A PHENOMENOLOGICAL OF HIGH SCHOOL TEACHERS’ EXPERIENCES WITH GROWTH MINDSET

by

Heidi Lyn Eveland

Liberty University

A Dissertation Presented in Partial Fulfillment
Of the Requirements for the Degree
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APPROVED BY:

Dr. Rick Bragg Ed.D, Committee Chair

Dr. James Eller Ed.D, Committee Member
ABSTRACT

The purpose of this transcendental phenomenological study was to describe the experiences of teachers who have used growth mindset in their classrooms. This researcher attempted to answer the question: What are the experiences of high school teachers who have used the growth mindset model to increase student achievement, motivation, and grit? Participants included those high school teachers who have in fact used this model in their classrooms. Data collection methods included interview, observations, and focus groups. Data analysis methods included bracketing, horizontalization, establishing themes, textural description, structural description, and describing the essence of participants’ experiences. Participants are teachers in the Northeast Ohio school district who have taught using the growth mindset model. Fourteen teachers participated in this study. This research has the potential to contribute to the literature on teachers’ beliefs about implicit theories of intelligence and student motivation. Three themes emerged as a result of this study: building relationships, student motivation, and ongoing professional development and support. Results indicate that although many of the participants found growth mindset to be beneficial in encouraging student achievement and grit, the participants had mixed feelings on the place growth mindset had in encouraging student motivation. The participants also agreed that professional development is an essential ingredient in creating a culture of growth mindset in the classroom.

**Keywords:** Implicit Learning Theory, Collective Teacher Efficacy, Growth Mindset Model, Expectancy-Value Theory
Dedication

First, I want to dedicate this to my husband, Jeff. He has been a constant rock during this journey. He has been patient and supportive every step of the way. I could not have done this without him. I also must dedicate this to my four children: Ryan, Meghan, Christian, and Ethan, who have sacrificed so that I could fulfill this dream.
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Socioeconomic Status (SES)

Organization for Economic Co-operation and Development (OECD)

National Assessment of Educational Progress (NAEP)

Professional Development (PD)
CHAPTER ONE: INTRODUCTION

Overview

Growth mindset has been the educational “buzzword” for at least the past decade, if not before. Having a growth mindset means that one believes that one’s intelligence and ability to learn can change and grow. Having a fixed mindset consists of the belief that one’s intelligence is fixed and cannot change and grow (Dweck, 2008). Duckworth (2016) stated that students who have a growth mindset are more likely to show perseverance and grit which in turn will help them as they graduate from high school. In this study, the first chapter will provide the background; theoretical, social, and historical basis for the study; statement of the problem; significance of the study; research questions; and definitions of terms. Later chapters will provide a review of the current literature, methods used, findings, and finally the conclusion.

Background

Social scientists have for a while enjoyed the quote from the famous philosopher W. I. Thomas, “If men define situations as real, they are real in their consequences” (Jussim, 1991, p. 54). Some believe that our belief system influences our perception of reality: the idea that what we perceive to be true will then determine how we see the world around us. This holds true for the student as well.

Social cognitive theory revolves around the idea that one can produce a desired effect through the actions that one takes in their lives. Bandura (2001) posited that human agency is characterized through a number of core features that include intentionality, forethought, self-reactiveness, and self-reflectiveness. Intention is defined by Bandura (2001) as “a future course of action to be performed” (p. 6). This central idea of human agency carries with it the pervasive belief that one can exercise some measure of control over their own abilities and actions to get
things done (Bandura, 2001). Efficacy beliefs can have a wide range of influence over the paths and actions that people choose to take in life (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996).

Efficacy beliefs play an important role in shaping how we lead our lives. They can decide what activities we engage in and the paths that we choose to follow. These beliefs also play a key factor in the development of the competencies that mark our internal dialogue about who we say we are. A person who sees themselves one way in a particular area, skill-wise, may behave differently than another depending on their efficacy belief (Bandura 1997, 2001). Bandura (1994) suggested that a strong sense of self-efficacy actually enhances the human experience by the very fact that if one has a high self-efficacy, they approach difficult tasks as ones to be mastered rather than avoided. These individuals tend to have a lower risk of depression and are less likely to fall victim to stress. On the other hand, those who have a weak sense of self-efficacy approach difficult tasks in quite the opposite way. They tend to avoid difficult challenges and they have little faith in their capabilities. These individuals usually have a high risk of depression and are likely to fall victim to stress. Bandura (2001) theorized that efficacy comes from four distinct sources: mastery experiences, vicarious experiences, verbal persuasion, and affective states.

Bandura (1994, 1997) believed that those who had a high sense of personal efficacy will be individuals that have learned to regulate their learning. Having this belief system will determine whether people think pessimistically or optimistically and in ways that will be self-enhancing or self-hindering. Efficacy beliefs play a central role in the self-regulation of motivation through goal challenges and outcome expectations. It is partly on the basis of efficacy beliefs that people choose what challenges to undertake, how much effort to expend in the
endeavor, how long to persevere in the face of obstacles and failures, and whether failures are motivating or demoralizing.

High academic self-efficacy plays a role in determining whether or not students will set challenging goals and actually achieve them (Zimmerman, Bandura, & Martinez-Pons, 1992). When students share what makes them feel more confident, they provide a window through which the teacher can understand how they view and process their progress in a specific domain, whether it be math or reading (Eisner, 1991). Within the framework of social cognitive theory, understanding what makes students more confident can lead to curricular and teaching changes that can serve as powerful environmental factors that influence student self-efficacy and learning (Butz & Usher, 2015).

**Historical Context**

Previous research has been done which has demonstrated that people can have one of two implicit types of intelligences (Dweck, 1999). This research has led many to suggest that what happens in the classroom is directly related to the belief one has about the implicit theories of intelligence. If this is true, then it would be wise for those who work with students to have a deep understanding of these theories and how it applies to motivation and goals as well as how students face challenges. The first type is called “entity” theory and states that intelligence is a fixed, stable quality. Entity theorists hold to the position that one is born with a certain innate level of intelligence and their performance is a consequence of that ability (Costa & Faria, 2018; Dweck, 1999; Hong, Chiu, Dweck, Lin, & Wan, 1999). This theory also holds that when one is confronted with a challenge, they respond with helplessness and a lack of self-regulation rather than an effort-driven approach (Burnette, O’Boyle, VanEpps, Pollack, & Finkel, 2013; Diener & Dweck, 1978; Robins & Pals, 2002). The entity theorist would then say that it was a lack of...
ability, not effort, that was demonstrated in the negative performance of a given task (Dweck, 2000). Students that hold to this view would tend to believe that they are smarter than others. They believe that their performance is a direct measure of their own ability. They like easy tasks so they don’t look “dumb” (Renaud-Dubé, Guay, Talbot, Taylor, & Koestner, 2015). Dweck and Leggett (1988) found that students with entity beliefs would be more likely to set goals only to a certain level to ensure that they were able to display adequate performance of that goal. This would be meant to make them look good to their classmates. Performance goals are all about “looking good” but not actually “being good.”

The other type of intelligence is labeled “incremental” theory due to the fact that intelligence is considered to be malleable and changeable (Dweck, 1999). Those that hold to this type of intelligence are more likely to adopt the idea that failure is linked to behavior and not to traits (Dweck, Chiu, & Hong, 1995; Hong et al., 1999; Thomas & Sarnecka, 2015). They are also more likely to believe that characteristics can change with effort and through time (Costa & Faria, 2018). Students who believe that intelligence could be changed were less likely to respond to failure with helplessness and tended to put more effort in their studying (Blackwell, Trzesniewski, & Dweck, 2007; Rickert, Meras, & Witkow, 2014). Those who hold to this type of theory believe in what is called a mastery-oriented style of learning. Students then would welcome harder challenges as an opportunity for new learning. They make use of innovative strategies and will exert effort with a great deal of persistence when things get challenging (Dweck et al., 1995). Students that hold to this view are those that welcome feedback as they are learning a new and challenging new task (Mueller & Dweck, 1998).

**Theoretical Context**

The current research study investigated several constructs and provided the theoretical
framework for this study. It began with Carol Dweck’s (1999) theory of growth mindset. Using the constructs of expectancy-value theory, self-efficacy, and social cognitive theory, the literature provided a background for understanding teachers’ experiences using growth mindset theory in the classroom.

According to researchers there is a close relationship between Dweck’s (1999) theory of growth vs. fixed mindset and Duckworth’s (2016) theory of grit. Dweck (1999) theory suggests that students with a “growth” mindset are more likely to be successful than their peers who have a “fixed” mindset. Those with a growth mindset are also more likely to persist when faced with a challenge. Duckworth (2016) defined grit as perseverance and passion for long-term goals. “Grit entails working strenuously toward challenges, maintaining effort and interest over years despite failure, adversity, and plateaus in progress” (Duckworth, Peterson, Matthews, & Kelly, 2007, p. 1087).

The expectancy-value theory originated with John Atkinson in the late 1950s and 1960s (Eccles et al., 1983). He developed this theory to understand the motivation of individuals. Jacqueline Eccles expanded this theory into the field of education. Theoretical and empirical work would suggest that expectancies and values interact with each other to predict outcomes such as achievement, motivation, and engagement (Trautwein et al., 2012).

The belief system regarding implicit theories of intelligence is a reality for everyone who sets foot inside the classroom. Where one stands on this theory will then predict through which lens one views the student’s ability to learn and face challenges (Satchell, Hoskins, Corr, & Moore, 2017). There are many positive effects to understanding these theories of intelligence which could include motivation (Blackwell et al., 2007; Dweck & Leggett, 1988), self-regulation (Burnette et al., 2013; Diener & Dweck, 1978, Robins & Pals, 2002), and goal setting (Dweck &
Leggett, 1988). A student’s belief about their own intelligence will determine whether or not they will succeed academically or even be motivated to learn. Expectancies are the belief that one has regarding the success they will have on certain tasks (Eccles & Wigfield, 2002) and shape the choices that a student will make when tasks are placed in front of them. These choices are tied directly to the concept of self-efficacy, which in turn is tied to implicit theories of intelligence (Bong & Skaalvik, 2003).

Social Context

Many studies have been conducted on the influence of implicit theories of intelligence on students (Bandura et al., 1996; Blackwell et al., 2007; Burnette et al., 2013). Researchers have spent quite a significant amount of time investigating student motivation and academic learning as it applies to entity and incremental theories of intelligence. Unfortunately, far less has been found in the literature regarding how teachers view their students’ intelligence and how that affects the way they approach their instruction in the classroom. Does the research show that how students feel about themselves (self-efficacy) directly correlates with what the teacher believes about their implicit theory of intelligence? It would seem that students that display a higher sense of self-efficacy would not need the teacher’s influence in their learning; however, does the teacher bias in relation to fixed or growth mindset influence a student’s self-efficacy?

Developing a growth mindset has been shown to have many benefits for the student. Studies have shown that providing students with specific interventions to increase their understanding of the growth mindset will improve academic performance (Wilson & Linville, 1985; Blackwell et al., 2007). Researchers have spent plenty of time teaching students that their brains were like a muscle and that they were malleable—they would stretch and grow the more that the students learned (Aronson, Fried, & Good, 2002; Aronson & Inzlicht, 2004).
Researchers believe that if the interventions are intentional, they can have significant academic success (Mills & Mills, 2018). They recommend teaching students a growth mindset and how the brain develops with challenge. Teachers should ensure that students feel as if they belong in the classroom and encourage collaboration. Teachers must challenge the myth that raw ability is what matters the most (Mills & Mills, 2018).

The growth mindset teaches students that intelligence is not a fixed quality (Aguilar, Walton & Wieman, 2014). Intelligence can be nurtured through challenging tasks since intelligence grows with hard work on challenging problems (Aguilar et al., 2014; Ng, 2018). Teachers often are asked to teach specific educational models to students to increase test scores and overall achievement. One of those models is the growth mindset model. This study delves into the experiences that teachers have had with teaching this model.

**Situation to Self**

In my current role as a teacher in a public school in northeast Ohio, I find that many of the policies and practices that are passed down from the administrators are outside my circle of control. Teaching growth mindset resonates with me personally as I have been asked to teach using this model without much training and have wondered if I did it justice.

As an educator, I have also wondered if other teachers ever felt like I did when they were asked to teach this particular model. I believe that with any new teaching method or model there should be support and leadership from administration for teachers to be successful and for the model to have maximum effect on student achievement, motivation, and grit. I believe that as God’s creation, I need to do everything with excellence, which includes teaching new methods to my students.

It becomes extremely important to understand the often-subjective meanings brought to
light by each participant as they share their experiences using the growth mindset model in their respective classrooms (Creswell & Poth, 2018). I sought to construct meaning by interviewing other educators who have used this method in their classrooms. I spent time in their classrooms in order to understand the “context” of their experience (Creswell & Poth, 2018). I attempted to get as close as possible to the participants being studied to understand how they experience knowledge (Creswell & Poth, 2018).

**Philosophical Assumptions**

Ontologically speaking, I learned to understand that not everyone believes and sees things the way I do. I believe that there are multiple realities and mine is not always “right.” I did not report “truths,” however; I sought to report on the realities of the teachers that I interviewed (O’Neil, 1998). My goal was to report the different perspectives of the teachers that I interviewed as themes as they are presented even if they differ from my perspective.

Epistemologically, I relied on quotes as evidence from the participants. I spent time in the field with the participants to gain a deeper understanding of their reality. I became the “insider” (Creswell & Poth, 2018). Being a teacher, it is easy to rely on my own experiences as the source of knowledge; however, it is extremely important to get inside the heads of the teachers that I will be studying. Only then will I be able to “know what they know” and not rely on my knowledge and understanding (Creswell & Poth, 2018).

As an axiological researcher, I not only continually and openly articulated the values that shape the narrative but also included my own interpretation alongside of the interpretation of the participants (Creswell & Poth, 2018). I attempted to identify themes encompassing the idea that using the growth mindset model will benefit achievement, motivation, and grit among high school students. The interpretations of these interviews were used to shape this study (Creswell
& Poth, 2018) as well as parallel the phenomenological approach and provide a description for the study of examining the meaning that teachers who have taught growth mindset ascribe to their experience of student achievement, motivation, and grit.

This assumption is based on the idea that I have something worth saying and am trying to engage my reader in the argument of that fact. The overall assumption is that I am not a “truth seeker” (O’Neil, 1998) but am reporting on the reality of my participants as they see “truth.” My job then as a qualitative researcher is to understand my participants’ realities and report each of these realities as themes. Each of these teachers has had an opportunity to experience the theory of growth mindset in their perspective classrooms. I served as the objective observer in order to truly understand their realities.

**Personal Paradigm**

By referencing my own philosophical assumptions previously mentioned, I attempted to identify my biases as I gathered and analyzed the data for this study. I viewed this study from a social constructivist perspective. I relied on the subjective views of the participants as I looked to understand the world as they see it. I sought to construct meaning based on the interviews and focus groups. The questions were open-ended, allowing for subjective interpretations (Creswell & Poth, 2018). I positioned myself in the research and acknowledged how my interpretation evolves from my own personal experience with the phenomenon (Creswell & Poth, 2018). Social constructivists believe that students are intrinsically and extrinsically motivated and thereby learning takes place in both arenas. Students are extrinsically motivated by rewards and “pats on the back,” whereas students are intrinsically motivated by the learning process itself (Vygotsky, 1978).

I grew up in a household that valued intrinsic motivation. I had parents that understood
how to develop this within my siblings and myself. I learned from an early age that if I put my mind to something, I could accomplish just about anything. With this belief system already instilled, I was able to approach difficult tasks with the idea that it was a challenge that needed to be met. My parents were always there to let me know that “smartness” really was not the basis for ability. However, words and phrases like “Good job” and “You’re so smart” were ones that I heard consistently growing up. It was not until recently that I heard the terms “growth and fixed” mindsets. I understand that others will have different perspectives of the idea of a growth mindset. As a researcher, my primary job was to recognize the multiple views that appeared within the themes (Creswell & Poth, 2018).

**Problem Statement**

The problem exists that many teachers may be unfamiliar with the growth mindset model of teaching and therefore are reluctant to utilize this model to benefit their students. Many teachers are asked to utilize the growth model with their students in order to increase student achievement, motivation, and grit (Schmidt, Shumow, & Kackar-cam, 2017; Spiess & Cooper, 2020; Yeager et al., 2019). Many students in high school struggle to succeed academically, especially in the low-income inner city (Destin, Hanselman, Buontempo, Tipton, & Yeager, 2019). There are many factors that affect these students as they enter the classroom each day. Some may not have eaten since they left school the day before, while others may leave school with no place to go because they are homeless, and still others may come from less-than-ideal home situations where they are beaten or neglected. Most of these situations are outside of the teachers’ daily control; however, is there a way that the teacher could help these students become academically successful despite their circumstances? How a teacher approaches each student and the way that they learn determines if they will be successful. Implicit theories of
intelligence involve an individual’s fundamental underlying belief regarding whether or not intelligence or abilities can change (Blackwell et al., 2007). Implicit theories of intelligence can be broken up into two parts: Incremental theory of intelligence is the theory that intelligence can grow and improve due to a “growth mindset,” while entity theory of intelligence is the theory that intelligence cannot grow and improve and includes a “fixed mindset” (Satchell et al., 2017).

