post-Secondary Instructors Promote Resilience in Students Within Their Courses?

To my knowledge this is the first study that has explored ways to promote resilience in students from the perspective of the instructors in higher education. The literature has already touched in different factors and models that enhance the development of resilience in general

(Martínez-Martí & Ruch, 2017; Theron, 2021; Ungar, 2017; Yeager & Dweck, 2012), in students (Cefai, 2004; Mansfield et al., 2016; Schwitzer, 2016; Ungar et al., 2019), and teachers (Beltman, 2015; Beltman et al., 2018; Gu, 2018; Mansfield & Beltman, 2019). The results presented in this study also support the view of resilience as a multidimensional construct that includes different factors and dimensions of wellbeing (Mansfield et al., 2012), the findings presented in this research have responded directly to this question suggesting that instructors are using multiple specific ways, at varying levels, to promote the factors and mindset that develop resilience in students.

Instructors Create a Safe and Trusting Environment to Promote Resilience

The first and foremost way in which instructors contribute to foster resilience is through creating a safe and trusting environment. Recent literature that studies resilience has shown the importance of the community and relationships have for individuals when needing to overcome obstacles (Theron, 2021; Ungar et al., 2019). For this reason, I was very interested to see if instructors mentioned any societal or contextual resources that may help students in their obstacles. All participants referred to a positive environment as a basic aspect to promote resilience. This suggest that an appropriate environment is the foundation for resilience, similar to what a soil rich in nutrients is for a plant. The finding of a safe and trusting environment is aligned with the social ecology concept of resilience and the contextual influence of resilience (Ungar, 2011). Although that concept was generated from studies in children, the fact that instructors affirm that they actively created these spaces for post-secondary students indicate that resilience is enabled contextually and by others also in post-secondary education. It is also novel in this study the evidence of how instructors were creating those environments that may add to the literature of resilience.

Conversations were key for instructors when creating caring and safe environments for their students. Participants gave importance to what students had to say, they actively listened to students' concerns, and were interested in their ideas. The results of this study show that the best way instructors found to support students is by having open and sincere conversations. Studies of resilience in education has shown already the influence the context make on individuals regarding resilience (Mansfield & Beltman, 2019; Ungar et al., 2019). However, the evidence of this research suggest that open and sincere conversations allow instructors to create safe and caring environments to promote resilience. The data indicated that not only did instructors approach these conversations with positive lens, but they also were ready to help students navigate resources that matches specific students needs. Communication and interpersonal relationships are key for individuals to express what they need from the environment. If there is not a space in which students can say what they need, system of supports won't be able to provide it in a timely and tailored manner (Ungar, 2019a). This may account for the importance that instructors have on creating this kind of environments; if students needed specific resources to overcome obstacles, (food, financial support, motivation, emotional support) instructors needed also to be able to get to know what the student exactly needs to thrive. Being able to have trusting relationships and open conversations with their students then enabled instructors to find the appropriate resource for students.

What feels important here is that even though creating a safe environment seems to be a more group dynamic it pays a lot of attention on the individual. It makes the individual feel valuable and heard. So, the protective factors that may have an effect in the community could be having a better impact on the individuals. Additionally "the resilience in one system will influence the resilience of other systems" (Ungar, 2017, p.37). This suggests that if there is not a

safe environment it would be more difficult to promote resilience in others as the one system (School, university) is influencing the others. Instructors could not totally control the resilience in individuals per se, but they can nurture an environment with the resources and supports necessary for individuals to flourish. This practice of opening conversations line up with Masten's (2014) description of the "Adaptive function of the individual is interdependent with many other systems at different levels of function that are continually interacting" (p. 170). The findings on this research expand the literature around the important role of relationships in the construction of resilience in educational settings.

Instructors also mentioned that the trusting environment is part of the group dynamics and how the students interact with each other. My findings show that instructors placed a lot of value on a culture of trust between teacher and student but also among students themselves. The participants stated that in their experience students who had trusting relationships were able to collaborate better with each other and therefore overcome individual and group obstacles. Reliance on peer networks has been found to be a protective factor for resilience (Theron & Liebenberg, 2015) and important for students when they faced difficulties (Bello et al., 2021). Participants stated how important is to create a sense off community in their courses. Inside those environments it was safe to make mistakes and learn from them. The strategy of failing more often (Ungar, 2019a) was less stressful for students due to the safe environment. This may suggest that not being ashamed of making mistakes is very important for resilience as well as opportunities for students to solve problems and fix mistakes made in the process of learning. Finally, instructors were actively involved in the academic development of students, not limiting themselves to only list coping strategies that they know but also being aware of how they could help them navigate the resources in the environment to overcome obstacles.

Instructors Use Focus on a Meaningful Goal to Enhance Resilience

Another strategy for building resilience that was frequently found in my data was setting meaningful goals. A clear goal aligned with the purpose of the course was the key element that prompted direction and inner motivation for students. Participants observed that students who understood and aligned the purpose of the course with their own goals were more likely to succeed in their courses.

Instructors used questions directed towards the reasons why students were doing the activities in class. They wanted to make sure students think about why those activities were important for them and why that matter in their teaching career. In doing so students were able to keep focused on the goals they had for their careers rather than to feel overwhelmed by problems or assignments. Although sometimes those goals can be generated from risk factors as well (Schwarze & Wosnitza, 2018), the evidence in this study showed that instructor act as a protective factor helping students to have a clear aim as well as helping students find the resources available in the environment to achieve those goals.

My findings show many examples in which instructors manifest the importance of setting meaningful goals for the development of resilience. It seems that an important part of the interaction with students involved promoting the prioritization of objectives and dealing with the many distractions that may appear in the life of an undergraduate. This promotion of prioritization and setting goals showed students how to better use their efforts and resources on hand to focus on important things to be achieved. This finding aligned with Holdsworth et al. (2018) findings on students who reported that “they [students] used goal setting as a strategy to make longer term goals more attainable [...] and this enable them to pick themselves up in the

face of setbacks” (p. 1844). The research literature evidence and the results of this study make parallel implications about the importance of focus on a goal for the promotion of resilience.

The findings indicate that instructors have found this practice to be useful in several courses and they have turned it into a habit in the different classes they teach. They have incorporated conversations and created situations to promote the focus on goals, which in turn has become into a possible constant protective factor for students’ resilience. However, when analyzing the course outlines, there was nothing related to setting goals or prioritizing in the course outlines. This suggests that it must do more with the internal drive of the instructor to promote these aspects rather than what the institution has designed for the course.

Previous studies have demonstrated the importance of goal setting in relation to resilience capacity (Duckworth et al., 2007; Holdsworth et al., 2018). However, this study offers a novel perspective about how instructors promoted resilience making use of goal setting as a strategy that impacted not only the life as undergraduate students but also their professional and personal lives. Although instructors were very involved in the development of students, they recognized it was not easy to discover all the different obstacles each student had, thus it was easier for instructors to help students navigate resources when it was clearer for both of them what they were trying to achieve. Knowing the specific goal of students will highlight possible obstacles and prevent any block in the road to success. This implies that resilience needs a certain level of personalization in terms of support, which stresses the importance of not providing a list of generic resources available to students but engaging in the specificity of their individual goals and purpose.