Motivation, achievement, and grit are often lacking in many high school students (Destin et al., 2019; Haimovitz & Dweck, 2017; Rhew, Piro, Goolkasian, & Cosentino, 2018). Dweck and Leggett (1988) found that students who are exposed to the growth mindset model are believed to demonstrate more motivation, achievement, and grit. These qualities become essential for success in high school and beyond.

**Purpose Statement**

The purpose of this transcendental phenomenological study was to describe the experiences that high school teachers in one urban district in northeast Ohio have with the implementation of the growth mindset model on student achievement, motivation, and grit. At this stage of the research, the use of the growth mindset model will be generally defined as the premise that students’ intelligence is not a fixed concept but rather one that can grow and develop. The theory guiding this study is the growth mindset theory, which will be tied into the expectancy-value theory that posits that individuals’ choice, persistence, and performance can be explained by what they believe about how well they will do on a specific activity and how much they believe the activity is valued (Atkinson, 1957; Eccles et al., 1983; Wigfield, 1994; Wigfield & Eccles, 1992). Expectancy-value theory highlights the need for educators to be cognizant of what students see as valuable, which will in turn underscore the need for students to believe that they are capable of certain tasks even if they do not value them. If a student expects to do poorly
on a task, then they will not see the value in doing that task and thereby risk sinking into a false narrative that they are not capable of the task, thereby operating within a limited mindset. They will not even try to accomplish the task. However, if a student sees value in the task, they will try harder to accomplish the task and fulfill the growth mindset narrative, which states that the brain can grow and develop.

**Significance of the Study**

Many students in high school struggle to succeed, especially in the low-income inner city. As of 2015, 51% of public school students in the United States were living under the poverty limit (Suitts, 2015). According to the National Report Card (2019), the city of Cleveland was ranked 23rd in Reading and 22nd in Math among other large urban districts, with only one district below in math and three below in reading. Something needs to change in order to bring this district closer to the top of these rankings.

**Empirical**

This research was done using direct observations, focus groups, and interviews. The data that was gathered will contribute to the empirical nature of this study. Moustakas (1994) describes varying approaches of phenomenological research. On one side there is the empirical phenomenological approach which “involves a return to experience in order to obtain comprehensive descriptions that provide the basis for a reflective structural analysis that portrays the essence of the experience” (p. 10). The proposed study was to learn more about the experiences of several high school teachers as they have taught the growth mindset model to their students. The results from this study will provide high school teachers with a practical rationale for using this model with their students in order to improve student achievement,
motivation, and grit. This study will also contribute to the literature by providing a clear connection between student growth and implicit theories of intelligence.

**Practical**

As in any large urban district, there are many factors that affect these students as they enter the classroom each day. Some may not have eaten since they left school the day before, while others may leave school with no place to go because they are homeless. Still others may come from less than ideal home situations where they are beaten or neglected (Chang & Romero, 2008; Smith & Medalia, 2015). Much has been written and researched about the benefits to the student in using the growth mindset model; however, few studies provide in-depth understanding of the context for the teacher’s perception of student achievement, motivation, and grit using this model. This study will provide high school teachers with a theoretical framework for using the growth mindset model in the classroom so that they can help improve student achievement. These teachers will be able to see the significance and the value from using the growth mindset model in their classrooms.

**Theoretical**

While studies have been conducted to show the benefits of using growth mindset (Hochanadel & Finamore, 2015), this current study will delve more deeply into teacher experiences using this model to encourage motivation, student achievement, and grit. Teaching in the urban district is challenging and usually filled with stress as many students decide to just give up and quit. There seems to be a lack of motivation and grit in inner-city students. As soon as students encounter a challenging situation, many quit (Hochanadel & Finamore, 2015). Teachers are left wondering if there is something they could do to encourage students to persevere even in the face of difficult situations.
The current research study investigated several constructs as well as provided the theoretical framework for this study. It begins with Carol Dweck’s (1999) theory of growth mindset. Using the constructs of expectancy-value theory, self-efficacy, social cognitive theory, and student motivation, the literature provides a background for understanding teachers’ experiences using growth mindset in the classroom.

**Research Questions**

This qualitative transcendental phenomenological study addresses one central research question: What are the experiences of high school teachers with the implementation of the growth mindset model to increase achievement, motivation, and grit? The research study considers factors that deal with teachers’ experiences in implementing the model and the support that teachers have with learning the model through research-based practices. Current research shows that there are considerable benefits to using the growth mindset theory in the classroom setting (Claro, Paunesku, & Dweck, 2016; Stipek & Gralinski, 1996). There has been much written and researched about the academic achievement of students that have been introduced to the concept of growth mindset versus fixed mindset when it comes to their ability to grow and learn new material (Andersen & Nielsen, 2016; Burnette, Russell, Hoyt, Orvidas, & Widman, 2017; Paunesku, Walton, Romero, Smith, Yeager, & Dweck, 2015; Yeager et. al., 2016). In fact, much of this research relies on the perspective of the student and their achievement in the classroom; however, little is written about the high school teacher’s experiences of the effects of using growth mindset in the classroom. There are three sub-questions that will help guide this research.
Sub-Questions

1. How do the teachers feel the growth mindset model helps students with motivation and achievement?

2. What preparations are given to teachers to ensure that they are teaching the model based on best research practices?

3. How do the teachers feel they are supported in using the growth mindset model for the long term? Teachers need to believe that they are supported in their classroom, and this can have an overall effect on student achievement (Leithwood, Harris, & Hopkins, 2008).

All these questions revolve around the central query which will seek to understand teachers’ descriptions about their experiences with teaching the growth mindset in the classroom and how growth mindset relates to student motivation, achievement, and grit (Dweck, 2007; Farrington et al., 2012).

Definitions

1. *Cognitive skills*: skills that would include students’ beliefs about themselves and their attitudes, goals, motivation, and perseverance (Farrington et al., 2012).

2. *Efficacy*: the belief that one can exercise some measure of control over their own abilities and actions to get things done (Bandura, 2001).

3. *Entity theory*: a theory which states that intelligence is a fixed, stable quality (Costa & Faria, 2018).

4. *Fixed mindset*: the belief that intelligence or ability cannot be developed or changed (Dweck, 2007).

5. *Growth mindset*: the belief that with effort individuals can learn and grow their intelligence (Dweck, 2007).
6. *Implicit theories of intelligence*: a belief system of any individual in regard to whether or not intelligence and ability can change (Burnette et al., 2013).

7. *Incremental theory*: a theory that intelligence is considered to be malleable and changeable (Dweck, 1999).

**Summary**

This researcher tried to answer the questions about the experiences of high school teachers as they have taught students using the growth mindset model in order to improve student achievement, motivation, and grit. The problem is that many teachers are asked to utilize the growth model with their students in order to increase student achievement, motivation, and grit, but many teachers may be unfamiliar with this model and therefore are reluctant to utilize it to benefit their students. The purpose of this transcendental phenomenological study was to describe the experiences that high school teachers have had with the implementation of the growth mindset model in urban high schools and its impact on student achievement, motivation, and grit. This research has the potential to contribute to the literature relating to teacher’s beliefs about implicit theories of intelligence as it relates to student academic achievement, motivation, and grit. The goal of this phenomenological study is to fill the gap in this research and to understand the effects of growth mindset in the classroom from a teacher’s perspective in order to provide researchers and educators with a more thorough look at the overall effects of using the growth mindset theory in the classroom environment.
CHAPTER TWO: LITERATURE REVIEW

Overview

“Compared with what we ought to be, we are only half awake. Our fires are damped, our drafts are checked. We are making use of only a small part of our possible mental resources…men the world over possess amounts of resource, which only exceptional individuals push to their extremes of use” (James, 1907, p. 322).

James (1907) posited that most individuals do not use their full capacity of intelligence. Can this be said about students as well? Many students in high school struggle even to succeed modestly in academics, especially in the low-income inner city (Wang, Haertel, & Walberg, 1997). As of 2015, 51% of public school students in the United States were living under the poverty limit (Suitts, 2015). There are many factors that affect these students as they enter the classroom each day. Some may not have eaten since they left school the day before, while others may leave school with no place to go because they are homeless, and still others may come from less-than-ideal home situations where they are beaten or neglected (Chang & Romero, 2008; Smith & Medalia, 2015). Most of these situations are outside of the teachers’ daily control; however, is there a way that the teacher could help these students become academically successful despite their circumstances? How a teacher approaches each student and the way that they learn could possibly determine if they will be successful.

Over the last several decades there has been a movement to hold schools accountable for what students are learning in the classroom. This movement, known as the standards-based reform movement, has led to schools focusing more on testing than on what students are actually learning (Laursen, 2015). Along with this movement came the overwhelming need for schools to fix the inequity that many believed was found in most public schools. “In order for students to
become successful citizens of their local and global communities, schools must be transformed to provide intentional experiences for students to learn the knowledge and skills required for career and community participation such as collaboration, problem-solving, grit, perseverance, tenacity, and self-control” (Laursen, 2015).

Current research shows that there are considerable benefits to using the growth mindset model in the classroom setting (Claro et al., 2016; Stipek & Gralinski, 1996). There has been much written and researched about the academic achievement of students that have been introduced to the concept of growth mindset versus fixed mindset when it comes to their ability to grow and learn new material (Andersen & Nielsen, 2016; Burnette et al., 2017; Paunesku et al., 2015; S Yeager et al., 2016). The related literature will examine the connection between students’ expectancy of success to social cognitive theory, implicit theories of intelligence, and self-determination theory as well as efforts belief.

**Theoretical Framework**

Previous research has been done which has demonstrated that people can have one of two implicit types of intelligences (Dweck, 1999). This research has led many to suggest that what happens in the classroom is directly related to the belief one has about the implicit theories of intelligence. If this is true then it would be wise for those that work with students to have a deep understanding of this theory and how it applies to motivation, goals, and student challenges.

**Entity theory**

The first type is called “entity” theory, which states that intelligence is a fixed, stable quality. Entity theorists hold to the position that one is born with a certain innate level of intelligence and their performance is a consequence of that ability (Costa & Faria, 2018; Dweck, 1999; Froehlich, Martiny, Deaux, Goetz, & Mok, 2016; Hong et al., 1999). This theory also
holds that when one is confronted with a challenge, they respond with helplessness and a lack of self-regulation rather than an effort-driven approach (Burnette et al., 2013; Diener & Dweck, 1978; Ehrlinger, Mitchum, & Dweck, 2016; Robins & Pals, 2002). The entity theorist would then say that it was a lack of ability, not effort, that was demonstrated in the negative performance of a given task (De Castella & Byrne, 2015; Dweck, 2000; Dweck & Bempechat, 2017). Those that hold to this view would tend to believe that they are smarter than other students. They believe that their performance is a direct measure of their own ability. They like easy tasks so that they do not look “dumb” (Renaud-Dubé et al., 2015). Dweck and Leggett (1988) found that students with entity beliefs would be more likely to set goals only to a certain level to ensure that they were able to display adequate performance of that goal. This would be meant to make them look good to their classmates. Performance goals are all about “looking good” but not actually “being good” (De Castella & Byrne, 2015).

**Incremental theory**

The other theory of intelligence is labeled “incremental” due to the fact that intelligence is considered to be malleable and changeable (Dweck, 1999). Those that hold to this type of intelligence are more likely to adopt the idea that failure is linked to behavior and not to traits (Dweck et al., 1995; Hong et al., 1999; Thomas & Sarnecka, 2015). They are also more likely to believe that characteristics can change with effort and through time (Costa & Faria, 2018). Students who believe that intelligence could be changed were less likely to respond to failure with helplessness and tended to put more effort in their studying (Blackwell et al., 2007; Rickert, Meras, & Witkow, 2014). Those who hold to this type of theory believe in what is called a mastery-oriented style of learning. Mastery-oriented learning comes when students believe they are capable of the task. They believe that if they make a mistake, it is not because they lack the
ability but rather because they just did not try hard enough (Senko & Miles, 2008). Mastery-oriented learning is the opposite of learned helplessness. Students who have learned helplessness, on the other hand, tend to quit when they are faced with difficult challenges (McCarter, 2013; Mokhberi, Hashemi, & Bayrami, 2019; Sciarretta & Cacciamani, 2012; Senko & Miles, 2008). Students who believe that they can accomplish goals welcome harder challenges as an opportunity for new learning. They make use of innovative strategies and will exert effort with a great deal of persistence when things get challenging (Dweck et al., 1995). Incremental theorists are those that welcome feedback as they are learning a new and challenging new task (Mueller & Dweck, 1998).

**Influence of implicit theories of intelligence**

The belief system regarding implicit theories of intelligence is a reality for everyone who sets foot inside the classroom. Where one stands on this theory will then predict through which lens one views the student’s ability to learn and face challenges (Satchell, Hoskins, Corr, & Moore, 2017). There are many positive effects to understanding these theories of intelligence which could include motivation (Blackwell et al., 2007; Dweck & Leggett, 1988), self-regulation (Burnette, et al., 2013; Diener & Dweck, 1978; Filippello, Buzzai, Costa, Orecchio, & Sorrenti, 2020; Robins & Pals, 2002), and goal setting (Dweck & Leggett, 1988; Nayir, 2017).

Many studies have been conducted on the influence of implicit theories of intelligence on students (Hong, Chiu, & Dweck, 1995; Dweck & Bempechat, 2017). Researchers have spent quite a significant amount of time investigating student motivation and academic learning as it applies to entity and incremental theories of intelligence. Unfortunately, far less has been found in the literature regarding how teachers view their students’ intelligence and how that affects the way they approach their instruction in the classroom. The research shows that how students feel
about themselves (self-efficacy) directly correlates with what the teacher believes about their implicit theory of intelligence (Dweck & Bempechat, 2017). It would seem that students that display a higher sense of self-efficacy would not need the teacher’s influence in their learning; however, the teacher’s bias in relation to fixed or growth mindset might influence a student’s self-efficacy.

**Related Literature**

As in any research study, literature was identified that related directly to the current research topic. The purpose of a literature review is to find and analyze a body of literature related to the current topic in order to show a reasonable understanding of the topic and to establish authentic credibility with the research in the field of study (Blum & Muirhead, 2005). The literature review should build on the work of others in the field of study while also highlighting the trends and gaps in the existing body of literature (Neuman, 2020).

**Growth/Fixed Mindset Model**

For years teachers have been tasked with teaching students to read, write, and complete some form of math. These are known as cognitive skills. Farrington et al. (2012) believe that it is not only these cognitive skills but also the non-cognitive skills that will help students be successful in life. These are defined as skills that would include students’ beliefs about themselves and their attitudes, goals, motivation, and perseverance. Good study habits, time management, self-discipline, and the ability to benefit from criticism and learn from mistakes are also part of these non-cognitive skills (Carneiro, Crawford, & Goodman, 2007; Farrington et al., 2012; Smithers et al., 2018). Non-cognitive skills can be just as important in identifying student success as cognitive skills (Almlund, Duckworth, Heckman, & Kautz, 2011; Nichols, 2017).
Academic achievements and interventions. Developing a growth mindset has been shown to have many benefits for the student. Studies have shown that providing students with specific interventions to increase their understanding of the growth mindset will improve academic performance (Andersen & Nielson, 2016; Blackwell et al., 2007; Miller, 2019; Wilson & Linville, 1985). Researchers have spent plenty of time teaching students that their brains were like a muscle and that they were malleable—they would stretch and grow the more that the students learned (Aronson, Fried, & Good, 2002; Aronson & Inzlicht, 2004; Conyers & Wilson, 2020). Researchers believe that if the interventions are intentional, they can have significant academic success (Mills & Mills, 2018). They recommend teaching students a growth mindset and how the brain develops with challenge. Teachers should ensure that students feel as if they belong in the classroom and encourage collaboration. Teachers must challenge the myth that raw ability is what matters the most (Mills & Mills, 2018).

Can mindset be taught? There seems to be agreement among researchers that teaching growth mindset does in fact increase students’ academic achievement. Dweck (2000, 2007, 2008), Farrington et al. (2012), and Vispoel and Austin (1995) all believe that students’ mindset significantly affects their academic motivation and success. The research also shows that students with a fixed mindset are so caught up in how smart they appear to their peers that they often will reject learning opportunities if they cannot be seen as competent at the task (Cimpian, Arce, Markman, & Dweck, 2007; Hong et al., 1999; Mangels, Butterfield, Lamb, Good, & Dweck, 2006; Nussbaum & Dweck, 2007). Donohoe, Topping, and Hannah (2012) found that the Brainology intervention was a successful intervention in moving learners towards a growth mindset way of thinking. However, Donohoe et al. (2012) did not find that the intervention had a lasting impact on the mindsets of the participants as they were found to have
returned to their original mindsets at a three-month follow-up. This suggests that the impact of the intervention was temporary, although it did show that mindsets are malleable at least in the short term. Studies found that students need to also be taught that stereotypes can play a negative role in mindset development (Aronson, Fried, & Good, 2002; Good, Aronson, & Inzlicht, 2003). Stereotypes such as girls and math and Hispanics and African Americans in math and verbal areas create a fixed mindset as they communicate that these students just don’t have the ability in these areas. While interventions, such as a growth mindset intervention, can influence academic achievement (Walton & Cohen, 2011), the interventions must be aligned to the academic curriculum for the interventions to be effective (Saunders, 2013). As a result, a growth mindset model of instruction is more successful when it interweaves with the daily curriculum of the classrooms (Rhew, Piro, Goolkasian, & Cosentino, 2018). The growth mindset teaches students that intelligence is not a fixed quality (Aguilar et al., 2014). Intelligence can be nurtured through challenging tasks, and it can grow as long as one perseveres through hard work on those challenging tasks (Aguilar et al., 2014; Ng, 2018).