As researchers McGraw & McDonough (2019) have found in their research, strategic thinking and goal setting has a positive impact on resilience. Due to the structured environment

of an educational institution, it seems that the organizational skills are very important to excel in academic settings. This can also be one reason why instructors promoted the goal setting and prioritization of tasks in the class looking to help students in the development of resilience. Giving time and space to students for goal setting allowed self-reflection in students according to instructors. This is very important in resilience because students have time to deeply connect with the goals and make sure that they will work hard for them.

This specific way to promote resilience seems also to be dependant of a safe and trusting environment. Students need to feel comfortable to set goals and deeply self-reflect on their purpose, otherwise they would do only what is barely needed as in survivor mode. When instructors stressed this process and gave them the necessary importance, the students were more proactive on facing challenges. Goal setting served as a component and fuel for grit and perseverance. After all, Angela Duckworth (2007) termed grit the perseverance and passion for long term goals. Having a clear goal provided also a vision forward that allowed students to continue pursuing the goals (Metzl & Morrell, 2008). This suggest that resilience is developed by using a reflection practice to set goals, a strategic thinking to come up with possible plans and flexible thinking that is provided by the need to achieve the goal stated. The reports of participants showed that students who had a clear purpose performed in a more motivated and decisive way according to their studies. This interpretation is related to the instructors interviewed, however not all instructors helped in the creation of goals and finding purpose, nor even organizing or prioritizing tasks. This left students with multiple tasks and low levels of motivation to persevere as the outcome or goal was not clear for them. Having a purpose and setting meaningful goals will give direction and allow students to find multiple ways to keep

going. Not having a clear goal will make students less likely to find a path to move forward, to adapt when the path is difficult, or to find alternative paths when the main one is blocked.

Clarifying Expectations Helps Instructors Facilitate Resources for Resilience

During the interviews instructors described how they have helped students to review their expectations and compare them with a realistic reading of the context. A specific strategy gives students the ability to plan accurately and adapt to any foreseeable adversity in their path to success. It could mean reducing some of the excessive and unnecessary expectations students place on themselves or, on the contrary, help them understand what their profession entails and how they will need to be prepared to face bigger challenges than they thought they would be facing. Making use of their experience teaching and working in the industry, instructors provide a fair reading of the context to students so they can compare their expectations with the real-life situations.

This seems to be complicated to apply, particularly if one thinks about the time that students need for self-reflection. Also, we need to take into account that the expectations of students are placed in different levels: expectations about themselves or self-demands, expectations of the situation and/or context in which students are immersed or are moving forward to, and expectations about others or their behaviour (Dyjur et al., 2017). However, instructors bring together all different expectations to assist in visualizing a general reading of what students may expect in a given situation or context. For instance, instructors support students' goals by helping them estimate how long will take them to achieve, what sacrifices will be needed, what would be the possible ways to achieve them, and even let them know if that is something necessary for the course or if that is out of scope. What is more interesting about this finding is how the support on clarifying the expectations give students the possibility to create a

plan to move forward. It could also prompt students to think what resources they will need in the execution of their plan thanks to the assessment of the path to follow.

With the guidance of the instructors, students could make a plan that will more likely have chances to thrive even when difficulties appear. Due to a more experienced big picture reading facilitated by instructors, students clarify what they could expect of different situations allocating efforts in the right place and looking for the appropriate resources for resilience. My findings show that educators invest time in helping students make a better assessment of the situation, their peers and themselves to set expectations that promote resilience. This followed with the creation of a plan to venture towards their decided goals.

Students may arrive with different expectations to the course, either high or low according to the context of the class or the specific personal goals. Students need to have a clear understanding of what needs to be done and what resources will be in place for them to succeed in their journey. It makes sense for instructors to make sure students have shared and reflect upon their expectations. It is very likely that results may be influenced by the perspective and the allocation of expectations from the beginning of the course. If students have too high expectations of himself, the situation, or their peers, they could probably find frustration or early failure when the plan hits reality. This perspective could also create additional unnecessary load that will be carried over the period of the studies. For instance, expecting to have a high performance in their studies while committing to a full-time job and volunteering several hours to learn from the profession industry at the same time is very unrealistic. In this case, some of these activities could be suppressed or decreased on a lower priority and effort. Similar to the strategy that Dr. Michael Ungar (2019) calls “changing what you want” (p. 190), in which he proposes that giving up an unrealistic expectation for a positive outcome is an approach for

resilience. Clarifying expectations could allow a student to excel at a workload that can manage, rather than taking a lot and perform in a mediocre fashion.

Additionally, with a plan grounded in clear expectations students could feel more motivated for continuous manageable challenge but not too much that could weight them down to imminent failure. On the one hand students need to expect certain difficulty level to grow. On the other hand, they have to be realistic on their skills, surroundings and resources available for them and their peers. While the expectations may be different for each individual according to many factors, the strategies employed by instructors help to create a systemic culture of reviewing the accuracy of their expectations. The goal is to avoid creating additional responsibilities that are not necessary for the achievement of the students' goal.

One of the strategies to help students create a better understanding of the context is by providing rubrics that detail what success in the course looks like. Instructors had conversations with students to understand better their point of view about the setting and the demand of and time commitment for the course. Instructors not only deployed the rubrics and asked for general questions. They engage in asking probing question to students to see what their expectations are and if they are appropriate with the course or not. They are even willing to modify what is needed to make it better adjusted to students. I will discuss this aspect in the next section of modeling a flexible thinking.

Instructors also support students in clarifying expectations about their peers. Instructors organized discussions in small groups to share their perspectives of the rubrics and what is expected of the course. This strategy is not thought only to be used in the classroom settings; instructors use it in class also with hopes that students can use it for their professional lives as future teachers. This says that their promotion of resilience is also including a future stage of the

students lives. This may be a reason why they placed an emphasis on relationships with peers when instructors talk about the expectations. Students who have better relationships with peers may find more resources not only during their time in their studies but also after graduation. They may encounter many of their previous classmates in the industry and they could understand better the world if they factchecked it with their peers, which in turn will be represented in more realistic and accurate expectations. Achieving this way of operating during the post-secondary education will give an advantage to students to overcome obstacles beyond their post-secondary education.

Instructors found that being frank with students about the things that were expected from them could help them create a coping plan, specially for those students that were struggling with different aspects of their lives. The examples that instructors provided during the interviews showed that they have been using this way to promote resilience for some time and have worked for them and their students. This way of promoting resilience is also involving different factors that influence individuals. Adjusting and adapting to situations in which there is not much that can be done, this is done with the help of the community and ongoing support of the instructor and peers. After all, having high expectations wont always lead to a better performance or result. “Sometimes, all we can do is change expectations and wait until the world around us changes for the better” (Ungar, 2019. p. 191). Instructors demonstrated they opt for adaptation to the difficult situation rather than try to modify the situation itself.

A study by Beiter et al. (2015) found that the top three stressor among college students were academic performance, pressure to succeed, and post graduation plans. All related to expectations of the students’ success at different levels. The data I am presenting in this study

suggest that participants understand the difficulties of the context, making instructors a very important protective factor for student wellness, mental health, and resilience.

Instructors finally help students to find realistic expectations that of course included challenge and support. Also, they help students to think about creating a plan that tackles those challenges. A plan that can be deployed and that is realistic in time and effort. With a realistic mindset they would not be so surprised, and they can handle and overcome occasional failures in the journey to find a goal. This includes having a realistic perspective of themselves. Previous research has established the importance of knowing personal strengths and the value to growth and resilience (*How Strengths, Wellbeing and Engagement Reduce Burnout* | Gallup, n.d.; Schwitzer, 2016; Seemiller, 2017). While it may be the case that knowing and working from your strengths gives you an advantage in times of difficulty, they alone would not constitute a realistic view. For this it is important to consider obstacles and threats as well. Participants then use the strategy of managing expectations from a *realistic* mindset rather than from an optimistic attitude. Instructors help students to see and account for possible threats, opportunities, obstacles, and strengths that may be part of the environment and then create a plan that address all of them. In addition, previous studies presented individual strengths as a proxy for resilience (Aburn et al., 2016; Panter-Brick, 2015) because the understanding of skills set, and talents in an individual acts as a protective resource in which students may rely on during difficulties. The evidence of this study adds to the importance of awareness and development of the personal strengths, and to the importance of being aware of difficulties present in the context and possible weaknesses that we need to manage as well. Instructors talk openly about the challenges they encounter, showing that not always is everything under control, but they can plan accordingly and prepare for those situations if they address them in their plans. Instructors do not only care about the students but

also about themselves, which works as modelling for students' current and future behavior of maintaining reasonable expectations according to the nature of the course. It has been found that "courses with unreasonable expectations for student learning can be a burden for both instructors and students"(Dyjur et al., 2017. p. 5). However, during the interviews done as a part of this study instructors showed that they use the strategy themselves to keep their expectations of students and learning outcomes reasonable and realistic. This served a double purpose. It eliminated the additional unnecessary load so students could thrive and modelled for students how they need to do the same for their studies and career, promoting resilience in the culture of the class and in individuals.

How is Resilience Modelled and/or Taught by Instructors at Undergraduate Programs?

The evidence presented in this study shows different ways in which instructors promote resilience. They used specific strategies that allow them to create a culture that foster resilience in students and help them gain the skills to overcome obstacles. Similarly, instructors used these strategies themselves to develop resilience and face changes and difficulties that appeared from time to time in the courses. It has been identified in this study that the involvement of the instructor in the development of resilience goes beyond anything that is written in the course outline or the academic boundaries. The solely presence and influence of the instructor over the students may be an important factor to develop resilience. Living by the same principles they promote is how they really teach and model resilience to students. According to participants, modelling resilience is a way to promote it, which is consistent with the idea that and teachers as role models or mentors are important external protective factors (Beltman et al., 2018; Peixoto et al., 2020; Werner, 2011) The influence that instructors naturally have on students underlines the

perspective presented in this study that modeling flexible thinking has been found to be of key importance for resilience.

Modeling Flexible Thinking to Teach Resilience

Modeling flexible thinking was introduced by participants as an important way to promote resilience. Teachers, mentors, and instructors all play an important role in the development of resilience (Ungar, 2011; Werner, 2011); their continuous interaction with students influenced the capacity of resilience during the time of the post-secondary education. Previous studies have already identified the importance of flexibility and adaptation to resilience (Black & Lobo, 2008; Metzl & Morrell, 2008). In this study, instructors emphasized that modeling rather than instructing flexible thinking is the way to go to develop resilience in students. It seems that instructors find very useful the exploration and formulation of questions about different ways to get to a solution or multiple solutions. It may be that if students see instructors regularly making use of this mindset it would be more appealing for students to copy that behaviour. It also could be the case that students find it more natural to practice flexible thinking when it is part of a daily practice rather than when it is a simulation for training purposes. It may be the door to sharing ideas and concerns to co-construct a culture of adaptation by facing problems and creating new routes to solve them.

Barak and Levenberg (2016) suggested that individuals who make use of flexible thinking are open to new experiences, which in turn help them to accept and adapt to new situations. In a learning process, students are exposed to a range of new experiences and concepts that are required to acquire knowledge. Instructors interviewed in this study expanded the use of flexible thinking outside the mere conceptual learning and included it into their interactions with students. Applying flexible thinking to daily life aspects would serve as training

for students to be creative and find different ways to do things, which has been found to be beneficial for learning and resilience (Cañas et al., 2006; Tseng et al., 2020). This way to promote resilience demands a thorough self-examination of instructors practice before its implementation. It would require openness to talk about challenges and difficulties that appear in the environment, as well as authenticity from the instructor to genuinely look for different ways to do things that may greatly differ from the commonly used strategies. And finally, it would be imperative to have a will to shift gears to find better, different, or more efficient strategies. The fact that the participants are already applying this way to promote resilience says a lot about their commitment with the field of education and their students.

Like the first finding of focusing on a meaningful goal, modeling flexible thinking also could help in the development of student's agency. Participants mentioned that students are involved in the decision-making process to solve difficulties of the class, which may be promoting autonomy in students. In fact, all participants decided to give John, the fictional student of the scenario analysis, the opportunity to make the decision or contribute ideas about the best way solve the situation proposed in the scenario analysis. This shows that instructors are open to be flexible and can manage unexpected difficulties that may arise in the course. Therefore, they are modelling the way to be flexible to come up with effective solutions that allow students and instructors to keep moving forward and don't get stuck in problems.

The application of this way of promoting resilience also presents a specific perspective or worldview that an instructor needs to define in terms of teaching. We educators usually have a convenient plan for moving from teaching activities to learning objectives. As the participant Sam mentioned: "being open to listen his[students] perspective, and willing to change the way in which he [students] can demonstrate his [their] learning" (Interview 6) also means a fair amount

of tolerance to have the plan changed must be demonstrated. It means that the instructor point of view places more value in the learning outcome than on the process or specific activities that were designed before hand. It also implies that instructors think in dynamic ways rather than in linear terms regarding their courses. On the contrary, an instructor who plan to execute his classes in a linear way in which every activity goes from A to B and then to C may not agree with the perspective of having unexpected changes in the middle of a term. In conclusion, having a perspective focused on a strict plan of the class rather than one which works with ambiguity and uncertainty may fail to promote resilience.