Even though implicit theories are relatively stable over time (Robins & Pals, 2002), there is evidence that they can be adjusted through interventions (Aronson, Fried, & Good, 2002; Blackwell et al., 2007; Good et al., 2003) which underscores the dynamic structure of motivation-based systems (i.e., evaluation, surveillance, competition, threats of punishment, negative performance feedback, and the promise of rewards). These extrinsic motives often serve to control people’s behavior and get them to perform an activity, but, in the long run, people tend to lose interest and quit (Renaud-Dubé et al., 2015). Research has shown that interventions that teach the brain is malleable will have the greatest advantage. As an example, during an intervention study conducted by Dweck and her colleagues, a group of seventh graders
were divided into two groups. One of the groups was taught growth mindset: that their brain develops like a muscle. The other group, the control group, was only given a series of sessions on study skills. The control group did not increase their scores, whereas the growth mindset group showed significant growth (Blackwell et al., 2007). Further evidence shows that the students in the growth mindset group showed greater engagement and put more effort into their schoolwork and learning (Renaud-Dubé et al., 2015).

Mindset and socioeconomic status. In the United States the gap between students who come from a higher socioeconomic level and those who come from lower socioeconomic level has widened (Reardon, 2011, 2013). This gap reflects in the number of students who can achieve and persist in the face of difficulty. Research shows that students who come from a higher socioeconomic level tend to have what is called a growth mindset (Destin, 2017; Destin, Rheinschmidt-Same, & Richeson, 2017). Recent studies have been conducted that show a definite correlation between mindset and socioeconomic status (Claro et al., 2016; Destin et al., 2019; Hwang, Reyes, & Eccles, 2016). What these researchers have found is that socioeconomic status (SES) levels help determine the contexts of students’ experiences and how they see themselves and the world around them. This leads them to understand the opportunities that might be available to them (Destin et al., 2019). Destin et al. also suggest that students from lower SES will have a greater risk for lower achievement due to the lack of opportunities afforded them (2019). It might be more detrimental for students from lower socioeconomic status to have a fixed mindset due to the fact that they have fewer educational opportunities (Destin et al., 2019). Students that have more opportunities and resources might have a better chance of having a growth mindset as opposed to a fixed mindset.
Mindset and Grit

According to researchers there is a close relationship between Dweck’s (1999) theory of growth vs. fixed mindset and Duckworth’s (2016) theory of grit. Dweck’s (1999) theory suggests that students with a “growth” mindset are more likely to be successful than their peers who have a “fixed” mindset. Those with a growth mindset are also more likely to persist when faced with a challenge. Duckworth (2016) defined grit as perseverance and passion for long-term goals. “Grit entails working strenuously toward challenges, maintaining effort and interest over years despite failure, adversity, and plateaus in progress” (Duckworth et al., 2007, p. 1087). These two concepts intersect when individuals are given a challenge and they persist even in the face of adversity. Duckworth and Eskreis-Winkler (2013) recounted that those who worked hard with perseverance would be successful and that their “research suggests that prodigious talent is no guarantee of grit” (Duckworth & Eskreis-Winkler, 2013, p. 1). Duckworth (2009) also suggested that those with more talent were not any more likely to be successful, and they were less likely to be gritty.

Grit can also be associated with previous experience with success and failure (Duckworth et al., 2007; McGlynn & Kelly, 2017). Each student encounters challenges, and how that student faces those challenges will determine either future success or future failure. If teachers can figure out how to influence students after they have had a failure, there could be a chance that student might then develop grit and perseverance. This can be seen in student’s self-esteem. Self-esteem, whether positive or negative, can play a significant role in a student’s achievement (McGlynn & Kelly, 2017; Rosenberg, 1989). Self-esteem relates to feelings of success or failure, which in turn influences achievement and motivation. Baumeister, Campbell, Krueger, and Vohs (2003) and Tetzner, Becker and Maaze (2016) found that there was a link between
self-esteem and academic achievement. Baumeister et al., (2003) also were able to show from their research that self-esteem may be related to higher aspirations, which then can be connected to academic performance. Many students see school as a place where they have to perform and are judged if they fail (Dweck, 2008). It seems that one’s grit may be connected with the successes and failures they experience in the classroom and then, when faced with difficulty, it shapes their developing sense of grit (Weisskirch, 2018).

However, there are others who believe that interventions that are put in place to increase students’ grit without also increasing students’ belief in their own abilities in the classroom will not likely bring about the expected success in core academic subjects (Usher, Li, Butz, & Rojas, 2019). Student perseverance and grit must be accompanied by a belief in their own academic abilities. Stajkovic, Bandura, Locke, Lee, and Sergent (2018) suggested that “in undertakings strewn with daunting obstacles, such as academic performance, students need both the staying power of their dispositions and efficacy beliefs in their capabilities to succeed” (p. 283).

Researchers have shown that perseverance was among the few significant predictors of urban students’ academic achievement (Seider, Gilbert, Novick, & Gomez, 2013; Usher et al., 2019; Weber & Ruch, 2012; Weber, Wagner, & Ruch, 2016). The more that the students persevered, the better they performed in school. Studies have shown that students increase the amount of grit they demonstrate as they get older (Credé, Tynan, & Harms, 2017). Bandura (1997) has suggested that the context specificity of efficacy beliefs is the reason why researchers have the ability to predict academic achievement. On the other hand, there are researchers who would suggest that traits such as grit “might be essential to success no matter what the domain” (Duckworth et al., 2007, p. 1087).
Researchers have begun to look at the constructs of perseverance and self-efficacy together instead of as two distinct ideas (Muenks, Yang, & Wigfield, 2018; Usher et al., 2018). Their findings suggested that perseverance of effort and academic self-efficacy became significant predictors of end-of-term grades, especially in the high-school setting (Usher et al., 2018). Their findings also demonstrated that grit might serve as a “trait-like” characteristic whereas self-efficacy might serve as a “state-like” characteristic (Muenks et al., 2018). Still other researchers are looking at the possibility that grit or perseverance can be the antecedent of self-efficacy (Wolters & Hussein, 2015; Usher et al., 2018). Wolters and Hussein (2015) suggest that “stable individual differences such as grit are...commonly viewed as precursors or potential influences on the attitudes [and] beliefs” students hold about regulating their own academic success (p. 297). Still others contend that self-efficacy may not be viewed as a consequence of grit but rather as a pre-requisite (Schmidt, Fleckenstein, Retelsdorf, Eskreis-Winkler, & Möller, 2017). Duckworth et al. (2007) also believed “the propensity to pursue long-term goals with perseverance and passion may be determined in part by beliefs about one’s capabilities” (p. 1100). Those that hold to this viewpoint see that self-efficacy demonstrated by past successes leads to more perseverant effort (i.e., higher perceived grit), which will then bring about more successful performances that will support one’s self-efficacy and future “grittiness” (Usher et al., 2018). Bandura (1997) has similarly argued that self-efficacy summons (or thwarts) effort:

When faced with obstacles or failures, people who distrust their capabilities slacken their efforts or abort their attempts prematurely. Those who have strong belief in their capabilities intensify their efforts when they fail to achieve what they seek and persist until they succeed. Strong perseverance usually pays off in performance accomplishments. (p. 129)
Teachers play a pivotal role in helping students internalize their external motivations. Ryan and Deci (2000) describe this as organismic integration theory. This theory suggests that the teacher can assist the student by making the context conducive. The teacher can provide autonomous support as well as lack of coercion, direction, and structure, particularly in situations of both autonomy support and structure (Jang, Reeve, & Deci, 2010). By providing a high level of involvement, teachers can provide support of students’ competence beliefs, engagement, and motivation (Malmberg & Martin, 2019). Skinner and Belmont (1993) defined this as the quality of the interpersonal relationship between the teacher and peers. Positive student–teacher relationships are essential and act as a buffer against stress and risk, which will then allow students the opportunity to internalize their academic goals (Malmberg & Martin, 2019). This is vital on academic tasks, student engagement, and social emotional development (Collie, Martin, Papworth, & Ginns, 2016; Wubbels, Brekelmans, den Brok, Wijsman, Mainhard, & Van Tartwijk, 2015; Wubbels, Brekelmans, & Mainhard, 2016).

Mindset and Motivation

Motivating students to learn is a key element of being a successful teacher. Whether the subject is English, Math, or Science, students need to develop a deep level of motivation to learn (Kiemer et al., 2015; Lazowski & Hulleman, 2016; Lin-Siegler et al., 2016). There are several factors in developing this motivation in students. These factors include self-efficacy, task value, goal orientation, and self-regulation (Hidi & Harackiewicz, 2000; Jackman, Townsend, & Hamilton, 2011; Velayutham, Aldridge, & Fraser 2011). What students believe about their ability to learn will either spur them to learn or be a deterrent to their learning.

The enjoyment that students get from learning a new skill will trigger their internal motivation and create the mindset that they have the ability. Creating a growth mindset is a key
to students’ motivation. It also creates resilient learners. This in turn increased motivation by improving self-efficacy and the belief that everyone is able to complete and master a task (Hsieh, 2014; Murayama et al., 2015).

Motivation can be broken down into three categories: task-involvement, ego-involvement, and extrinsic involvement (Crutchfield, 1962; Nicholls, 1989). Ego-involvement involves two distinct aspects. The first involves the idea that students would rather focus on themselves than look “stupid” in front of their peers (Nicholls, 1989). They focus inwardly rather than have the focus be on their learning. The second aspect of ego-involvement centers on the fact that learning is not valued. Learning is only the means to not look “stupid” in front of their peers (Holt, 1966; Nicholls, 1989). Task-involvement differs from ego-involvement in two distinct ways: First, students tend to focus more on the task and not themselves, and secondly, the learning is the end (Holt, 1966; Nicholls, 1989). “When we are task-involved, feelings of competence result if we gain a new insight or if we improve our performance: Ability is equivalent to learning” (Nicholls, 1989). Effort and learning have two very different meanings with regards to ego and task-involvement. When students are ego-involved, they tend to equate learning with effort and high ability, especially if other students appear to exert more effort in order to achieve the same learning. If a student is task-involved, they may feel more competent if they can achieve something even if it involves more effort (Diener and Srull, 1979; Jagacinski & Nicholls, 1984; Sommet & Elliot, 2017). Duda, Chi, Newton, and Walling (1995) examined a close link between task- and ego-involvement and intrinsic motivation. While task-involved students tend to develop a deeper sense of intrinsic motivation, ego-involved students lacked this quality and were seen to actually possess less intrinsic motivation. Students who were intrinsically motivated were more likely to see a challenging task as an opportunity for learning
as opposed to as task that would increase the way they view their “smartness.” If a student were to be motivated to learn, they might then be more apt to have a growth mindset as opposed to a fixed mindset.

There are a multitude of overlapping theories in this field of motivational theory (Hulleman, Schrager, Bodmann, & Harackiewicz, 2010). Nurmi, Hirvonen, and Aunola (2008) suggested that when learning is seen as inherently interesting, attention is focused on the task at hand and students use a more task-focused approach rather than task-avoidant behaviors in learning situations in the classroom. There have also been empirical studies that have suggested that intrinsically motivated students will place more effort on being successful and will be more persistent even when faced with challenging obstacles (Ng, 2018; Shin, 2018). These students will engage in adaptive behaviors in order to learn (Guay, Ratelle, & Chanal, 2008; Sommet & Elliot, 2017).

Achievement motivation can be seen everywhere in everyday life experiences. Achievement goal theory focuses on the idea that there are underlying reasons why students exhibit achievement behaviors (Destariant, Etikasari, & Agustianto, 2018; Dweck & Leggett, 1988; Elliot & Harackiewicz, 1996; Middleton & Midgley, 1997). Achievement theorists believe there are two types of goals: performance goals and mastery goals. Performance goals focus primarily on the development of competence and task mastery (Ames & Archer, 1987; Sommet & Elliot, 2017). Mastery goals will lead to a mastery motivation paradigm (Ames, 1992; Dweck & Leggett, 1988; Nicholls, 1989). It is hypothesized that students who adopt the performance goal mindset are more susceptible to a helpless pattern of response (Elliot & Church, 1997; Elliot & Hulleman, 2017).
Mastery task students will use a task- or self-referenced standard in order to evaluate their own competence (Sommet & Elliot, 2017). Both performance goals and mastery goals involve trying to either approach competence or avoid incompetence, thereby creating a “2X2 model of achievement goals: mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance” (Sommet & Elliot, 2017, p. 1142).

Research has been done (Elliot & Harackiewicz, 1996) to demonstrate that performance-avoidance goals undermined intrinsic motivation in relation to both mastery- and performance-approach goals; the latter orientations showed equal levels of intrinsic motivation. “Some theorists in the classic achievement motivation tradition have even designated competence expectancies the ‘active ingredient’ in achievement motivation and fear of failure and proposed that competence expectancies replace motive dispositions as an explanatory construct” (Kukla, 1972; Meyer, 1987). Competence expectancies can then be seen as a direct antecedent of achievement goal adoption, and achievement goals are seen as exerting a direct, proximal influence on achievement-relevant behavior (Elliot & Church, 1997).

Figure 1 demonstrates of the proposed hierarchical model, in which motivational dispositions (achievement motivation and fear of failure) represent higher order motivational constructs, achievement goals (performance-approach, performance-avoidance, and mastery) represent midlevel motivational representations, and task-specific competence expectancies are seen as an independent antecedent of achievement goal adoption (Elliot & Church, 1997).
Understanding struggling students’ achievement goals is essential because it provides a cognitive schema for understanding academic contexts and regulating achievement-related behaviors (Baird, Scott, Dearing, & Hamill, 2009; Sommet & Elliot, 2017). According to the hierarchical model of achievement motivation, achievement goals are concrete representations of more abstract personality dispositions such as fear of failure or mindset (originally termed as implicit theories of intelligence) (Cho, Toste, Lee, & Ju, 2019). Achievement goals can provide an essential link between students’ psychological dispositions, such as mindset, to engagement and possibly other academic pursuits (Cho et al., 2019). Achievement goals have been found to predict students’ engagement (Ames & Archer, 1987). Mastery goal-oriented students have been shown to employ greater effort and persistence (Miller, Behrens, Greene, & Newman, 1993; Schiefele, 2017; Wolters, 2004), utilize deep learning strategies (Elliot & McGregor, 2001; Liem, Lau, & Nie, 2008; Mokhberi et al., 2019), and show positive emotional responses to learning (Gonida, Voulala, & Kiosseoglou, 2009). In fact, studies have found that students who had learning goals were more apt to engage in self-regulatory practices (Miller et al., 1993;
Mokhberi et al., 2019). Studies have consistently proven that there is a benefit to mastery-goal orientation on intrinsic motivation (Gonida et al., 2009).

Sommet and Elliot (2017) identified three areas that affect the student in the classroom when it comes to achievement goals. These are achievement goals, reasons for goal pursuit, and specific achievement goal complexes. They define achievement goal complexes as a multicomponent construct (Sommet & Elliot, 2017). The first is the focal goal, which represents an aim without any accompanying reason. “For example, a student may say, ‘My goal is to learn.’” The second is the focal reason that represents a general form of motivation without a specified aim. For example, a student might say, ‘I pursue goals because I find them challenging’” (Sommet & Elliot, 2017, p.1143). The third is a combination of the first two constructs. This is called the integrated goal complex. This construct is an essential component to motivational theory. “The goal serves the reason, and the reason provides the impetus for goal adoption and pursuit” (Sommet & Elliot, 2017, p. 1143). A student might say then that “my goal is to learn because I find this a highly challenging goal” (Sommet & Elliot, 2017; Vansteenkiste, Lens, Elliot, Soenens, & Mouratidis, 2014).

Over the past few decades research has been conducted about the idea of motivation. It has become transparent from the research that students’ motivation cannot be treated exclusively in a calculable way, as if students would differ only in the amount or dose of motivation that they possess (Deci & Ryan, 1985; Lens & Vansteenkiste, 2006; Vansteenkiste, Lens, & Deci, 2006). Even when students are motivated in perceptible ways, they can demonstrate different dimensions of motivation, with one dimension being of a higher quality and more advantageous than the other. Motivational quality is not a simple matter; it takes the form of a spectrum due to the very fact that several types of motivation can co-exist in each student (Vansteenkiste, &
Mouratidis, 2016). As an example, Vansteenkiste and Mouratidis (2016) shared the idea that “an athlete can take the time to experiment with a different technique while at the same time show others that he is highly capable of commanding control of that same technique. It is important to understand that motivation is not unilateral, that is, one cannot assume that if a student has intrinsic motivation, they automatically are categorized as not having some form of extrinsic motivation” (p. 322).