The findings of this study relate to the studies on fixed and growth mindset which have presented a similar analysis to problem solving situations. Growth mindset research indicates that not only it could be used to promote resilience (Brooks et al., 2012; Yeager & Dweck, 2012) but also it could contribute to find different solutions to unexpected problems (Yeager et al., 2019). This has been addressed by participants in this study, however, modelling flexible mindset goes beyond a state of mind to a hands-on strategy by showing students how to implement it. Modeling flexible thinking encourage a view of possibility and a habit of looking for different solutions; this could be looking among the external factors to find resources that help overcoming difficulties. It could also be that making use of flexible thinking students find internal factors as individual strengths that may be used in a different way to solve problems. It gives the opportunity to students of harnessing strengths and resources that contribute to their success. Recent studies of resilience acknowledged the inclusion of strengths as an important internal factor that gives individuals the capacity to cope and adapt (Hodges & Clifton, 2012; Martínez-Martí & Ruch, 2017; Padesky & Mooney, 2012). However, it requires that students get involved in experiences in which they could use them (Lopez & Louis, 2009). Mentors and

teachers have been found to be of importance to facilitate those opportunities for students making use of self reflection (Minulescu, 2015). This study presents a way in which educators could help students find different opportunities and ways to think about their own strengths as well as how to use them in the face of adversities.

It is important to note that this strategy is an ecological factor that influence resilience and not an internal factor of an individual. Programs and interventions based on growth mindset or character strengths place the responsibility of the development mainly on the individual that is developing resilience. In contrast, modeling flexible thinking is a strategy instructors used to develop resilience on students. Although the goal is that students start using a flexible thinking when facing problems, the behavior that triggers the resilience process comes from an external factor in this case the instructor. The perspective of the instructor plays an important role to be able to model flexible thinking. They assume there is not just one answer for each problem and that progress is more important than perfection.

Stories as Plan for Resilience Development

Instructors interviewed in this study used stories in their classrooms as a mean to develop resilience in students. They described activities that were used in the classroom in which students listened to other's stories of resilience and reflected upon them to extract specific strategies that could be used for student's own resilience. These activities, which are based on Indigenous People practices, not only identify strategies of resilience, but also promote the creation of a personal plan to overcome obstacles and achieve the goals. They used a storytelling approach in order to integrate the stories, strategies, and others' experiences into a personal story plan that guide the student in facing adversities.

Several studies have showed the impact our mindset has on achieving goals and academic success (Canning et al., 2019; Dweck & Yeager, 2019). However, there have been reports of difficulties to develop in students a growth mindset inside the classroom (Denworth, 2019; Dweck & Yeager, 2019). This thesis shows that in drawing on stories, students may build up a specific mindset of possibility around difficulties. Witnessing others' struggles was used as a strategy to help students make sense of their own contexts, situations, and stories. The process of listening to the stories, assessing their own stories, putting things in perspective, and acknowledging a bigger plan gave students the motivation and strength to keep going despite the challenges. However, an additional step of reflection and adaptation of that information gathered from others' stories is required to transform that knowledge into a personal plan that supports resilience.

Reflective and strategic thinking has also been found to enable resilience (McGraw & McDonough, 2019). My findings point to the importance of self-reflection around problematic situations that can be tackle from different perspectives. Those different points of view may not be seen if there is not a deliberate reflection on problematic situations. The additional step of self-reflection provides a clear perspective to students to maintain focus and emotional control when under stressful and adverse circumstances (Holdsworth et al., 2018). A novel outcome of this finding is the integration of self-reflection, strategic thinking, and growth mindset for the promotion of resilience in the form of a story. Initially, instructors used the stories as a coping mechanism for students where connection to others helped them learned to positively deal with similar problematic situations. Additionally, with knowledge shared through stories, students were expected to use the strategies and resources they learned from the stories to overcome their challenges. Then, with the instructor guidance, students may create their own *possible* story of

resilience. This story ends up working as a strategic plan that includes resources, strategies, and alternatives to face challenges. It might be that considering other stories of resilience, reflecting, and creating a plan worked as a complete overview of the student situation. When students tried to integrate both others' and self story. They needed to go in detail over their current situations, assessing themselves, actively looking for resources shared in the stories, and looking at the big picture from different perspectives that allowed them to develop resilience. Once these stories are ready, students need to keep telling themselves those stories to remember where the supportive resources may be available to nurture the resilience in students.

This specific way in which instructors teach resilience to students takes a journey approach to change and challenge. It draws on the perspective that some challenges are part of a big journey and that without them many of the expected results would not be there nor would be valuable to pursuit. "Risk cannot be disassociated from any learning experience, and over the course of their university education students will at some time experience feelings of self-doubt, stress and academic, social inadequacy" (Phair, 2014. pg 50). It may also be the case that it contributes to an environment of compassion, understanding that there are others with struggles as well as themselves. Compassion has been found to promote unity and strengthen communities in educational settings (Reid-Larade, 2017). Additionally, previous studies on self-compassion have demonstrated that this practice develops confidence and helps individuals to accept personal strengths (George et al., 2008; Ho et al., 2016; Lopez & Louis, 2009). This may be a clear way to gain resources to promote and develop resilience.

How Does the Post-Secondary Course Setting Provide Tools for Students to Help them Build?

The course settings in which the participants were involved did not provide any explicit tools for the development of resilience in students in the classrooms. Nevertheless, the tools were provided implicitly by instructors through out the different ways and strategies they shared in this study. More than the institution philosophies and the documents that are created to give structure to the courses, it was showed how important the instructors are in the development of resilience in post-secondary education. The ways in which instructors promote resilience in their students were clearly described and defined by the participants. They even demonstrated how they put it in practice by using those strategies to solve the scenario analysis problem, yet there was nothing written down in the course outlines that explicitly shows these strategies. This points out that the most important resource the post-secondary course setting provides to build resilience is the instructor himself. The inner motivation of instructors to engage with students' process of developing resilience and to support them in moments of difficulty is a protective factor that develops resilience in students during their studies.

To conclude, the findings of this study showed that instructors have specific ways in which they promote resilience in students during their courses. Also, the results illustrate that instructors are far more important for the development of resilience than thought before. The data also demonstrates that instructors in this study have an ecological interpretation of resilience that is aligned with the believe that they can guide students to navigate and negotiate resources that can positively impact students wellbeing (Ungar, 2011, 2019b). Instructors did not place all their efforts in individual traits of students, on the contrary they facilitated resources and modelled resilience practices to create environments that promote resilience. Previous research

showed that protective processes resulting from social and ecological life impacts the well being of students (Theron, 2021; Theron & Liebenberg, 2015; Ungar, 2015). This study is adding to importance of instructors and the specific protective processes that they are promoting in the classroom for the development of resilience. Through out the discussion in this chapter I have reviewed the integration of my findings with the current research, the interpretation of the results as well as the key points that have been crucial learnings from this study. Implications and recommendations for practice have been described in the next chapter.

Chapter Six: Conclusions and Recommendations

Capacity for resilience represents a process that students need in post-secondary education to achieve success in university settings. Research done in this area lacks the insights on how educators have an impact on students' resilience capacity over the time they are part of their classes. This study aims to develop an understanding of the ways in which post-secondary instructors promote resilience in students within their courses. Case study research was designed to answer the research question 'How do post-secondary instructors promote resilience in students within their courses?' I conducted the study through the lens of the constructivism approach and used the following specific questions; 1) how is resilience modelled and/or taught by instructors in undergraduate programs? and 2) how does the post-secondary course setting provide tools for students to help them build resilience? With the goal of finding different ways to promote resilience in others, I interviewed instructors from a post-secondary institution from Western Canada. Data were also gathered by a scenario analysis and a document analysis. The multiple ways in which instructors promote resilience in their courses may provide valuable insights and recommendations for other instructors in similar institutions, as well as leaders who have an impact on how the instruction is delivered every day.

Conclusions

After discussing the links between the results of the different participants as well with the integration with previous research done in the field of education and resilience, there are some key conclusions that can be drawn from this study. Firstly, there exists an understanding that deficits of higher-education institutions in addressing students' resilience at the course level implicitly stimulate a trait view of resilience, in which the only one who is responsible for being resilient is the student. Current research has identified the external and systemic factors to be the

bigger part of an individual's resilience (Lee & Stewart, 2013; Liu et al., 2017; Theron, 2021; Ungar et al., 2019). Clearly, instructors who were part of this study were addressing resilience in the classroom and were eager to support students in times of distress and difficulty. The multiple ways in which they constantly promote and reinforce resilience can create protective factors that allow the development of resilience in students.

Similarly, resilience capacity in this study results from a systemic culture as part of a whole approach created by the instructor in specific situations either before, during, or after an adversity. A combination of personal development and personalized resources deployed by instructor facilitation was the best way to promote resilience in the courses. Following this, a creation of external protective resources is also possible as a result of the interrelation from the individual and the context, situations, and role models present in the context (Schwarze & Wosnitza, 2018). The successful stories of resilience students told by the participants in this study were based on systemic factors that either influenced individual resources of students or created protective factors and external resources for them in order to overcome challenges. An instructor approach of creating supportive environments in courses generated many supportive resources that have developed resilience in students.

Data presented in this study pointed to the fact that instructors are far more important for students' resilience than previously thought. Instructors presented examples of how their behaviours and practices had a meaningful impact on students' wellbeing and performance. Although course outlines and teaching policies did not explicitly include resilience development, instructors played the role of facilitators of resilience in undergraduate studies. Understanding this is of great importance as it may contribute to strengthen the course outlines as well as to be a starting point of the development of programs and resources at the course level. At the

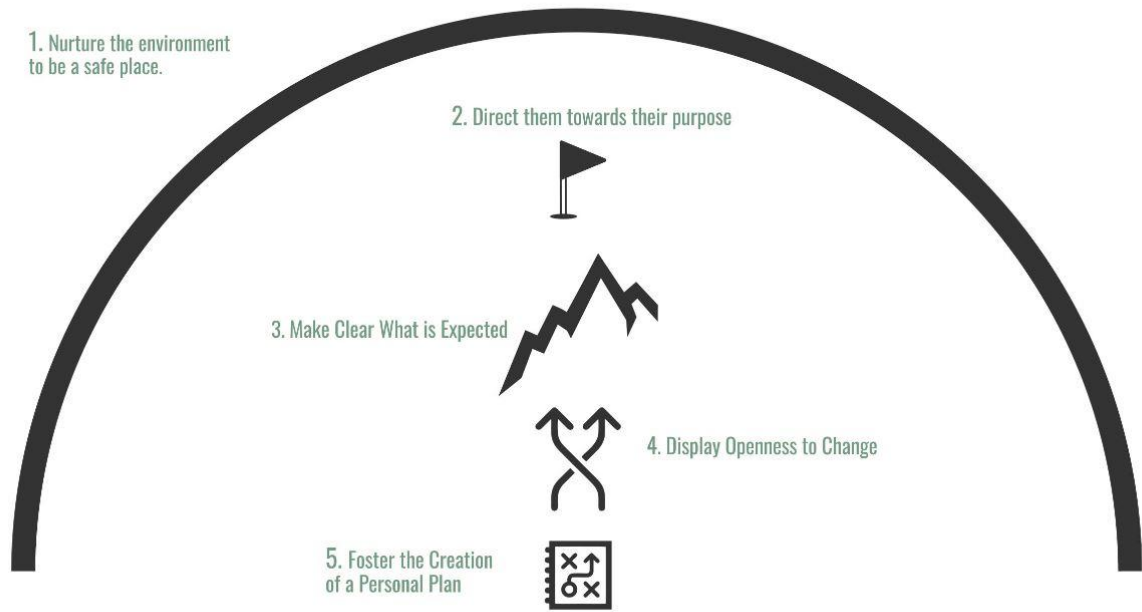
institutional level, leaders in education could make use of the strategies found in this study to promote environments at the course level in which instructors and students may benefit from resilience. The practices presented in this study can be the foundation for a full framework for the development of resilience, one that can be incorporated into the design of post-secondary courses. Moreover, the educational policy of higher education institutions should include an explicit strategy for students' resilience at the course level. Along with this, students who are part of education programs looking to practice as teachers may benefit from knowing, discussing, and promoting these strategies to foster resilience in their own classes.

One important aspect that was evident during the discussion and interpretation of the data was that the protective factors that supported students were a result of interactions between instructors and students in classes, which means that the resources were created and found in the classroom. The support from educators and peers, along with the classroom dynamics, gave a primary level of support to face adversities. The instructors were conscious that some specific situations needed specialized attention due to the scope and size of the barriers or situations that an individual was facing. Nonetheless, with a proper set up for resilience from the instructors' approach and the course design, many students could thrive and prevail over adversities with no more than their own instructor and the resources facilitated in class. On this note, there was a trend in participants to share the responsibility of resilience with the student. While the instructors described that they facilitated resources and support, they also expected responsibility and effort from students. Instructors assumed that they were, at least in part, responsible for providing this kind of support in the classroom. Evidently, instructors are in a privileged place to act as protective factors albeit not too close so as to be overprotective with students.

Figure 4

Framework for the development of resilience.