The research suggests then that there is a simultaneous influence of mastery goals and autonomous reasons (Sommet & Elliot, 2017). Both mastery goals and autonomous reasons were found to explain independent variance in most of the beneficial experiential (interest and positive emotion) and self-regulated learning (deep learning, challenging tasks, and persistence) outcomes (Dysvik & Kuvaas, 2010; Sommet & Elliot, 2017). Not only do the reasons behind a student pursuing a goal matter, but the goals themselves matter as well. Vansteenkiste et al.’s (2014) statement applies here to each classroom situation: that “reasons [should] not [be] meant to replace the achievement goals themselves” (p. 142).

Students often will equate the idea of ability with that of effort. Their evaluations of their ability will often coincide with the concept of academic motivation, engagement, and achievement (Miele, Browman, & Vasilyeva, 2019). Research also shows that students often base their judgments of ability on their perceptions of the amount of effort they expend in completing a specific task (Miele et al., 2019). Lester, Garofalo, and Kroll (1989) show that beliefs encompass an individual’s subjective knowledge about self. Some researchers have shown that belief is a construct usually associated with attitude (Eagly & Chaiken, 1993; Filippello et al., 2020; Goldin, Rösken, & Törner, 2009). Research has also been done to demonstrate that beliefs about effort can be measured and can predict student success in the
classroom (Tempelaar, Rienties, Giesbers, & Gijselaers, 2015). The pivotal role of efforts beliefs is clearly seen in the research (Tempelaar et al., 2015). According to Tempelaar et al. (2015), “all aspects of academic motivation, the role of implicit theories is dominated by the role of effort beliefs” (p. 117).

There are two distinct types of effort beliefs: the effort positive belief and the effort negative belief. The effort positive belief is key to the direct explanation that students’ adaptive behavior in goal setting would constitute autonomous motivation (Tempelaar et al., 2015). Research has shown that there is significant power in the relationship between efforts belief and entity theories; however, more emphasis should be placed on teaching students the positive relationship between goals and effort (Tempelaar et al., 2015).

**Expectancy-Value Theory**

Some believe that our belief system influences our perception of reality (Seitz, Paloutzian, & Angel, 2016; Usó-Doménech & Nescolarde-Selva, 2016). Those that believe the expectancy-value theory argue that individuals’ choice, persistence, and performance can be explained by what they believe about how well they will do on a specific activity and how much they believe the activity is valued (Atkinson, 1957; Eccles et al., 1983; Wigfield, 1994; Wigfield & Eccles, 1992). “Expectancies and values are assumed to be influenced by task-specific beliefs such as ability beliefs, the perceived difficulty of different tasks, and individuals’ goals, self-schema, and affective memories” (Wigfield & Eccles, 2000). This belief system will either determine whether one will overcome the challenges and face them head on with persistence, motivation, and resilience or give up before completing the task. This is especially important for socioeconomically disadvantaged high school students as they face many challenges which can lead to many of them giving up and dropping out of school (Campbell, 2003; Rumberger, 2020).
Developing and understanding these beliefs can be essential to their academic success as they progress through the challenges they will face inside and outside the classroom environment. However important it is for the student to develop these belief systems, it is equally important for the teacher to recognize the malleability of the intellect of the student. How the teacher perceives the student’s underlying abilities can be either an asset or detrimental to the success of the student.

Students who value a task because they are good at that particular task will be more likely to do well and achieve a higher grade (Eccles & Wigfield, 2002). Students who do not like the task or subject will not value that task and therefore will not do as well. Their achievement and motivation to do that task will be lower and will suffer as a result. As educators it is critical for all students to believe they are capable of accomplishing each task and to value each task even if they do not believe that they will be successful. This is where the growth mindset model plays a role. Growth mindset says that even if one does not believe one can achieve, or if one does not value a specific task, one can still be successful with persistence and effort. It is changing the way that each student sees their own ability to grow and change. According to the expectancy-value theory, expectations for success are shaped by a myriad of characteristics such as abilities, self-concepts, beliefs, and expectations (Leaper, 2011). Expectancy-value theory highlights the need for educators to be cognizant of what students see as valuable, which will then in turn underscore the need for students to believe that they are capable of certain tasks even if they do not value them. If a student expects to do poorly on a task, then they will not see the value in doing that task and thereby risk sinking into a false narrative that they are not capable of the task, thereby operating within a limited mindset. They will not even try to accomplish the task.
However, if a student sees value in the task, they will try harder to accomplish the task, and fulfill the growth mindset narrative, which states that the brain can grow and develop.

**Self-Determination Theory**

According to the Education at a Glance Report (OECD 2019), only 16.79% of high school students from OECD countries are expected to graduate and enter some form of higher educational system. It is very important for educators to pay attention to these statistics because young people who do not complete upper secondary education are likely to experience higher unemployment rates (Rumberger, 1995; Rumberger, 2020), become dependent on public welfare (Morris, Pawlovich, & McCall, 1991; Rumberger, 1987; Rumberger, 2020), use addictive substances (Strom & Boster, 2007), and develop poor lifestyle habits along with health problems (Rumberger, 1987; Rumberger, 2020). Previous research indicated that motivation is a factor in adolescents’ intentions to persist in school (Bean, 1985; Rumberger, 1987; Rumberger, 2020; Tidwell, 1988; Tinto, 1975; Vallerand, Fortier, & Guay, 1997).

Compared to elementary students, high school students face a diverse number of challenges. The high school years may make some students doubt their ability to complete each new challenge because they see them as daunting. Even more high school students struggle because of the very nature of high school classes. Still more students struggle because of the challenging nature of classes, the increasing complexity of the tasks, and the greater amount of effort and hard work required to succeed (Dweck & Master, 2009).

Motivation can be defined as inspiration to act and move toward a specific goal or end. Those who don’t feel the need to move in a certain direction would then be considered unmotivated students in the classroom. Researchers desire to understand what makes students want to learn. SDT (self-determination theory) highlights the importance of the elemental
reasons for student behavior, including goal-directed behavior (Ryan & Deci, 2000; Ryan & Deci, 2020; Sheldon, Ryan, Deci, & Kasser, 2004). This theory also delineates between two distinct reasons for goal pursuit. Autonomous reasons would include things like pursuing goals because they are fun and enjoyable (intrinsic regulation) or because one may identify the goal to be important or meaningful (identified regulation); controlled reasons would include things like pursuing a goal because it feeds into the ego or allows one to not feel shame (introjected regulation) or one is provided some type of reward (external regulation) (Ryan & Deci, 2000; Ryan & Deci, 2020; Sommet & Elliot, 2017).

Motivation can be broken up into two categories: intrinsic motivation and extrinsic motivation. However, some researchers would contend that SDT sees motivation as a continuum that contains autonomous motivation and controlled motivation, and this continuum flows between intrinsic and extrinsic motivation (Malmberg, Pakarinen, Vasalampi, & Nurmi, 2015). According to Malmberg et al., (2015), “Autonomous motivation consists of both intrinsic motivation and forms of extrinsic motivation which the person identifies and values (i.e., identified motivation) and has integrated into the self (i.e., integrated motivation)” (p. 159). Intrinsically motivated goals give students a sense of personal ownership over their academic endeavors and are pursued through sustained “self-regulation of effort” (Malmberg et al., 2015; Sheldon & Elliot, 1998).

Extrinsic motivation can be defined as the desire to do anything for an external goal or reward. Intrinsic motivation comes from an internal desire to complete the task for the sheer enjoyment of the task (Hennessey, Moran, Altringer, & Amabile, 2015; Ryan & Deci, 2017). Individuals not only have each of these types of motivation, but they also have varying levels of these types of motivation. The levels vary in how much motivation one has and in the orientation
of that motivation (Ryan & Deci, 2000; Ryan & Deci, 2020). Orientation of motivation is related to the underlying attitudes and goals that spurs one to move in a specific direction. In self-determination theory (Deci & Ryan, 1985; Ryan & Deci, 2017) there is a definite difference between the different types of motivation based on what causes the rise of an action. The most basic distinction is between intrinsic motivation, which refers to doing something because it is inherently interesting or enjoyable, and extrinsic motivation, which refers to doing something because it leads to an external reward.

Several research studies have focused on how students are intrinsically motivated to complete a task. These studies showed that positive performance feedback increases intrinsic motivation (Deci, 1971; Harackiewicz, 1979) and the opposite also holds true: negative performance feedback diminished motivation (Deci & Cascio, 1972). Due to the very fact that many tasks in school are not designed to be interesting, creative, or enjoyable, the question is how to get students to value and motivate themselves to complete these tasks (Ryan & Deci, 2017).

Research has been done that demonstrates the importance of promoting various forms of autonomous motivation (Malmberg et al., 2015; Guay et al., 2008). “Students characterized by autonomous motivation have shown to receive higher grades, to be more persistent, to learn more, and to feel more satisfaction and positive emotions at school compared to those who are motivated by control” (Malmberg et al., 2015, p. 159). In daily activities that students perform, they encounter a type of autonomous motivation. The most autonomous forms of motivation (intrinsic and identified regulations) have been reported to lead to a number of positive outcomes, in contrast to more controlled forms of motivation (external and introjected
regulations), which have been found to induce negative outcomes (Renaud-Dubé et al., 2015; Ryan & Deci, 2017).

Vallerand, Fortier, and Guay (1997) showed that a lack of autonomous motivation at school is connected with intentions to disengage from school, which in turn will predict actual dropout behavior in students. In a similar study, Hardre and Reeve (2003) demonstrated that in a sample of rural students those experiencing high levels of autonomous motivations were more likely to express persistence intentions over and beyond previous academic performance. In light of these results, it seems that motivation is an important predictor of future academic intentions to persist.

This type of motivation is essential to their success in the classroom; however, most learning situations that they encounter are not autonomously motivated but controlled by teachers. This type of motivation (i.e., wanting to please the teacher and receiving a good grade, which is considered extrinsic motivation) can have its advantages and can produce high levels of learning (Deci & Ryan, 2008; Ryan & Deci, 2020). Lepper, Corpus, and Iyengar (2005) suggest that while these types of motivations can have limited success in the classroom, behaving only in an intrinsically motivated manner and enjoying the task without paying any attention to the external contingencies and boundaries may actually undermine student learning outcomes. However, on the other hand, students who only attend to the task because of external pressures will inherently lose some of the joy of the task (Lepper et al., 2005).

Teachers often will see student motivation manifest itself in the classroom as their learning-related behavior. An example would be their on-task behavior (Ryan & Deci, 2017; Skinner & Pitzer, 2012). It then follows that students’ behavioral engagement provides a teacher
with a glimpse at their motivational processes, which are not directly observable in everyday situations (Skinner & Pitzer, 2012).

One pedagogical practice that becomes essential in the classroom is the provision of structure for students (Farkas & Grolnick, 2010; Ryan & Deci, 2017). Structure allows the student to gain a perception of competence on specific tasks, which in turn promotes the development of autonomous motivation and limits the development of controlled motivation (Guay, Roy, & Valois, 2017). Structure then provides the starting point for students to develop a sense of autonomous motivation. Structure allows the student to feel competent at the task they face. Teachers have the capacity to provide autonomy support for the student. Autonomy support refers to what an individual says and does to enhance another individual’s internal perceived locus of causality, volition, and sense of choice during action (Reeve, Nix, & Hamm, 2003). Jang et al. (2010) showed that teacher structure should be provided in an autonomy-supportive manner to facilitate students’ engagement in learning activities. Research has proven that providing students with structure gives them the know-how to self-regulate their behavior and accomplish their goals (Murayama et al., 2015; Sierens, Vansteenkiste, Goossens, Soenens, & Dochy, 2009). To be autonomously motivated, students need to pursue optimal challenges that are suited to their abilities (Guay et al., 2017).

Social Cognitive Theory

Social cognitive theory revolves around the idea that one can produce a desired effect through the actions that one takes in their lives. Bandura (2001) posited that human agency is characterized through a number of core features that include intentionality, forethought, self-reactiveness, and self-reflectiveness. Intention is defined by Bandura (2001) as “a future course of action to be performed” (p. 6). This central idea of human agency carries with it the pervasive
belief that one can exercise some measure of control over their own abilities and actions to get things done (Bandura, 2001). Efficacy beliefs can have a wide range of influence over the paths and actions that people choose to take in life (Bandura et al., 1996).

Efficacy beliefs play an important role in shaping how we lead our lives. They can decide what activities we engage in and the paths that we choose to follow. These beliefs also play a key factor in the development of the competencies that mark our internal dialogue about who we say we are. A person who sees themselves one way in a particular area, skill-wise, may behave differently than another depending on their efficacy belief (Bandura 1997, 2001). Bandura (1994) suggested that a strong sense of self-efficacy actually enhances the human experience by the very fact that if one has a high self-efficacy, they approach difficult tasks as ones to be mastered rather than avoided. These individuals tend to have a lower risk of depression and are less likely to fall victim to stress. On the other hand, those who have a weak sense of self-efficacy approach difficult tasks in quite the opposite way. They tend to avoid difficult challenges and they have little faith in their capabilities. These individuals usually have a high risk of depression and are likely to fall victim to stress. Bandura (2001) theorized that efficacy comes from four distinct sources: mastery experiences, vicarious experiences, verbal persuasion, and affective states.

Four sources of self-efficacy. Researchers believe that by using these four sources of self-efficacy educators may be able to help students manage their self-efficacy belief system (Hendricks, 2016). Bandura (1997) noted that of the four sources, mastery experience was by far the most powerful in determining the self-efficacy of students. He found that when a specific task was accomplished well, the student’s self-efficacy would increase, and the opposite would hold true if the task was not completed successfully (Chen & Usher, 2013). However, the
amount of effort required to complete a task can be indicative of one’s ability level, and when students experience failure, it will ruin any progress they may have made with their self-efficacy (Hendricks, 2016; Usher & Pajares, 2008).

The second source of self-efficacy is learning through vicarious experiences. In many situations, students are not able to gauge their own proficiency unless they observe the learning of others. Social models play an important role in determining self-efficacy, especially if students are uncertain of their own abilities. It is only natural for students to compare themselves with their classmates (Bandura, 1997; Usher & Pajares, 2008). Students are more likely to change their beliefs following a model’s success or failure to the degree that they feel similar to the model (Schunk, 1987).

Verbal and social persuasion is the third source of self-efficacy. Getting encouragement from teachers, parents, and peers whom they trust will go a long way in boosting the student’s self-efficacy. Students are often not academically capable of making an evaluation of their own work, hence the reliance on others (Hendricks, 2016; Usher & Pajares, 2008).

Bandura’s final self-efficacy belief source is informed by emotional and physiological states such as anxiety, stress, fatigue, and mood. Strong emotional reactions to school-related tasks can provide cues to expected success or failure. High anxiety can undermine self-efficacy (Bandura, 1997; Usher & Pajares, 2008). A bad mood may lead individuals to misconstrue their mistakes as signs of inability, which in turn can lower their self-efficacy (Seligman, 1990). A good mood, however, raises self-efficacy beliefs, motivation, and subsequent achievement, initiating a reciprocal process that enhances well-being (Usher & Pajares, 2008). These four sources of self-efficacy are a major part of what makes up social
cognitive theory. Our sense of self and how we respond to the world around us determines how we face challenges, how we are motivated, and how we will likely accomplish our goals.

Influence of self-efficacy. Bandura (1994, 1997) believed that those who had a high sense of personal efficacy are individuals that have learned to regulate their learning. Having this belief system will determine whether people think pessimistically or optimistically and in ways that will be self-enhancing or self-hindering. Efficacy beliefs play a central role in the self-regulation of motivation through goal challenges and outcome expectations. It is partly on the basis of efficacy beliefs that people choose what challenges to undertake, how much effort to expend in the endeavor, how long to persevere in the face of obstacles and failures, and whether failures are motivating or demoralizing.

High academic self-efficacy plays a role in determining whether or not students will set challenging goals and actually achieve them (Zimmerman, Bandura, & Martinez-Pons, 1992). When students share what makes them feel more confident, they provide a window through which the teacher can understand how they view and process their progress in a specific domain, whether it be math or reading (Eisner, 1991). Within the framework of social cognitive theory, understanding what makes students more confident can lead to curricular and teaching changes that can serve as powerful environmental factors that influence student self-efficacy and learning (Butz & Usher, 2015).

Teacher expectations about student achievement can impact student self-efficacy and learning (Blote, 1995). Rosenthal and Jacobson (1968) theorized that changes in teacher expectations would produce more significant growth in students. Teachers that held high expectations for their students tended to treat those students differently, and the students would rise to the high expectations. Teachers who believed their students were low achievers held low
expectations for their students. The students perceived this and only rose to the expectations of the teacher (Blote, 1995; Rosenthal & Jacobson, 1968). The level of the teacher’s help and support indicated to them that they were not capable and thereby lived up to their own self-fulfilling prophecy.

Several concepts are used to describe the way in which teachers create, maintain, or repair relationships with their students if in fact the student is not feeling supported, thereby ensuring academic success (Malmberg & Martin, 2019; Roorda, Koomen, Spilt, & Oort, 2011). According to Malmberg and Martin (2019), examples of these concepts are:

- emotional support, classroom organization, and instructional support (Pianta & Hamre, 2009),
- autonomy support, structure, and involvement (Skinner & Belmont, 1993),
- or autonomy-supportive climate, controlling behaviors, and cognitive autonomy support (Tsai, Kunter, Lüdtke, Trautwein, & Ryan, 2008).