FRAMEWORK FOR THE DEVELOPMENT OF RESILIENCE



DEVELOPING RESILIENCE

 <p>1. Nurture the environment to be a safe place.</p> <p>Engage in conversations with students to foster a caring and positive culture</p> <p>Show value to each individual and encourage the support to each other</p> <p>Relationships and trust are key here.</p>	 <p>2. Direct them towards their purpose</p> <p>Facilitate students to set meaningful goals that are in relation to the course</p> <p>Ask questions to find out students' goals and refine what is meaningful for them.</p> <p>Connect students with the resources that are available to achieve their specific goals.</p>	 <p>3. Make Clear what is Expected</p> <p>Set in advance what can realistically be achieved or delivered by the end of the project</p> <p>Explain what needs to be done and what resources will be in place for them to succeed in their journey</p>	 <p>4. Display Openness to Change</p> <p>Formulate questions about different ways to solve problems</p> <p>Accept unknown situations and look for ways to work through. Students will catch that and imitate.</p>	 <p>5. Foster the Creation of a Personal Plan</p> <p>Share others' stories that include experiences of struggles and success.</p> <p>Give students time to reflected upon them to extract specific strategies that could be used for student's own resilience</p>
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For the strategies found in this study that promote resilience, they can be presented in a logical procedure to be implemented in the classroom. A framework that represents the approach of instructors when they facilitated the promotion of resilience. As depicted in Figure 4, the framework for the development of resilience starts with the creation of a safe environment with trusting relationships. Then spend some time finding the purpose or meaningful goal that will allow students and instructors to think on the path to follow and set some realistic expectations about the process to get there. Once students have focused on a meaningful goal and started the journey, many adversities will become more evident. Sharing stories and creating a plan that integrates the resources and experiences found in those stories will also become a crucial tool for the process of resilience. Instructors will support students all the time by modelling flexible thinking and showing ways to navigate the resources needed to succeed.

Recommendations for Practice

The findings of this research as well as the different conclusions here presented serve as the starting point of a novel perspective of resilience with relation of teaching and learning practices. Recognizing that specific resources and tools are needed at the course level will assist students to improve their capacity of resilience. If completion of studies, student wellness, and general resilience of students is needed for students' success, it will be important for post-secondary institutions to examine how resilience is promoted and encourage in the classrooms or at least if it is in their specific contexts. If post-secondary institutions start finding ways to equip students with a higher capacity of resilience from their classrooms, they will be more prepared to face different challenges beyond their academic programming. Following I present specific recommendations for the groups of instructors, leaders and institutions.

Recommendations for Instructors

One other way in which this study may assist instructors in promoting resilience in the classroom is to explore the different strategies here presented by the participants of this research. Principles as to maintain open conversations with students, nurture trust, and encourage caring relationships, will create a safe environment that supports resilience in their classrooms. Making specific questions that challenge students to narrow and break down their objectives will keep a focus on a meaningful goal. Furthermore, having a perspective of ecological resilience in which instructors model resilience in the classrooms to promote behaviors that will foster a culture of resilience. The way in which instructors face challenges in the classroom will also provide a foundation to students on how face them themselves. Finally, instructors can incorporate the framework for the development of resilience here presented that provides steps and ideas to promote resilience in the classroom. This figure is the result of the connections between the literature and the contribution of the participants. Instructors can try these strategies in the order provided and with the specific descriptions, nonetheless the focus should be on the overall themes rather than in the specificities of the strategy. Each instructor may want to take these strategies and adapt them to their specific context having always a focus on the positive domains of the ongoing conversation and benefit the student's resilience. In contrast, other instructors could use one strategy at a time and tested inducing their own style in the way it is executing in the classroom. Once the strategy is working, they could use a second one and so on, giving the possibility to the instructors to better understand their setting and targeting different aspect of the promotion of resilience at a time.

Recommendations for Leaders

The effectiveness of these strategies is not applicable only to the educational context. Many of them, if not all, could be adopted for use in different settings. For instance, leaders could use these strategies in their practices with the teams they guide. The impact of a positive role model in resilience has been documented by different researchers (Beltman et al., 2011; Gu, 2018; Werner, 2011). The strategies presented in this study can also be used by leaders for more deliberate support such as modelling flexible thinking to instructors or opening spaces to share the stories of resilience with students. Likewise, leaders in education can share this framework and the different ways in which instructors promote resilience to create awareness of the importance of resilience support at the course level. Also, teachers and educators who may be on their team could be benefited from knowing these strategies that other instructors are currently using as well to promote resilience in the classroom.

Recommendations for Post-Secondary Institutions

Institutions are constantly creating different programs and interventions that support wellness of staff and students. They may be benefited of also paying specific attention at the way in which resilience is or not promoted inside the classrooms. Institutions can use the framework for the development of resilience illustrated in the Figure 4 for instituting a basis of resilience at the course level. The success of such a framework may be dependent on institutional culture, however. The instructors that participated in this study belonged to the same Canadian Institution. All of them had a basic knowledge of resilience and were already employing some or all the strategies here mentioned. For this reason, I recommend that institutions use the results of this research to undertake conversations with the instructors about the practices that may promote or diminish resilience in their classrooms. These strategies as well as the framework for

the development of resilience may be shared among different post-secondary institutions in the Canadian context.

Finally, I would recommend that institutions and those who are in charge of designing the courses, take a deeper look at how the students may navigate resources available to them in times of adversity and distress; maintaining a perspective of resilience that may contribute to the larger body of students as well as to specific situations that some individuals may be going through. These strategies could easily become part of any larger wellness program that the institutions are using for students as well as for the professional development of instructors. It can also become a topic of discussion as part of the curriculum of the programs of education that prepare future teachers.

Future Research

One of the primary barriers of this study was the COVID-19 pandemic, limiting the ways in which this research was designed. The ability to engage in real time observations of participants employing the strategies described in the interviews was not possible due to the restrictions of in-person gatherings. By including the scenario analysis in the research methods, however, this study was able to discern how instructors respond to specific situations of student challenges. In future research it would be necessary that researchers perform observations in the classroom to see the strategies in real time use with the students. Furthermore, it could also avoid perspectives of the instructors that may be loaded with assumptions about the situations and responses of the students to certain strategies. Following the actual responses of students to the implementation of this strategies in the classroom to ensure the valid and reliable functioning of the proposed framework for the development of resilience see Figure 1.

Expanding sampling is an additional way in which this research can be taken further in the future. The themes generated in this research are the result of interviews, scenario analysis, and document analysis of six instructors in one post-secondary institution. For further research done in this topic, researchers will need to include more participants that can give more diverse perspectives on how they are promoting resilience in the classroom. Also, the study can be conducted at different post-secondary institutions at different levels (universities, colleges, technical institutions) to determine if there are certain strategies that overlap or differ across different educational contexts.

At the completion of this research study, it has become evident that the creation of tools and resources at the course level facilitated by instructors is of vital importance for the development of resilience. While this study presented some specific ways in which some tools may be navigated and enabled by the instructors, a full study about the resources and programs available for students at the course level is needed. To start with this process there is a need for a multisite study with institutions at different levels that find the resources available, those who are used or neglected by students, and those who are needed but that are not currently available for students.

Finally, some new questions arise from this study and the integration of the relevant literature. Firstly, the aspect of flexibility in this study presents a paradox that could not be explained, flexible thinking involves being open to find different pathways to the solution of a problem. When problems appear, a student needs to select an strategy to overcome or deal with the obstacle, then execute it properly (Barak & Levenberg, 2015). However, when a strategy is given to the student, the knowledge of that strategy may difficult the student to find another solution as they could think the solution provided by the instructor is the most appropriate one. Is

knowledge a threat for flexibility? Could Knowledge itself become a limitation for strategies of resilience related to flexible thinking? How can the conceptual learning become adaptable for new and different situations that require a different application? Secondly, the influence of the instructor in students' resilience has been one big part of this study. Nonetheless, the lack of dialogue around this influence in resilience caused me to consider the following questions: Until what extent instructors have influence over students' resilience? Is there a bigger influence if the resilience come from the whole institution as a culture or just the instructor resilience will make the positive benefits? Is the influence of instructor stronger or weaker depending on the contexts of different kinds of institutions? These questions seem to me of worth a further examination.

Final Thoughts

Students face a vast number of challenges and barriers in post-secondary education that not only risk their academic success but also can follow undesired outcomes in their personal lives. Resilience in education is an area of research that has started to show the importance of supports and protective factors for students' success and well being. Through my literature review, I have confirmed the importance of resilience in education and how it has the potential to improve the educational practices and students well being. I sincerely hope this study contributes to better practices and understandings of resilience in different contexts. As I conclude this study, it has given me a whole new perspective on how resilience can be promoted in the classroom and how I can practice resilience myself. A sense of responsibility about students' resilience has also stuck with me after interacting with the participants of the study. It has inspired me to do more research and enhance my practice as an educator.

During the process of conducting this research, I have been able to reflect about my teaching philosophies as well as my vision of leadership in educational settings. The way I see my

students and my colleagues has changed for the better, including a more ecological perspective of resilience. I can now put more effort on the creation of that safe environment and the way I model resilience to either my team or my students. My own passion for leadership has led me to believe there is a lot we can do for others. I believe in the impact of the actions that leaders, mentors, and teachers have in their daily practice and I better understand how they can impact others' resilience. I hope my results, recommendations and conclusions aid the instructors to keep the conversation going about the ways in which students can be better supported and provided with resources for their success and specific needs.

After reviewing the literature and analysing the data gathered, my interest in the topic of resilience and student supports has grown. I will continue my work by presenting the results of this research in conferences and aiming to publish academic articles disseminating the findings. All this is with the hopes of having insights from different people on different contexts about the ways in which resilience can be promoted. It will nurture my views about the development of resilience in education and provide the experience necessary to pursue further research. Hopefully, I will be continuing this avenue of research to expand the knowledge about resilience in education and help students succeed in our very complex society.

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Appendix A: Participant Recruitment Email



**Werklund School of Education
University of Calgary**

PARTICIPANTS NEEDED FOR RESEARCH IN RESILIENCE

I am looking for volunteers to take part in a comprehensive study to better understand how post-secondary instructors promote resilience in students within their courses.

As a participant in this study, you will be first asked to be part of an interview regarding the perceptions of resilience in the classroom and invited to discuss your understanding of resilience and how you make it evident in the classroom. Second, during the interview session, you will be facilitated with a written case study about a common issue related to a student task or project. You will be invited to discuss the case study with the researcher. Third, a document analysis will be done on the course outlines of the course during the Fall semester

Your participation in the interview would involve 1 session, which is approximately 45-60 minutes for the first part and then 15-30 minutes for the second part, the discussion of the case study.

For more information about this study, or to volunteer for this study,
please contact:

Jhonattan Bello, MA Student of Educational Research Email: jhonattan.bello@ucalgary.ca

If you have any further questions or want clarification regarding this research, please contact:
Amy Burns, Associate Dean Undergraduate Programs, Werklund School of Education
amburns@ucalgary.ca

The University of Calgary Conjoint Faculties Research Ethics Board has approved this research study (REB20-1069)

Appendix B: Consent Letter: Interview



Principal Investigators:

Amy Burns, Associate Dean Undergraduate Programs, Werklund School of Education amburns@ucalgary.ca

Research Assistant(s)

Jhonattan Bello, Graduate Student, MA of Educational Research jhonattan.bello@ucalgary.ca

Promoting resilience in post-secondary students: A case study (Interview Consent)

This consent form, a copy of which has been given to you, is only part of the process of informed consent. If you want more details about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

The University of Calgary Conjoint Faculties Research Ethics Board has approved this research study (REB20-1069).

Participation is completely voluntary and confidential.

Purpose of the Study

The purpose of this research is to conduct a comprehensive study to better understand how post-secondary instructors promote resilience in students within their courses. The research explores the perceptions, attitudes and behaviours modelled by university professors that could have influence and enhance resilience in students.

Study Procedures

There are three activities associated with this project. First, an interview regarding the perceptions of resilience in the classroom before your course has started, you will be invited to discuss your understanding of resilience and how you make it evident in the classroom. Second, during the interview session, you will be facilitated with a written case study about a common issue related to a student task or project. You will be invited to discuss the case study with the researcher making emphasis on how you would manage that specific situation. Third, a document analysis will be done on the course outlines of the course during the Fall semester. You will be provided a different consent form in order to access to the course outlines.

All research materials will be kept in a locked cabinet only accessible by the research assistant(s) until after transcription and anonymization. At that point, the research assistant(s) will store the interview materials and transcriptions on an encrypted external hard drive.

The use of this data is for research purposes only and participation in the research is entirely voluntary. Your responses to the interview will only be known by the researcher. You are free to withdraw from the interview at any moment. At that time all data collected from you will be withdrawn from the study. Once all data is complete, however, all data will be included in the study and cannot be withdrawn. Only after the audio recording has been transcribed and anonymized will the data go to the research team for analysis. Notes taken during the interviews will not include any specific detail or identifying information as names of people, places or other information that can lead to the identification of the participant. If you have any questions or concerns related to the study, please contact the research assistant(s) for clarification.

Risks or Benefits

We see the participation in this project as minimal risk. During the research, your identity will be kept private. That means all the details will be removed from the thesis and subsequent works. The interviews will be audio-recorded and transcribed. Quotes from the transcription may be used in the research paper and subsequent papers. Once the data is collected, and before it is provided to the researchers, all identifying information from the session (and potentially identifying information) will be removed (anonymized). While a high degree of anonymity and confidentiality is offered, there is no absolute guarantee that some persons who may be familiar with the participants would not recognize them based on the quotes used in the thesis and subsequent works.

As for benefits, the increased understanding of educational practices may have an impact to enhance resilience in students and instructors' outcomes regarding resilience. Moreover, the results will be shared with others and benefit participants from the findings which will be useful to create new strategies and innovate in educational practices.

Dissemination of Findings

Study findings will be shared across the University of Calgary campus, particularly with undergraduate programs. Findings may also be published online or in print journals and may be presented at local, provincial, and national conferences to share the potential benefits of promoting resilience in the classroom.

Personal Information

Your name and email address will be collected in this study for communication purposes only and confidentiality during the study will be protected. Once all data is collected and before it is provided to the researchers all identifying information (and potentially identifying information) will be removed (anonymized).