Emotional support encompasses warmth, lack of negativity, child-centeredness, sensitivity, and responsivity toward specific children (Pianta & Hamre, 2009), while involvement (Skinner & Belmont, 1993) denotes affection, attunement, dedication of resources, and dependability (p. 301).

Teacher and student interactions that are sensitive and responsive tend to promote experiences that will ultimately foster motivation and engagement in the learning processes (Malmberg & Martin, 2019).

Social cognitive theory is based on the idea that one is an agent, and to be an agent means that one will exert self-regulative influence upon inherent traits. Social cognitive theory promotes the idea that personality is a set of dynamic, intrapersonal factors which motivate and regulate behavior (Bandura, 1999). The five traits can be seen as behaviors: conscientiousness,
agreeableness, extroversion/introversion, openness to experience, and emotional stability (Stajkovic et al., 2018). Conscientiousness increases task engagement and effort, which in turn works at fostering a higher self-efficacy belief (Brown, Lent, Teland, & Tramaye, 2011; Chen, Casper, & Cortina, 2001). Due to the fact that self-efficacy depends so much on experience with any given challenge, it is adaptable and can be modified and enhanced through “enacted mastery, vicarious learning, verbal persuasion, and physiological/psychological sensations” (Stajkovic et al., 2018, p. 239).

Students will comprehend the characteristics of the totality of their surrounding conditions. The barriers that they create as well as the prospects shape their course of action beyond their temperament. Those with low self-efficacy will easily convince themselves that effort does not really matter when they come up against academic obstacles, whereas those with high efficacy figure out ways to break through the barriers to academic success (Stajkovic et al., 2018, p. 239). Given that academic performance occurs robustly in various types of content and under a plethora of circumstances, it is not clear if the “big five” traits are effective as non-conventional generalities to predict disunity in performance above that of self-efficacy (Costa & McCrae, 1992; Lent, Brown, & Hackett, 1994). Moreover, those students that have an increase in self-doubt about their academic abilities may try and avoid those activities despite their dispositions (Stajkovic et al., 2018).

**Summary**

This study will focus on the themes that will naturally occur in the analysis of growth mindset and implicit theories of intelligence in the classroom. This research has the potential to contribute to the literature on teacher’s beliefs about student motivation and student academic achievement among socioeconomically disadvantaged high school students. Current research
shows that there are considerable benefits to using mindset theory in the classroom setting (Claro et al., 2016; Stipek & Gralinski, 1996). There has been much written and researched about the academic achievement of students that have been introduced to the concept of growth mindset versus fixed mindset when it comes to their ability to grow and learn new material (Andersen & Nielsen, 2016; Burnette et al., 2017; Paunesku et al., 2015; Schmidt, Fleckenstein, Retelsdorf, Eskreis-Winkler, & Möller, 2017; Yeager et al., 2016). In fact, much of this research relies on the perspective of the student and their achievement in the classroom; however, little is written about the teachers’ experiences with using growth mindset in the classroom and whether growth mindset aids with student achievement, motivation, and grit. The goal of this transcendental phenomenological study is to fill the gap in this research and to understand the effects of growth mindset in the classroom from a teacher’s perspective in order to provide researchers and educators with a more thorough look at the overall effects of using the growth mindset theory in the classroom environment and its impact on student motivation, achievement, and grit.
CHAPTER THREE: METHODS

Overview

This chapter describes the methodology for conducting this study. It will review research questions, the purpose of the study, design, and data collection. For this phenomenological qualitative study, certain methodologies are appropriate for collecting and analyzing data. (Berkenkotter, Huckin, & Ackerman, 1988). According to Christensen, Johnson, and Turner (2010) the primary objective of a phenomenological study is to glean the meaning, structure, and essence of the lived experience of a person or a group of people around a phenomenon. Beginning with a theoretical framework helps to guide the research study. The purpose of this research study is to provide real-world data that will answer the questions concerning teacher perceptions about their experiences teaching the growth mindset model in the classroom setting in order to improve achievement, motivation, and grit. This chapter explains the rationale for using a phenomenological study design for this research, the procedures for choosing the participants, and the methods for gathering and analyzing the data.

Design

A qualitative study is appropriate for this research in that it will provide real-world data that is relevant to the questions concerning teacher perceptions related to the teaching of a specific educational model in the urban classroom setting. The nature of this research study focuses on educator experiences and perceptions, thus lending itself to a qualitative versus quantitative design. The participants’ collective experiences spoke through their stories and was captured in their own words (Patton, 2015), which allowed a better understanding of the perceptions of educators as they teach a specific model in the classroom. The transcendental
phenomenological design facilitated hearing and recording the participants’ voices as they revealed their perceptions of their experiences (Moustakas, 1994). The participants’ stories provided the data so that their experiences could shape purposeful change in the classroom.

Researchers who use qualitative design, as opposed to quantitative design, recognize that they are not seeking the quintessential design because they are looking for the flexibility that qualitative design allows. Additional characteristics of qualitative research would include:

1. The requirement of the researcher to seek the perceptions of the teachers’ lived experiences from a subjective point of view;
2. A series of interviews from a narrow heterogeneous sample;
3. A definite lack of research on the topic of teacher perceptions in regard to the growth mindset, allowing for a more descriptive and explorative topic; and
4. The expectation of a variety of perspectives from the participants’ experiences.

A design approach that allowed for the researcher to discover the essence of lived experiences and perspectives was desired (Creswell, 2003). The essence of the teachers’ experiences emerged from the data as relevant themes and patterns (Moustakas, 1994). Qualitative research was best suited for studying these themes and patterns (Creswell, 2003).

A transcendental phenomenological design provides the framework for this research study (Moustakas, 1994). By following a phenomenological design (specifically with a constructivist approach) data is collected through the retelling of teachers’ experiences and perspectives (Creswell & Poth, 2018). Gathering data through the recounting of experiences and detailing of perspectives provides knowledge for the researcher and participants, which leads to understanding of the phenomenon (Moustakas, 1994). The definition of phenomenological satisfies the requirement for this study because the focus is on the perceptions of teachers who
have taught using the growth mindset model, which is the phenomenon.

With a phenomenological study, the participants must feel free to express their experiences, personal feelings, and impressions of the phenomenon. The requirements of this qualitative study are to explore teachers’ perceptions and essences by analyzing the participants’ lived experiences in order to share those experiences and what their experiences are like (Creswell 2003; Husserl, 2001). A qualitative transcendental phenomenology is best suited for this study. This methodology requires that the researcher remain open-minded and free of preconceived notions and presuppositions as she recounted the themes and patterns discovered (Moustakas, 1994).

**Research Questions**

High school teachers have been asked to incorporate the growth mindset model into their daily curriculum. Research seems to be very clear that using the growth mindset model does in fact aid in student achievement, motivation, and grit (Dweck & Bempechat, 2017; Dweck, 1999).

**Central Question**

The central question guiding this study will be: What are the experiences of high school teachers with teaching the growth mindset model to increase achievement, motivation, and grit?

**Sub-Questions**

Additionally, there will be three sub-questions addressed in this study:

1. How do the teachers feel the growth mindset model helps students with motivation, grit, and achievement?

2. What preparations are given to teachers to ensure that they are teaching the growth mindset model based on best research practices?

3. How do the teachers feel that they are supported in using the growth mindset model
for the long term?

**Setting**

Administrators of all high schools in the identified district have been contacted in order to secure verbal and written permission to conduct the research study. The high schools are located in a large urban district in northeast Ohio. Each administrator has been emailed to request a meeting to present the proposal for the research study (see Appendix A). Northeast School District (pseudonym) was chosen because it is the second largest district in Ohio. It is a very large and diverse urban district with over 39,000 students receiving 100% free and reduced lunch. This district has a student make-up of 64% Black, Non-Hispanic; 15.8% Hispanic; 15.7% White, Non-Hispanic; 2.6% Multiracial; 1.3% Asian or Pacific Islander; and 0.02% American Indian or Alaskan Native. Students consist of 48.2% female and 51.8% male. According to the National Report Card, this district currently has over 21% of students being serviced with Individual Education Plans (NAEP, 2019). The Northeast School District (pseudonym) has a CEO which leads and directs the district. Under the CEO there are several administrators that control a group of schools. These administrators are responsible for leading the principals at those schools. The exact steps for approaching the administrators and principals and gathering participants are explained in the next section. Each step of the research study required prior IRB approval (Appendix A) and Accountability and Research approval from the public school’s county, along with the permission of administrators and the participants themselves. This setting was chosen because the researcher currently works in this district and will have access to data and participants.
Participants

For this qualitative phenomenological study, a maximum variation sampling was used by selecting a wide range of experiences to get variation on dimensions of the phenomenon (Patton, 2015). Creswell and Poth (2018) also suggest purposeful sampling in which the participants are intentionally selected to provide the maximum amount of data for this research study. Fourteen participants who have taught the growth mindset model in their classrooms were used in this study (Creswell & Poth, 2018). Potential candidates were identified after answering screening questions that targeted teachers who have taught the growth mindset model to their students in the past. This researcher used snowballing as a way of eliciting participants for this study. Snowballing is a method of expanding the sample by asking one informant or participant to recommend others for interviewing (Crabtree & Miller, 1992). The researcher asked questions to the participants about their experiences, feelings, beliefs, and convictions relating to the research question in hopes of uncovering themes. The participants were given pseudonyms in order to protect their identity. For this study certain criteria was asked through a Google Forms survey. Those participants that met the criteria were included in the study. No participants withdrew from this research study.

Procedures

This phenomenological qualitative study was conducted in several stages. The administrators from the identified districts’ high schools were emailed (see Appendix A) to request a brief meeting with the researcher, in person or on Zoom, for the purpose of presenting the research plan. Once the researcher met in person or via Zoom with each administrator and received written confirmation of participation, an application was submitted to Liberty
University’s Institutional Review Board (IRB) and Northeast Ohio School District’s Office of Accountability and Research to receive permission to proceed with formally contacting the identified high schools. Once the administrators provided written permission and the researcher received their commitment to support the study, the researcher worked together with each administrator to determine the best strategy for contacting the teachers to elicit their support in the research study. After the desired number of participants was obtained, each was asked to sign a form for informed consent to signal the acceptance of their participation in the research study (see Appendix C).

Permission to be interviewed was obtained from the participants. The participants were then provided a calendar where they could identify a date and time that they would be available for their interview. Each participant was then provided a Zoom meeting link which allowed for a confirmation of the interview. Following the individual interviews, the researcher contacted each school’s administrator to determine a date and time to conduct the focus group via Zoom in order to further explore the research questions and information already provided in the individual interviews, which were audio or video recorded by the researcher using a secured device. Participants responded to the researcher’s prompts about their perceptions of their experiences teaching the growth mindset model to their students. The researcher personally transcribed all interviews, observations, and focus group interactions, using Rev.com as the transcription service, in order to ensure data accuracy. After the interviews, each participant was given the opportunity to allow the researcher access to their classroom for direct classroom observations; however, this was done in an online format using either Zoom or Microsoft Teams. This allowed the researcher to gather data directly from the classroom environment. Classroom observations were recorded using the Zoom or Microsoft Teams recording ability.
The Researcher’s Role

In my current role as a teacher in a public school in northeast Ohio, I find that many of the policies and practices that are passed down from the administrators are outside my circle of control. However, by analyzing the data through questionnaires and individual and focus group interviews, I remained the human instrument in this research study (Patton, 2015). Because of this, I bracketed myself in the process of analyzing the findings and writing the results according to the memos I make while collecting data (Creswell & Poth, 2018). Teaching growth mindset resonates with me personally as I have been asked to teach this model without much training and have wondered if I did it justice.

As an educator, I wondered if other teachers ever felt like I did when they were asked to teach this model. I believe that with any new teaching method or model there should be support and leadership from administration for teachers to be successful and for the model to have maximum effect on student motivation and achievement. I believe that as God’s creation, I need to do everything with excellence, which includes teaching new methods to my students. By referencing my own philosophical assumptions previously mentioned, I attempted to identify my biases as I gathered and analyzed the data for this study.

Data Collection

Recognizing the value and integrity that triangulation affords, multiple methods of data collection were used (Creswell & Poth, 2018). The first source was that of interviews. Individual interviews were conducted at the participants’ respective school according to their schedule. Participants signed a consent form (Appendix C) for participation in the interviews (Creswell & Poth, 2018). The participants’ responses to the questions were audio recorded using the recording feature of Zoom or Microsoft Teams and secured to a password-protected file to
protect their confidentiality. The participants were given an overview of the research study before being asked the series of questions. The researcher discussed expectancy-value theory, social cognitive theory, and implicit theories of intelligence (Dweck, 1999). The researcher then asked the participants the questions related to the research topic.

After the interviews with individual participants, the researcher requested that the participants participate in focus groups. The purpose of these groups was to get a better sense of the collective ideas of each participant. The interviews and the focus group discussions were recorded using the Zoom or Microsoft Teams recording function, stored in a secure password-protected file, and later transcribed by the researcher using the Rev.com transcription service. The interview and discussion questions were based upon the literature and the purpose of each question was explained in the research study. Even though individual and focus group questions were prepared in advance, the possibility remained that the planned questions needed to be adjusted dependent upon the responses given at the time of the discussion. Common concepts and themes emerged through the collected data from the individual and focus group interviews (Creswell & Poth, 2018). The researcher and interviewees were recorded on Zoom for each focus group interview for accuracy. While each group interview was conducted, the researcher took field notes to record what was seen, heard, and experienced. After conducting the initial interviews with the participants, this researcher transcribed each one using Rev Transcription service with detailed word-for-word accuracy in order to maintain the essence of the participants’ thoughts and feelings about the phenomenon (Creswell & Poth, 2018).

After the interviews and focus groups, the participants were asked if they would be willing to have the researcher observe the classroom. These observations provided the researcher with the opportunity to collect data in real-time situations and observe the participant
as they interacted with their students. The researcher took more field notes to record the interactions between the teacher and the students.

**Interviews**

Interviews are a common data collection tool in qualitative research (Berry, 1999; Fossey, Harvey, McDermott, & Davidson, 2002; Gill, Stewart, Treasure, & Chadwick, 2008; Moustakas, 1994). There are several types of interviewing strategies; however, the one used for the purpose of this study is the semi-structured, guided interview (Berry, 1999; Gill et al., 2008). The reason for using this type of interview was to allow the interviewer and the interviewee the opportunity to fully explore the experiences they have had with the growth mindset model. In the event that in-person interviews could take place, the researcher and the participant set up a time and place to conduct an interview via the internet using Facetime, Zoom, or another online platform. There was a set of questions that helped guide the interview; however, these questions were only a guide and allowed for flexibility (Patton, 1987). The questions in Table 1 were used how help guide the interview (see Appendix D).

**Table 1**

*Open-Ended Interview Questions*

1. Please introduce yourself to me.
2. Please talk me through your personal theory about student motivation and grit.
3. Please describe your views about the growth mindset model.
4. Describe your experience with learning about this model and how you implemented this model in your classroom.
5. Describe the most significant experience you had with using the growth mindset model.

6. What made that experience significant?

7. What are some other experiences related to using the growth mindset model that you would like to share?

8. On a scale of one to five, one being ineffective and five being effective, how effective would you say the growth mindset model is in helping with student achievement?

9. Explain why you gave that rating.

10. Using the same rating, how would you say that growth mindset helps with student motivation?

11. Explain why you gave that rating.

12. And finally, using the same rating, how would you say that growth mindset encourages student grit and determination?

13. Explain your rating with this.

14. Tell me about the support you received in learning how to use this model.

15. Tell me about any continued support you have received as you have implemented this model.

16. If you were a principal asking your staff to use this model, what would you do to ensure that it is implemented correctly?

17. What advice would you give a novice teacher getting ready to begin the process of implementing the growth mindset model with their students?

18. If you continue using this model, describe anything you would change going forward?
19. Before we end, what else do you believe is important for me to know about your experience using the growth mindset model?

Questions 1 through 6 are questions that allowed for self-reflection (Fossey et al., 2002; Hewitt, 2007). These questions allowed the participant to take some time to get comfortable and reflect on their experiences in their own classrooms with the growth mindset model. These questions are intended to help the researcher and participant build a rapport and some type of familiarity (deMarrias & Tisdale, 2002; Hewitt, 2007). Questions 7 through 12 allowed the participant to reflect on how the growth mindset model affected various outcomes in the classroom, including student achievement, motivation, and grit. These questions allowed the participant to place a value on these concepts, which allowed a more thorough description of the essence of the experience (deMarrias & Tisdale, 2002).

Much has been written about the role of the principal when it comes to their leadership in creating an environment of trust and support (Marzano, Waters, & McNulty, 2005; Supovitz, Sirinides, & May, 2010). Teachers need to believe they are supported in their classroom, and this can have an overall effect on student achievement (Leithwood et al., 2008). Leithwood et al. (2008) stated “there is not a single documented case of a school successfully turning around its pupil achievement trajectory in the absence of talented leadership” (p. 29). Questions 14 through 16 asked the participant to reflect on the level of leadership in implementing this new model in the classroom. Question 17 asked the participant to step into the role of the researcher and expert (Patton, 2015). This allowed the participant to provide additional insight into their experiences with the growth mindset model. Questions 18 and 19 are the closing questions. These questions led with prefatory statements that signaled to the participant that the interview was coming to a close (Patton, 2015). These questions gave the participant the opportunity to share any parting
comments or have the final say (Patton, 2015). According to Patton (2015), these type of questions can lead to an enormous amount of valuable data on the participant experiences.

**Observations**

Observations are used to gather data in the natural setting (Patton, 2015). The data collected in this study described in great detail and depth the activities that relate to the growth mindset model as it is being used in the high school classroom. The hope is to better understand and capture the context of the participants that are being used in this study (Patton, 2015). With this direct observation, the researcher was able to get a better sense of the big picture. The researcher obtained permission first from the administrator of the building to formally observe and audio and video record the classroom. After this permission was granted, the researcher asked the participant when would be a good time to come observe (see Appendix E).

At this stage, the data for study was collected. The researcher used a notebook and pencil, video, and audio to note the participant’s interaction with the students in the classroom as it related to growth mindset. In addition to firsthand observation (i.e., being on the scene), three other data collection techniques were available to and utilized by the researcher: diary keeping, unobtrusive measure, and document analysis (Creswell & Poth, 2018; Esiri, Ajasa, Okidu, & Edomi, 2017).

**Focus Groups**

Focus groups were used for this study. After the data was analyzed and themes were identified, focus groups were contacted to clarify and enrich the data collected (Creswell & Poth, 2018). This group was composed of all the participants who volunteered to participate in the focus groups (Patton, 2015). This researcher carefully structured questions that sparked discussion on the topic of growth mindset and expectancy-value theory of motivation. The focus
groups provided an additional means of confirming themes and patterns that emerged in the initial data collection. These questions provided triggers that awakened memories that were included in the data collection (Patton, 2015). The setting was a neutral location where the participants felt as though they had the freedom to express their experiences in a non-threatening environment (Krueger & Casey, 2008). Table 2 represents the questions that were used to guide the focus group discussion.

Table 2

*Open-Ended Focus Group Questions*

1. Please introduce yourself to the group. Please include subject and grade in your introduction.
2. Please share with the group your personal theory about motivation and grit.
3. Please share with the group your own personal views about the growth mindset model.
4. Please share with the group your experience learning about the growth mindset model.
5. Would anyone share their most significant experience using the growth mindset model in their classroom?
6. What made this experience significant?
7. On a scale of one to five, one being ineffective and five being effective, how effective would you say the growth mindset model is in helping with student achievement?
8. Please explain your rating to the group.
9. Using the same rating, one to five, how would you rate growth mindset’s ability to help student motivation?

10. Please explain your rating to the group.

11. Using the same rating, one to five, one being ineffective to five being effective, how effective do you believe growth mindset to be in helping students’ determination and grit?

12. Please explain your rating with the group.

13. What kind of support did you receive in the implementation of the growth mindset in your classroom? Explain to the group.

14. If you were a principal asking your staff to use this model, what would you do to ensure that it is implemented correctly?

15. What advice would you give a novice teacher getting ready to begin the process of implementing the growth mindset model with their students?

16. If you continue using this model, what would you change going forward?

17. And finally, is there anything else that you would like to share with the group about your experience using the growth mindset model in your classroom?

Questions 1 through 6 are questions that provided the opportunity for individual teachers to respond to questions and hear from other teachers about their experiences. Questions 7 through 12 not only allowed the participants to place value on their experiences but also provided the opportunity to hear from other educators as they reflect as well. These questions allowed the participants to place a value on these concepts, which allowed a more thorough description of the essence of each of their experiences (deMariais & Tisdale, 2002).
Questions 13 and 14 were asked in order to identify the level of leadership that is present in the various classrooms. Participants were able to share their perspective on the nature of principal involvement in implementing new strategies in the classroom. Question 15 was asked to allow the participants to step into the role of researcher and expert (Patton, 2015). This also allowed each participant to provide additional insight into their experiences with the growth mindset model. Questions 16 and 17 are the closing questions. These questions were led with prefatory statements that signaled to the participant that the focus group session was coming to a close (Patton, 2015). These questions gave the participants the opportunity to share any parting comments or have the final say (Patton, 2015).

**Data Analysis**

Moustakas (1994) examines the phenomenological method in order to gain knowledge of life experiences. The process that was followed included epoché, phenomenological reduction, imaginative variation, and synthesis. *Epoché*, according to Schmitt (1959), is the “suspension of all-natural belief in the objects of experience” (p. 240). Data analysis in phenomenological research includes the epoché, the reduction, and the synthesis (Moustakas, 1994). This researcher provided their own personal experience with the phenomenon in order to set aside any presuppositions. According to Miller and Crabtree (1992), the researcher must “bracket” his or her own preconceptions to enter into the individual’s lifeworld and use the self as an experiencing interpreter. It is particularly important that initial preconceptions arising from personal experience with the research material are surfaced prior to undertaking the research project; they also should be monitored throughout the research endeavor as both a potential source of insight as well as potential obstacles to engagement (Tufford & Newman, 2012). Journaling is a way in which the researcher was able to maintain a reflexive stance.
aspects were explored in the journal that included reasons for undertaking the research; assumptions regarding race/ethnicity and socioeconomic status; and the researcher’s personal value system (Tufford & Newman, 2012). Without this step the researcher cannot fully focus on the participant (Groenewald, 2004). This is a necessary step for the participants’ voices to be heard. Bracketing was achieved through journaling and references to philosophical assumptions such as understanding the nature of reality, what is knowledge, and the role of value in research (Creswell & Poth, 2003). This is known as the epoché, “putting into brackets the various assumptions that might stand in the way from opening up access to . . . the living meaning of an experience” (Moustakas, 1994). This journal was incorporated into the final research.

**Epoché**

In order to achieve epoché, which is the blocking of biases and assumptions, I bracketed my own experiences, biases, and assumptions (Moustakas, 1994). Moustakas (1994) states that in order to fully achieve epoché, “we set aside our prejudgments, biases, and preconceived ideas about things” (p. 85). The challenge for me was setting aside my own assumptions about growth mindset and fully seeing the participants’ experiences with fresh eyes. Through journaling, I described my own experiences with teaching the growth mindset model and listed any presuppositions I had regarding growth mindset so that I could focus on the experiences of my participants (Moustakas, 1994). Moustakas (1994) stated that a “phenomenological approach involves a return to experience in order to obtain comprehensive descriptions that provide the basis for a reflective structural analysis that portrays the essences of experience” (p. 13).

**Develop Structural Themes**

I also used horizontalization, which is also known as reduction, to develop a list of significant statements from the interviews or other data about how individuals are experiencing
the phenomenon (Moustakas, 1994). I manually went through the data and coded for significant statements. This process allowed me to treat each statement as equal. I used colored highlighters to label each individual significant statement. At this point I used a qualitative data analysis software called Atlas.ti9. This software allowed me to import documents and code them on the screen. It also allowed me to create memos and organize them. I used a line-by-line coding system of the transcribed interviews and the handwritten field notes to highlight phrases, key ideas, categories, and statements made during each interview (İlter, 2018). Line-by-line coding is a way for the researcher to identify significant statements that will be sorted into themes (Merriam & Tisdell, 2016). These notes were placed in each participant’s folder. I used Post-it notes to record data from each interview that I transcribed to make note of significant words, phrases, and participant’s descriptions of the phenomenon (Blyseth, 2015). I then created a list of non-repetitive, non-overlapping statements (Creswell & Poth, 2018).

**Horizontalization**

Horizontalization is a key aspect of phenomenological research. This process includes reflecting on the data and recognizing significant themes (Creswell & Poth, 2018). First, I created a folder for each participant that held all their transcribed interviews and notes. Next, after completing each interview, I transcribed each interview using an online transcription service in order to ensure accuracy. These statements, or “themes,” were what I was truly looking for. These themes provided the foundation of the interpretation of the data that was collected by the interview. I provided a detailed example of verbatim transcription of the interviews that answered the researcher’s questions and helped understand the essence of the phenomenon. Finally, the synthesis of textural and structural descriptions moved the researcher to a rich account of the participant’s experience.
**Phenomenological Reduction**

In phenomenological reduction, the researcher establishes themselves as a “disinterested observer” (Schmitt, 1959). Moustakas (1994) states that a phenomenological reduction is one of describing what one sees just as it appears and then a reduction to what is horizontal and thematic. “Phenomenological Reduction is not only a way of seeing but a way of listening with a conscious and deliberate intention of opening ourselves to phenomena as phenomena, in their own right, with their own textures and meanings” (Moustakas, 1994, p. 92). As a researcher, it is critical to record what one sees, using the five senses. I took copious field notes as I observed the classrooms. I recorded descriptive and inferential data. My recorded observations were then coded for themes that appeared.

**Imaginative Variation**

Imaginative variation requires that the researcher view the research from multiple angles and perspectives in order to see through imagination various possible meanings (Moustakas, 1994). As the researcher, I imagined multiple variations of experiences that would reflect growth mindset used in the classroom environment. I created various meanings that follow themes in classroom usage of growth mindset. “In Imaginative Variation the world disappears, existence no longer is central, anything whatever becomes possible. The thrust is away from facts and measurable entities and toward meanings and essences; in this instant, intuition is not empirical but purely imaginative in character” (Moustakas, 1994, p. 98). The steps needed in imaginative variation, according to Moustakas (1994), include: a systematic varying of the structural meanings that underlie the textual ones; recognizing the underlying themes that describe the emergence of the phenomenon; consideration of the structures that cause feelings and thoughts in relation to the phenomenon; and a search for typical examples that illustrate the themes.
Varying Perspectives of the Phenomenon

Moustakas suggested that, during this phase of data analysis, the researcher view the collected data from different perspectives or vantage points in order to get a more concise and clear view of the phenomenon (Moustakas, 1994). This was achieved as I reviewed the data and tried to see the phenomenon from different points of view, such as the principal, the student, and the teacher. This allowed me to get a clearer picture of the overall essence of the phenomenon. Not only did it allow me to see multiple perspectives, but I also had a clearer picture of teachers’ attitudes toward growth mindset in the classroom.

Synthesis of Composite Textural and Composite Structural Descriptions

Synthesis is the last step in the phenomenological research process. “Synthesis is the intuitive integration of the fundamental textural and structural descriptions into a unified statement of the essences of the experience of the phenomenon as a whole” (Moustakas, 1994, p. 100). The essences of experiences are so varied that they are inexhaustible (Moustakas, 1994). It was my task as the researcher to unite these descriptions in order to manifest the essence of an experience.

Trustworthiness

For a qualitative study to be considered trustworthy, values such as credibility, dependability, transferability, and confirmability must be addressed within the study. An audit trail was used to provide the assurance that the research study is a dependable one. Through the IRB process, the researcher was held accountable to follow the methods of research that were proposed (Lincoln & Guba, 1985). Triangulation of data collection and analysis in a qualitative
research study design is appropriate and was used to ensure that the participant’s account is rich, robust, comprehensive, and well developed (Lincoln & Guba, 1985).

**Credibility**

Patton (2015) describes credibility as being the method that ensures that the data is not one-sided. To create credibility, the researcher must use triangulation such as interviewing, observations, and document analysis (Patton, 2015). This researcher used interviews and focus groups to ensure a more credible study. Credibility can be achieved by using a variety of methods including participant checks, validation, and researcher reflexivity (Morrow, 2005). This researcher used participant checks to ensure that the interviews are transcribed with authenticity. The transcriptions were made available for the participants for them to check for authenticity. For this study, credibility is considered member-checking, which consists of participants being asked to read any transcripts of dialogues in which they have participated. The emphasis should be that if the participants consider their words to match what they said (since a tape recorder was used), the words themselves should at least have been accurately captured (Lincoln & Guba, 1985). Validation occurred through triangulation of multiple data sources including interviews, focus groups, and observations (Creswell & Poth, 2018). This triangulation allowed for evidence from different sources to shed light on the perspective of the participants. Researcher reflexivity came when this researcher made themselves a part of the study (Creswell & Poth, 2018).

**Dependability**

Dependability was addressed through an external audit (Marshall & Rossman, 1999). An audit trail was used to provide assurance that the research study is a dependable one. This researcher provided access to all research notes and findings. The researcher also gave access to
this research study to a third party in order to verify all data (Lincoln & Guba, 1985). Through the IRB process, the researcher was held accountable for following the methods of research that were proposed (Lincoln & Guba, 1985).

Confirmability

Confirmability was addressed through reflexivity (Miles & Huberman, 1994). Reflexivity occurs when the researcher goes back and looks at their prior assumptions and biases (Hewitt, 2007). Jootun, McGhee, and Marland, (2009) defined reflexivity as “the continuous process of reflection by the researcher on his or her values, preconceptions, behavior or presence and those of the participants, which can affect the interpretation of responses” (p. 42). To accomplish reflexivity, this researcher took the time to reflect on the process of research. This process allowed for the researcher to become self-aware of their role in the data (Hewitt, 2007).

Transferability

Transferability was achieved because rich data was collected and analyzed, which led to a greater opportunity for other educators and researchers to use the data in other settings and situations (Lincoln & Guba, 1985). Educators may be able to apply the findings to their own schools and make appropriate application for the benefit of their school communities. To make sure that transferability was achieved, a detailed description of the research process was given. It is extremely valuable to provide a clear and concise description of the culture and context, selection and characteristics of participants, data collection, and process of analysis (Graneheim & Lundman, 2004).

Ethical Considerations

I obtained permission from all participants in the study and used pseudonyms for participants that did not want their names published. I obtained permission to use school data for
the schools being studied. I cited all of the sources accurately and to the best of my knowledge. Care was also taken to ensure that the participants were fully aware of all that the study entailed (Patton, 2015).

Each participant was given a pseudonym to protect their identity. I also informed the participants that they were able to opt out of this study at any point. Confidentiality was a very important aspect of this study as it allowed the participants to feel that they were free to share their experiences with the researcher. I not only kept electronic data on a password-protected computer and identified all data by pseudonyms, but I kept all interview data and coding on that computer as well. If a transcription service is used, no identifiable information will be included. Participants were also informed that they were free to not answer questions during the interview if they choose. Participants in this study were made aware of any risks and benefits that could potentially be a part of this study. The risks were minimal; however, they will be explained to the participant. There could still be a chance that individual statements could be recognized, but the researcher did their best to protect each participant. IRB approval was obtained prior to the start of any data collection in order to ensure ethical research was conducted (Creswell & Poth, 2003). Data collected will be stored for a period of three years, at which point it will be destroyed (Creswell & Poth, 2003).

**Summary**

This chapter describes the methods that were used to conduct this research study with all ethical consideration. The researcher employed a variety of research data collection methods to ensure that triangulation was achieved, including interviews, focus groups, and observations.
The data was protected to guard the participants’ identities. Each aspect of the data-gathering stage was treated with the highest integrity as outlined in this chapter.
CHAPTER FOUR: FINDINGS

Overview

The purpose of this transcendental phenomenological study was to describe the experience of growth mindset for teachers in an urban district in northeast Ohio, how teachers perceive the effects of growth mindset, and how they believe they have been prepared to use this theory in their classrooms. This qualitative transcendental phenomenological study addressed one central research question: What are the experiences of high school teachers with the implementation of the growth mindset model to increase achievement, motivation, and grit? The research study considered factors that dealt with teachers’ experiences in implementing the model and the support that teachers had with learning the model through research-based practices. The collection and analysis of the data, which took place over a period of two months, were previously described in Chapter Three. This chapter provides a narrative about individual participants, using pseudonyms, and how the themes were developed. Chapter Four will also identify and describe the three themes uncovered by the research and answers the research question used to guide this research. The three themes include the idea of building relationships with students, motivating students, and ongoing professional development.

Participants

The following represents a narrative analysis of each of the fourteen participants in this study. These narratives tell a story of the overall experiences of urban high school teachers in northeast Ohio who have taught using the growth mindset model. Participants were identified as eligible to be included in this study if they have taught high school and have used this model in their classrooms. Originally each teacher, in order to be eligible, needed to have taught for a
minimum of ten years; however, after sending out the initial survey, the parameters needed to be changed to having taught a minimum of three years. Once identified, participants volunteered for the study after being contacted by the researcher through a letter sent by DocuSign, where they each signed their consent. Through interviews, open-ended questions, and participation in an online focus group, the researcher constructed narratives in order to analyze each participant’s overall experience. Pseudonyms have been used and other identifying characteristics have been deleted to protect the anonymity of each participant in this study. Table 3 includes the demographics for each participant.

Table 3

*Participant Demographics*

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<tr>
<th>Pseudonym</th>
<th>Gender</th>
<th>Race</th>
<th>Age</th>
<th>Subject(s) Taught</th>
<th>Years’ Experience</th>
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<td>English</td>
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<td>50–59</td>
<td>English</td>
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</tr>
</tbody>
</table>
Sam

Sam has been teaching for ten years. He is currently teaching twelfth-grade English but has taught ninth-grade English in the past. He has taught in several school districts during his career; however, he has been in the current district for three years. Sam, along with teaching English to seniors, has taught a course entitled Senior Seminar that is a required course for graduation.

Sam started using the growth mindset model back in 2012 when he read an article (not specified in interview) written by Carol Dweck. He chose this article as the article of the week for his students. He had the students discuss the pros and cons of the ideas of growth mindset. He had them talk about grit and how effective grit is as a trait, especially as they progress through high school and into college. He, at that time, believed that this concept was going to be useful for the long term.