Data Retention and Storage

All research data will be stored on an encrypted external hard drive in a locked filing cabinet for a minimum of 7 years following the study.

Signatures – Written consent

Your signature on this form indicates that 1) you understand to your satisfaction the information provided to you about your participation in this research project, and 2) you agree to participate in the research project.

In no way does this waive your legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from this research project at any time. You should feel free to ask for clarification or new information throughout your participation.

Participant's Name: (please print) _____

Email address: _____

Participant's Signature: _____ Date: _____

Researcher's Name: (please print) _____

Researcher's Signature: _____ Date: _____

Questions/ Concerns

If you have any further questions or want clarification regarding this research and/ or participation, please contact:

Jhonattan Bello, research assistant, jhonattan.bello@uclagary.ca

If you have any concerns about the way you've been treated as a participant, please contact the Research Ethics Analyst, Research Services Office, University of Calgary at (403) 220-6289 or (403) 220-8640; email cfreb@ucalgary.ca. A copy of this consent form has been given to you to keep for your records and reference. The investigator has kept a copy of the consent form.

Appendix C: Consent Letter: Document Analysis



Principal Investigators:

Amy Burns, Associate Dean Undergraduate Programs, Werklund School of Education
amburns@ucalgary.ca

Research Assistant(s)

Jhonattan Bello, Graduate Student, MA of Educational Research jhonattan.bello@ucalgary.ca

Promoting resilience in post-secondary students: A case study (Document Analysis Consent)

This consent form, a copy of which has been given to you, is only part of the process of informed consent. If you want more details about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

The University of Calgary Conjoint Faculties Research Ethics Board has approved this research study (REB20-1069).

Participation is completely voluntary and confidential

Purpose of the Study

The purpose of this research is to conduct a comprehensive study to better understand how post-secondary instructors promote resilience in students within their courses. The research explores the perceptions, attitudes and behaviors modelled by university professors that could have influence and enhance resilience in students.

Study Procedures

The third phase of the study involves the analysis of artifacts and documentation. Course outlines are the main target artifacts of the document analysis. However, any other information that you voluntarily are willing to share for the study will be included in the analysis. You will be asked to provide one of your

course outlines prior to the interview. These documents or files will help me to understand each participant's vision of the class, as well as the setting of the class that creates a specific atmosphere.

All research materials will be kept in a locked cabinet only accessible by the research assistant(s) until after transcription and/or anonymization. At that point, the research assistant(s) will store the documents and transcriptions on an encrypted external hard drive.

The use of this data is for research purposes only and participation in the research is entirely voluntary. The details of the course and instructor associated with the course outline, any other document or artifact provided will only be known by the researcher. You are free to withdraw from the study at any moment. At that time all data collected from you will be withdrawn from the study. Once all data is complete, however, all data will be included in the study and cannot be withdrawn. Only after the documentation is anonymized will the data go to the research team for analysis. If you have any questions or concerns related to the study, please contact the research assistant(s) for clarification.

Risks or Benefits

We see the participation in this project as minimal risk. During the research, your identity will be kept private. That means all the details will be removed from the thesis and subsequent works. Quotes from the transcription and the course outlines may be used in the research paper and subsequent papers. Once the data is collected, and before it is provided to the researchers, all identifying information from the documents (and potentially identifying information) will be removed (anonymized). While a high degree of anonymity and confidentiality is offered, there is no absolute guarantee that some persons who may be familiar with the participants would not recognize them based on the quotes used in the thesis and subsequent works.

As for benefits, the increased understanding of educational practices may have an impact to enhance resilience in students and instructors' outcomes regarding resilience. Moreover, the results will be shared with others and benefit participants from the findings which will be useful to create new strategies and innovate in educational practices.

Dissemination of Findings

Study findings will be shared across the University of Calgary campus, particularly with undergraduate programs. Findings may also be published online or in print journals and may be presented at local, provincial, and national conferences to share the potential benefits of promoting resilience in the classroom.

Personal Information

Your name and email address will be collected in this study for communication purposes only and confidentiality during the study will be protected. Once all data is collected and before it is provided to the researchers all identifying information (and potentially identifying information) will be removed (anonymized).

Data Retention and Storage

All research data will be stored on an encrypted external hard drive in a locked filing cabinet for a minimum of 7 years following the study.

Signatures – Written consent

Your signature on this form indicates that 1) you understand to your satisfaction the information provided to you about your participation in this research project, and 2) you agree to participate in the research project.

In no way does this waive your legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from this research project at any time. You should feel free to ask for clarification or new information throughout your participation.

Participant's Name: (please print) _____

Email address: _____

Participant's Signature: _____ Date: _____

Researcher's Name: (please print) _____

Researcher's Signature: _____ Date: _____

Questions/ Concerns

If you have any further questions or want clarification regarding this research and/ or participation, please contact:

Jhonattan Bello, research assistant, jhonattan.bello@ucalgary.ca

If you have any concerns about the way you've been treated as a participant, please contact the Research Ethics Analyst, Research Services Office, University of Calgary at (403) 220-6289 or (403) 220-8640; email cfreb@ucalgary.ca. A copy of this consent form has been given to you to keep for your records and reference. The investigator has kept a copy of the consent form.

Appendix D: Interviewer Guide



Interviewer guide

Promoting resilience in post-secondary students: A case study

Date:	Time:	Instructor
pseudonym:		

- A. Interviewer: REVIEW terms of and sign consent form with the participant.
- B. Interviewer: RETAIN Consent Form sent via email.
- C. Interviewer: READ to Participant: **This interview will take approximately 45 to 60 minutes. I really appreciate your participation. I will ask you a series of questions and record them, then later you will have a week-long window to review the interview transcriptions and edit them for meaning or to offer corrections. If you would like, I will give you a copy of our audiotape to review before receiving written transcripts. Do you have any questions? Are you ready to begin?**
- D. Interviewer: Turn Recorder on. Begin Interview. (Interviewer: KEEP THIS completed guide and file).

Questions

1. Please state your chosen pseudonym.
2. What is your role at the university? How long have you been in this position?
3. What is your definition of resilience? (probe: examples)?
4. What are the typical challenges you think students face during your course? (probe: specific to any part of the term/ level/culture)
5. What kinds of programs or practices are in place in your courses that you consider will enhance resilience in students? (probe: why/how they help to enhance resilience)
6. What kind of tools or supports do you think the students have available to overcome any challenge, or adversity? (Probe: How do students know them/ How are communicated to students)
7. How would you enact or model resilience during your courses? (probe: procedures/sounding boards)
8. How do you keep aware of the students' engagement and motivation on the course? (Probe: How do you follow up)
9. Is there anything about working at this institution that is exceptionally different than institutions you have worked at before regarding promoting resilience? (probe: institution culture)
10. Do you have any questions for me?

Thank you for participating in this interview. Your answers are extremely important to my study!

Interviewer: Turn off recorder. Keep this paper page with your notes, keep any documents the participant offers, file and retain.