So that was my first experience, and I tended to use it in subsequent years as a way to frame the year, early on in the year so they can get through those things that get in your way. And I find it beneficial to those kids who were open-minded and who already had some of the characteristics of growth mindset. (Sam, personal communication, April 19, 2021)

Olivia

Olivia has been teaching for four years. She is the youngest of the participants. Olivia started teaching directly out of college in the current district. She has taught eleventh-grade
English for all four years. She also teaches a senior seminar class designed as a graduation requirement.

Olivia first heard about growth mindset in college. She had to read Carol Dweck’s book (not specified in interview) as one of her required readings.

I don’t remember exactly what class it was, but I remember thinking that this was a common sense sort of idea where, of course, our brains have the ability to grow, and our intelligence is not something that is fixed. So I was like, you didn’t have to convince me of that. It was something that I naturally agreed with. (Olivia, personal communication, February 26, 2021)

She thinks that even though she understands this principle, it is harder to practice in her own life.

Evelyn

Evelyn has been teaching for a little over 25 years. She has been in three different school districts and has been at the current district and school for six years. Evelyn has taught English for most of her teaching career; however, she is now a theater arts teacher, which is her first love. Evelyn moved from the elementary school, where she taught upper-elementary-age students, to teaching high school. This has given her a varied experience in education.

Evelyn first heard about growth mindset about four years ago. She said that it made complete sense to her. She remembers seeing several posters in the hallways and it was even mentioned in a professional development session. She mentioned this with a goofy smile on her face, and when asked about this smile, she said that what she learned she learned on her own.

I still think it’s something that we need more professional development on, and I don’t think that it’s talked about nearly enough. I just had to figure it out on my own; some of it I did naturally: how I related to students and how I would talk to students about their
thinking, about their work. If they didn’t do well, this is not the end of the world. Let’s work to make it better. (Evelyn, personal communication, April 14, 2021)

Karen

Karen has been teaching for 15 years. She began her career teaching in North Carolina but moved to Ohio in 2014. She has been teaching math, which includes Algebra, Trigonometry, and Geometry. Karen is currently teaching ninth-grade Algebra I.

Karen first heard about growth mindset a couple of years ago. She started noticing that her students were “stubborn” when it came to math and she wanted to understand why. She had heard about growth mindset in a professional development session; however, the presenter was presenting as if the staff already knew what the model was. After the session, she started researching on her own and discovered that when her students presented with a “stubborn” frame of mind in math, they were exhibiting a fixed mindset. She wanted to figure out how to change that, so she started doing her own research. She believes that growth mindset can be best summarized by the word yet. “When a student says, ‘I don’t know what to do,’ I say, ‘Yet; I can’t solve this problem, yet’” (Karen, personal communication, April 14, 2021).

Charlotte

Charlotte began her teaching career eight years ago. Before she entered the teaching field, she worked in customer service, worked on an organic farm, got a degree in Geology and worked as a field researcher, and finally worked as an analytical chemist in the chemical engineering industry. She now teaches science and loves her content. She will readily admit that she loves teaching higher grades but is currently teaching ninth-grade physical science. Charlotte is very passionate about her students. She loves helping them with work during and after school. She also hosts several clubs that deal with the environment.
Charlotte first heard about growth mindset while teaching middle school science. She developed a yearlong project that culminated in a science fair. She would watch the students develop a growth mindset as they moved through the process of creating their project for the science fair.

Those that were particularly successful in the science fair went onto regional and state fairs, and that entire process was, to me as an educator, really phenomenally empowering because I watched my kids struggle and struggle and be successful and universally across the board, it was a success for all of us. It was a growth mindset moment for me, too. I was mortified to do it, but it was a valuable risk for me to take. (Charlotte, personal communication, March 3, 2021)

Mia

Mia started her teaching career after spending several years working as a collections agent. She graduated with the plan to attend law school; however, after graduating, she realized that her path led in a different direction. She is now teaching social studies to sophomores and has been for eight years, and she is really enjoying it.

Mia first heard about growth mindset when she attended a professional development seminar on social emotional learning. She sees the need for this in the student population as so many of the students do not seem motivated or see the light at the end of the tunnel. She believes that it is important to create opportunities for the students to continue to grow, and she will take on those opportunities as she believes they are huge moments.

Abigail

Abigail is a special education teacher that focuses mainly on English, with a few classes of self-contained tenth-grade English classes. She has been teaching for 11 years in the current
district. She is very passionate about her special education students. She creates an environment that is very conducive to rigorous learning.

Abigail learned about the growth mindset model by accident. She, as a special education teacher, wanted all her students to know that they could experience success, whatever that looked like for them. “Everyone experiences success differently, everyone in my classroom walks through the door at a different level” (Abigail, personal communication, March 5, 2021). It was after a professional development session on project-based learning (PBL) that she realized what she was doing in her classes had a name. She recognized that the vocabulary used in the session, one that centered around growth mindset, was the very vocabulary she used with her students.

**Irma**

Irma has been a math teacher for 15 years. She originally started her college journey to become an engineer but changed her mind and decided to head in the direction of pharmacy. It was not until after she graduated that she felt like that was not the path she should take. She went straight into her master’s program as a math major and is now teaching math. She has been in the current district for 13 years.

Growth mindset is never a topic that Irma ever learned specifically and intentionally. She said that it was touched on in several PDs, but she never actually learned about it.

And like they’re always just like the slow release. We’re going to explain, we’re going to write about it, we’re going to…. It was never like a PD directly on that, it was never learning directly on that. It’s always been touched on, and then let go. (Irma, personal communication, March 3, 2021)

She decided to learn about this concept on her own. She spent time trying to figure out how to use this in class with her students.
Charles

Charles is an engineering teacher for the district. He was not always a teacher. He began his career as a mechanical engineer and was in that field for 17 years before turning toward education. He has been teaching in urban education for eight years and has been the engineering teacher in this current district for the past three years.

Charles learned about growth mindset while he was teaching at a charter school in the current district. He said that the administration there was pretty cutting edge when it came to growth mindset. Charles said they spent a lot of time in professional development, learning about how to use and implement growth mindset in their classrooms.

Robert

Robert began his teaching career as an intervention specialist with a focus on science, English, and social studies. Robert grew up in a very poor situation and always felt as if he needed to give back to the community. He graduated from college with a degree in teaching; however, due to his inability to find a job, he joined Teach for America, a program that places teachers in inner-city environments. He headed for Oklahoma but ended up back in his current position in northeast Ohio.

He started his career as a teacher thinking that one just had ability or one did not. He did not really believe that one could change that. However, after joining Teach for America, he learned about the growth mindset model and how relevant it was to inner-city students. “I think that joining Teach for America kind of pushed me into a growth mindset. I started to believe that I could do anything if I was willing to work hard and not give up until the job is done” (Robert, personal communication, March 2, 2021).
Gabriella

Gabriella started her career as an ESL teacher. She did this for five years before moving into the classroom teaching Spanish. She has been in the current district for her entire career of 20 years. She enjoys working with students as they are learning a new language. She spends quite a bit of time helping them in the classroom and individually.

Gabriella was first introduced to growth mindset when she taught at a school that focused on project-based learning. The staff would attend workshops to learn about this style of teaching. Even though she has moved away from project-based learning, she has not abandoned the concept of growth mindset. Gabriella has been using growth mindset with her Spanish speakers, even though it is difficult at times.

Margret

Margret is a veteran teacher with 25 years of experience. She graduated with a degree in education; however, she was unable to find a job, so she subbed for a year. She decided to change careers and moved into the insurance industry where she worked for several years until her son was born. After that she moved with her husband to northeast Ohio where she is now teaching. She has been teaching English to tenth graders for the past 22 years. During that time, she has been a curriculum coach, a principal, and now a teacher.

Margret learned about growth mindset from a summer workshop that she attended when she first came into the district. She was so excited to discover that there was a model or concept that finally gave a voice to what she had always believed about student intelligence. “I had always believed that, and I had always done it in my classroom, I just never knew there was a name for it and that there were specific strategies. It was a hit or miss with me” (Margret, personal communication, April 12, 2021). She usually spends the first several weeks going over
growth mindset and having the students look at themselves as to where they have used it and how it could benefit them. After a while she tends to drop the vocabulary but continues modeling the strategies.

**Allison**

Allison has had a wide variety of teaching experiences. She has been in the district for 18 years; however, the first 10 were at various locations around the district. For the last eight years she has been at a school totally dedicated to project-based learning. She teaches social studies and freshman seminar classes to ninth graders. Allison spends most of her day facilitating learning, which she very much enjoys, instead of just lecturing. Her classes begin the year with a project and that project carries them through the whole year.

Allison first heard about growth mindset when she started teaching at her current school. Until that point, she did not even know that such a concept existed. Upon being placed at this school, she went through rigorous training on PBL and the growth mindset model. She was able to begin implementing this in her classroom immediately.

**Brandon**

Brandon has been teaching now for six years in the current district. He graduated with a math degree and continued on to get his master’s in teaching. He has taught a wide variety of math topics, including Algebra I and II and engineering. He is also a part of the football coaching staff, where he has had the opportunity to impact students outside of the classroom environment.

Brandon first learned about growth mindset in graduate school. He was introduced to it at MIT as he was learning about student behavior and growth. He decided that it was very useful
to incorporate these concepts into the classroom to help students grow and learn about grit and determination.

**Results**

Through the analysis of participant interviews, online focus groups, and classroom observations, the results and themes began to take shape. The participants in this study seem to share common experiences and observations related to the idea of using the model of growth mindset in their classrooms throughout the three different types of data collection. The triangulation of the data allowed the researcher to have reliability and validity within the development of the themes (Creswell, 2017).

The researcher used Moustakas’ (1994) qualitative analysis methodology in which she bracketed herself from her own experiences with growth mindset through journaling throughout the data collection process. The researcher transcribed each participant interview including the focus group discussion. These transcripts were then uploaded as documents into the Atlas.ti9 software.

The Atlas.ti9 software provided the researcher with a way to generate a list of codes appearing within the uploaded documents. The researcher was then able to identify codes central to the research on teachers’ perception of using growth mindset with their students. She then connected the codes in their bearing to one another. This connection was used to identify themes related to the three research questions. Table 4 represent the themes that emerged after this process of synthesis and phenomenological reduction included Building Relationships, Student Motivation, and Ongoing Professional Development and Support.

**Table 4**

*Identified Themes and Related Codes*
<table>
<thead>
<tr>
<th>Themes</th>
<th>Related Codes</th>
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<tbody>
<tr>
<td>Theme 1: Building Relationships</td>
<td>• Build Procedures&lt;br&gt;• Care&lt;br&gt;• Clear Expectations&lt;br&gt;• Constructive Feedback&lt;br&gt;• Create Success&lt;br&gt;• Don’t Care&lt;br&gt;• Don’t Lose Passion&lt;br&gt;• Failure&lt;br&gt;• Hard Work&lt;br&gt;• Intentional&lt;br&gt;• Learning Environment&lt;br&gt;• Messing Up&lt;br&gt;• Model&lt;br&gt;• Overcome Obstacles&lt;br&gt;• School Culture&lt;br&gt;• Show Personality&lt;br&gt;• Social Emotional Learning Activities&lt;br&gt;• Student Buy-In&lt;br&gt;• Student Opportunity&lt;br&gt;• Student Ownership&lt;br&gt;• Talking About Growth Mindset&lt;br&gt;• Trust</td>
</tr>
<tr>
<td>Theme 2: Student Motivation</td>
<td>• Determination&lt;br&gt;• Elementary School&lt;br&gt;• Extrinsic Motivation&lt;br&gt;• Extrinsic Motivation Leads to Intrinsic&lt;br&gt;• Failure&lt;br&gt;• Fixed Intelligence&lt;br&gt;• Frustration Level with Barriers&lt;br&gt;• Grit Is Perseverance&lt;br&gt;• Grit Varies&lt;br&gt;• Growth Mindset Develops Grit&lt;br&gt;• Hard to Teach Motivation&lt;br&gt;• Hard Work&lt;br&gt;• Lack of Success&lt;br&gt;• Motivated by Learning&lt;br&gt;• Motivation from Home&lt;br&gt;• Motivation Varies&lt;br&gt;• Negative Mindset&lt;br&gt;• Persevere&lt;br&gt;• Power of Yet</td>
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Theme 3: Ongoing Professional Development

- Balls Dropped
- Implementation
- Intentional
- Little Support
- Make It Fit the School
- No Support
- Principle Participates
- Process of Teaching
- Project-Based Learning
- Reflection
- Rigorous Work
- School Culture
- Self-Taught
- Staff Buy-In
- Staff Experience
- Teacher Input
- Teacher Leaders
- Team Teachers
- Value
- Weekly Meetings

**Theme Development**

Three themes were identified that were used to help the researcher get a more thorough idea of the participants’ experiences using growth mindset with their students. Each theme brought a glimpse of those experiences. According to Moustakas (1994), developing a list of significant statements from the interviews or other data about how individuals are experiencing the phenomenon is essential to understanding those experiences. From these significant statements, the themes emerged.

**Theme 1: building relationships.** The first identified theme was Building Relationships. Six of the participants specifically stated the building relationships with students is key to encouraging a growth mindset in students. It became very evident that all the
participants, in one way or another, hinted that the relationship that teachers have with students is critical to the success of using growth mindset. The participants argued that building these relationships must be done intentionally as a staff in order to create the school culture of growth. Olivia commented that it is important to identify what students do well, and this can be accomplished by building those relationships and building their confidence. She believes that her students have low self-efficacy and that they do not really believe in their own skills and strengths. She thinks that that building these relationships is the best place to begin the process of developing a growth mindset (Olivia, personal communication, February 26, 2021).

Robert also stated that the idea of building relationships is essential to developing growth mindset. He said that it takes time to build those relationships and set up protocols and expectations that encourage motivation. “If they feel that there is trust in the relationship, then they’re willing to show their bumps and bruises along the way of growing” (Robert, personal communication, March 2, 2021). He believes that for a student in the urban setting, it takes risk to grow and to overcome the obstacles they face, and they need that trust in order to take the risk of making mistakes. He argues that if there is no trust, growth mindset will not work because students are afraid to show they messed up (Robert, personal communication, March 2, 2021). Sam, in his interview, also talked about failure and that it is important for students to feel as if they can fail in a safe space. This space can only happen if there is a relationship built between teacher and student (Sam, personal communication, April 19, 2021). Charlotte mentions this idea of failure as well during her interview. She believes that students need to be willing to experience failure in order to grow, but this cannot happen unless there is a relationship developed between the teacher and the student. Teachers need to show the students their
personality in the classroom. Showing this personality will help develop a mutual respect (Charlotte, personal communication, March 3, 2021).

Abigail reiterated these ideas in her interview. She included the idea of building rapport with students:

So, they have to know that you care about them. First of all, that you’re not just another teacher, that you’re not just another white lady, for lack of another word, who’s just going to show up. You have to be someone who follows through with what you’re going to do; you have to be someone they can trust and once they trust you, you can pretty much ask them to do anything. (Abigail, personal communication, March 5, 2021)

She believes that this relationship is reciprocal. She feels that if she shows them that she cares, they will want to grow and do better. “If I’m proud of them, they will start to make themselves proud” (Abigail, personal communication, March 5, 2021). She emphasizes the point that teachers must show students that they care and believes that they must show them what it means to grow. “You have to get to know them and their families. You have to share you and your family and your cats and dogs and your kids” (Abigail, personal communication, March 5, 2021). She does not believe that starting the year teaching growth mindset is a good idea but rather that showing students who you are, your personality, and the fact that they can trust you is more important and the best place to start on the growth mindset journey.

Evelyn continues this thought by saying that developing growth mindset in students comes down to having a personal relationship with them. She understands that for students to even want to listen to you, you must have that relationship:
It is not something you can teach the whole class; it has to be done one student at a time. It’s all their own, and you have to know your students. You must do it one at time. You have to make time for it. (Evelyn, personal communication, April 14, 2021)

Charles mirrored this sentiment when he stated that for growth mindset to work, you must show them that what they are doing means something, and in order to do this you have to know them. “I have to encourage and inspire and get personal so that they understand that what they are doing matters” (Charles, personal communication, April 13, 2021). Margret agreed that for growth mindset to be effective, a teacher needs to build an environment where the students feel as if the teacher is on their side. She mentioned that the students that come from the urban population tend not to have a home environment that encourages those types of relationships. She continued by suggesting that if a teacher can build that relationship with a student, then they can have a way of learning what motivates the student and connect that with what they are learning. Margret believes that it is all about making those connections. One way that she suggests could be used to encourage these relationships is social emotional learning activities. These activities will ensure that the students buy into the idea of personal responsibility and ownership of their own learning (Margret, personal communication, April 12, 2021).

Theme 2: Student Motivation. The second theme that was identified revolved around the idea of motivation. All the participants agreed that there is a huge issue with student motivation in the urban district. One of the most significant ideas that came out of the interviews was the idea that motivation needs to be taught at home, and it needs to be taught earlier than high school. This sentiment was echoed by several of the participants. Irma was one of the first participants to indicate that she believed that motivation needs to be taught at home and, if they are not being motivated at home, they are not going to be motivated in the classroom. She
believes that by the time they reach high school their motivation levels are already set (Irma, personal communication, March 3, 2021). Abigail agreed with this statement but went a step further by saying that the parents of the students served in the district are not equipped with the tools to teach their children motivation.

Many students in this district, which is underfunded, have not experienced a lot of success, academically and also personally. They don’t have a lot of motivation and grit, and sometimes their parents don’t know how to teach them that. Not that they don’t want to, it’s just not a skill that they are learning at home. (Abigail, personal communication, March 5, 2021)

Abigail also suggested that they do not have a lot of intrinsic motivation yet because they have not had it from a younger age.

Brandon continued with this idea when he suggested in his interview that the students that have grit and perseverance are the ones that were taught it by someone along the way and that by the time they do finally get to high school, it is already engrained in them. He believes that these attributes are not self-taught but instilled in them by someone that happens to be important to them (Brandon, personal communication, March 17, 2021). Evelyn mirrored these comments by stating that she believes that the majority of student grit begins with extrinsic motivation and that comes from parents and the home environment. She believes that even if it is taught it starts at home.

It’s taught in the home environment, and I feel like they come to us motivated or not motivated. Now that doesn’t mean we can’t motivate them in the classroom, but it means that for those students that don’t have extrinsic factors it is an uphill battle. It is an uphill
battle with those students if they don’t have motivation from home. (Evelyn, personal communication, April 14, 2021)

In her interview Mia stated that she does not think teachers have much influence when it comes to motivating students. “I think that a lot of the motivation is honestly internal and comes from family situations, more so than anything teachers can do” (Mia, personal communication, April 14, 2021). Sam was of the opinion that students are extrinsically motivated by factors that are influenced by parents. They come to high school already motivated or not motivated. “I think with student motivation, there’s a lot of it that is extrinsic motivation. I find that a lot of kids are there, external factors that influence things either parents or money” (Sam, personal communication, April 19, 2021). Margret made the point of saying that perseverance is something that is often modeled at home. She believes that with students it is about getting them out of a negative mindset and modeling with them the skills they need to grow. Unlike Mia, Margret does believe that teachers can influence a student’s level of motivation. “Perseverance is something that is often modeled at home, but we can also give them the ability to persevere by rewarding their perseverance” (Margret, personal communication, April 12, 2021). Allison did agree with Mia in that she believes that it is often hard for teachers to teach intrinsic motivation. “I really think that a lot of students already have motivation built into them by the time they get to high school. I feel especially that it’s a struggle for high school teachers to teach intrinsic motivation, like I think that it’s a lot harder” (Allison, personal communication, April 22, 2021). Many of the participants agreed that by the time that students are out of elementary school, motivation is there or it is not.

Some of the participants agree that it is often hard to teach growth mindset because of the lack of motivation that the students have. Sam commented, “It was much harder to convert those
kids who were resistant or were apathetic towards growth mindset” (Sam, personal communication, April 19, 2021). That did not stop him from still trying to teach growth mindset. 

There’s always kids, like, when you revisit it later like in literature, we would look at characters, like did this character have a growth mindset and that’s where it would pay off later. I think that’s where it became really effective when we could implement it in a real-life setting. (Sam, personal communication, April 19, 2021)

What was equally interesting was that the participants concluded that teaching growth mindset does help with achievement, motivation, grit, and determination. Abigail suggested that student achievement is definitely tied to growth mindset. She smiled as she said that after teaching growth mindset, the kids would “walk through walls for me, because they know it matters to me and I love them” (Abigail, personal communication, March 5, 2021). She said that when students understand that their brains can grow and achieve, they are more likely to push through and do the hard tasks she is requiring of them. Karen continued with this idea of achievement by stating that if the students have a growth mindset, it is due to the internal motivation they have toward something. She believes that if you are willing to learn then you are going to achieve. “Even if you don’t reach the mastery level, you are going to show growth and more and more that you promote your motivation and growing in your learning experience” (Karen, personal communication, April 14, 2021). Evelyn made her case using the example of standardized testing. She commented that

the problem of standardized testing is students don’t have the grit to persevere to the end of the test. And the first half of the test they do astounding on, then they get tired, and they start to make mistakes, they start to quit. Time and time again I’ve seen them quit.

A vast majority of my kids that struggle already with grit and achievement, they have the
smarts, they can’t get to the end of it, and so the growth mindset helps them to push through. (Evelyn, personal communication, April 14, 2021)

She said that growth mindset helps her and the students evaluate what they are already thinking and then be able to push through to get to the end.

When Robert answered this question, he went straight back to the idea of building relationships. He said that if growth mindset is used properly and if you take the time to build relationships and procedures, and then to implement them in the correct way, students will naturally be successful and achieve (Robert, personal communication, March 3, 2021). Charles agreed with Robert, but he added that if students can see how they are growing, it helps with their level of achievement. He believes that “it’s all about being able to measure, sharing that measurement with your students to let them know how you’re monitoring. Then you develop a plan, you know to get them where they need to be” (Charles, personal communication, April 13, 2021).

Allison recognized the importance of teaching growth mindset. She believes that it is a process and that by the time the students are seniors they show more achievement than freshmen only because they have had more time to learn and grow. “They were getting it. They were actually getting it so yeah, it’s a process” (Allison, personal communication, April 22, 2021). Olivia, when asked if growth mindset helps with student achievement, said that for it to be effective there needs to be student buy-in. She felt that it is challenging for high schoolers to accept because they view it as if you were talking about intelligence and talent. But she does see that if students are able to grasp the concept of growth mindset, then they will show achievement. She also believes that once they get to high school then it is almost too late. “Because they’re almost at a spot of fixed intelligence, like they’re almost where they feel like
it’s done: ‘If I am not good at science, I never will be good at science’” (Olivia, personal communication, February 26, 2021). She was very emphatic that teaching growth mindset, if it is to be effective, needs to start early for there to be noticeable achievement. Irma believes that growth mindset only helps with student achievement if used correctly. She also agrees that for there to be any success the students must be on board. She did, however, mention that not everyone understands how to use growth mindset correctly and therefore it becomes less effective (Irma, personal communication, March 4, 2021).

The participants also believe that teaching growth mindset encourages the development of motivation. Robert gave this question a very hearty yes. He firmly restated that for students to show any type of growth there must be the trust relationship.

Students will feel motivated if there is trust in the relationship, then they’re willing to show their bumps and bruises along the way of growing. If there is not trust, that growth mindset won’t work for motivation, because the students are afraid to show that they messed up, they’re not willing to grow, they’re not willing to take the risk of possibly messing up when they’re taking that chance of going about their typical ability level. (Robert, personal communication, March 2, 2021)

Gabriella also suggested that growth mindset helps with motivation. She used the example of student projects. She believes that when students have the growth mindset, they are able to power through a large project because they see it in smaller chunks. If they can accomplish the chunks, then they become motivated to accomplish the bigger part of the project. She believes that some students get overwhelmed with certain tasks and then become unmotivated; however, if students are given the opportunity to show a growth mindset, they can finish. “I think it’s easier for those kids who struggle with being motivated when you give them
smaller chunks to focus on. That way they don’t feel so overwhelmed, and the less kids feel overwhelmed the more motivated I think they’ll be” (Gabriella, personal communication, March 12, 2021). Sam also gave this question a high score. He believes that students that already show growth mindset will automatically be motivated.

Definitely, if you have the mindset your motivation will increase; your intrinsic drive to be successful will only increase your willingness to overcome barriers. You see it in those kids to get things done and to really attack things on their own. I think that’s a big thing with motivation; a lot of times we become unmotivated when we are left to our own devices. (Sam, personal communication, April 19, 2021)

Margret fell in the middle of the range when it comes to student motivation. She believes that not every student is motivated at the same levels. She does see that growth mindset helps students when it comes to the big things in the classroom like “big ticket tests.” She believes that using growth mindset encourages the environment that produces motivation for these things. She believes that these types of tests produce anxiety for the students, but that anxiety can be overcome in teaching motivation through growth mindset. She emphasizes that it takes the teacher–student relationship to be present in order for them to listen and be receptive (Margret, personal communication, April 12, 2021). Brandon echoed Margret’s sentiment about testing. He believes that it is difficult to motivate the students to take things seriously. “At least for our kids, I know this is true because they freaking hate taking tests like that; they have no interest in it. I think growth mindset would be better suited for us; it might motivate the kids to take it seriously” (Brandon, personal communication, March 17, 2021). Irma was another teacher who did not really feel as if growth mindset helps with motivation. She sees students that just do not care about their education and that means it becomes difficult to motivate them at all. “Students
don’t care about anything; they may care now, but not five minutes from now” (Irma, personal communication, March 3, 2021). Mia mirrored Irma’s thoughts on motivation. She feels as though motivation has to be intrinsic. “So if they already kind of buy into that idea, right, I think they’ll gain grit, but I don’t think those who lack the motivation, even if you teach growth mindset, will encourage it” (Mia, personal communication, April 14, 2021).

Some of the participants also believe that teaching growth mindset encourages the development of motivation. Evelyn was adamant that growth mindset does develop a level of grit in students. She believes that grit can be developed and taught. She feels as though for some students it comes with their personality, but others can learn this skill. She stated that if they do not get the idea of having a growth mindset from home then she has to find a way to let them know what a growth mindset is and how it can benefit them in the classroom. “As far as growth mindset I think it develops the grit [and] learning, and really making that a part of education, every day-to-day education, helps with that” (Evelyn, personal communication, April 14, 2021). She believes that teaching growth mindset will help them learn how to persevere and push beyond the obstacles they encounter. Allison was equally confident that teaching growth mindset encourages grit and achievement in students. She commented that growth mindset is necessary and needs to be developed. She has been working all year at developing these concepts in her freshmen seminar class and believes that she has seen progress because of the students’ growth mindset. Mia believes that teaching growth mindset helps the students be willing to keep trying. “I think they do get grit because they’re willing to keep trying, which is essentially grit and those who don’t, just, they don’t” (Mia, personal communication, April 14, 2021). In her answer Evelyn said that growth mindset is effective for helping with motivation, but it is an uphill battle. She believes that for it to work there must be student buy-in first. “But
I think that we have a systemic motivation issue; I do think it will help” (Evelyn, personal communication, April 14, 2021).

The focus of the interview questions then moved into the area of grit and determination. Does growth mindset help encourage grit and determination in students? For most of the participants the answer was positive. There were a few who did not believe that growth mindset was influential in encouraging grit and determination. They felt as if growth mindset did help somewhat but not as much as some of the other participants.

Olivia was at the high end of the scale. She firmly believes that teaching students growth mindset absolutely helps them with grit and determination. “I think that’s the whole goal of teaching growth mindset, to get the students to see the importance of finishing, to push through” (Olivia, personal communication, February 26, 2021). Evelyn strongly made the point that growth mindset is the key to students having grit and determination. She suggested that it has to do with perception.

Your grit is your perception. If you perceive that you can do it, a lot of times we’ll do it, it’s like there’s a lot of perception on your grit and determination. So, if you’re already motivated, sometimes, you know, because there are those that don’t believe in themselves or don’t already have the motivation, so they will start out trying, but it’s grit and determination that will have them preserving to the end. (Evelyn, personal communication, April 14, 2021)

Robert was another participant who felt strongly that growth mindset encourages grit and determination. He commented that “with student grit, it allows them to open up as a person and allows them to show their personality, which then connects to their grit. So, when they are not being pushed and motivated and sometimes challenged, there’s no reason for their kind of grit to
come out and show” (Robert, personal communication, March 2, 2021). Charlotte also replied that growth mindset does encourage grit and determination. “I think it encourages student grit and determination quite a bit. Obviously, the kids are going to persevere through the project and be successful, or even serving to challenge them and [those] who like to work those muscles” (Charlotte, personal communication, March 3, 2021).

Abigail answered similarly. She does see how teaching growth mindset encourages grit and determination. She believes that students who experience success often see those small successes as a reason to dig deeper for the next challenge.

If you haven’t experienced any success, you don’t see the point of exposing yourself to constant pain, and the pain of not being successful sucks, and it sucks for someone to continue to get up and struggle and fail. So having small success and then larger success and just building on that, they start to see the reason for trying and, you know, that’s the stuff that matters. (Abigail, personal communication, March 5, 2021)

Gabriella spent the time answering the question by going back to the example of project-based learning. Freshmen have a harder time with this learning style as this is their first experience with that type of learning; however, by the time they are seniors they are secure in their own learning and they have the grit and determination to finish the project. She mentioned that the freshmen struggle because they are used to the immediate feedback that is offered with traditional learning. It takes a concerted effort, along with teaching growth mindset, that helps them persevere to the end of the project. “You’re changing their learning style and if they’ve never been exposed to it, yeah, I think that it definitely applies to grit” (Gabriella, personal communication, March 12, 2021). She also tied grit to being challenged. She believes that when students are challenged, they are more apt to show grit. “Grit is going to improve because they’re
going to be more challenged and be more up to those challenges versus when they’re first starting with this learning style” (Gabriella, personal communication, March 12, 2021). Margret also tied grit and determination to the idea of being challenged. She feels that using growth mindset to encourage grit and determination is not necessary if your curriculum is not rigorous enough. “They don’t see growth mindset as important because if your work is too easy, they don’t need it; they don’t need to work hard so why should we push through the work? You have to raise the standards and keep pushing them” (Margret, personal communication, April 12, 2021).

Several participants answered this question on the lower end of the scale since they did not see that growth mindset encouraged much grit and determination. Charles was one of those participants who felt as though high school students did not have the maturity to really understand the idea of grit. He believes that if a student was an athlete then there was the chance that they could develop these traits; however, for most of the students, especially in the urban district, they just did not understand the process. “I don’t think that they’re mature enough to understand, you know, what’s actually in front of them, for lack of a better understanding, that tracking their progress can help them develop that inner grit because, you know, as giving them that carrot at the end, you know, of the tunnel” (Charles, personal communication, April 13, 2021). Brandon was another participant that did not feel as though growth mindset did much for student grit and determination. He believes that the ones that are already motivated are the ones that already have grit, but the ones that do not have that internal motivation will have no interest in taking growth mindset seriously (Brandon, personal communication, March 17, 2021). Mia also shared this idea. “I think if those students who want to succeed and have that growth mindset and develop it, they are the ones that understand what it’s going to get them” (Mia,
personal communication, April 14, 2021). “I think they get grit because they’re willing to keep trying, which is essentially grit and those who don’t, just, they don’t. I mean, they just don’t show up” (Mia, personal communication April 14, 2021)

Theme 3: ongoing professional development and support. The third theme identified was wrapped around the idea of professional development. The participants were very clear on this point during the interviews and focus group. The vast majority of the participants agreed that there was not enough support and ongoing professional development on the topic of growth mindset.

Abigail, Evelyn, and Karen all stated that they learned about growth mindset on their own. Evelyn chuckled when asked about the professional development that she had received. She stated that in her building there were posters put up in the halls but that was the extent of the training. Karen said that she was at a professional learning session when the topic came up with all the vocabulary; however, she claims that she was lost. She went home after that and looked it up, bought a few books, and studied the concept on her own (Karen, personal communication, April 14, 2021). Abigail was another participant who smirked as she stated that she had to “figure it out” for herself:

When we were a separate academy there was more support for social emotional learning and things like grit, and, you know, wanting students to be successful and connect with them and have class meetings and really, you know, growth mindset. But now that we are a four-year high school there’s not a lot of focus on things like that. Now the focus is on getting them through. And so, if teachers choose to focus on this, that’s their choice and prerogative and if they do, yay for them. But there’s not a message or a support coming from administration. (Abigail, personal communication, March 5, 2021)
Irma, Mia, and Olivia all commented that there has been little to no real training with using this model. In fact, they all said that they learned what they know based on the fact that they heard it from another teacher or, in the case of Olivia, taught growth mindset with freshman students. “I taught freshman seminar curriculum where we taught growth mindset explicitly. We presented the article about brain plasticity and kind of taught the kids about it, the definition of growth mindset” (Olivia, personal communication, February 26, 2021).

Several of the participants did comment that they had received training at a summer session that was paid for by the administrator. The session was about project-based learning (PBL); however, growth mindset was one of the mini-sessions. Margret mentioned that she did two summers at the PBL summer institute but that nothing was done back at the school as a follow-up. “Official support came from two summer sessions that I’ve attended, and I have gone to a few other conferences that have addressed that as well” (Margret, personal communication, April 12, 2021).

Charles learned about growth mindset at a previous district and has been able to apply the concepts with his current students. “Coming from my previous district, the one thing that I will say is that they were pretty, you know, cutting edge with all the things like growth mindset. They would send us places and study some of the latest techniques and the latest theories and bring them back” (Charles, personal communication, April 13, 2021). Brandon learned about growth mindset at graduate school, and this was reinforced by his co-teacher his first year of teaching. “But my first year at my current school, I was co-teaching with another math teacher for geometry, and I saw her use it and it showed me how beneficial it can be” (Brandon, personal communication, March 17, 2021). Robert also learned about growth mindset in a previous district. He commented that when he first became a teacher, he spent a lot of time in
professional development for growth mindset; however, he stated that in this district there has been little or no mention of growth mindset.

Gabriella learned about growth mindset in the district, but she was a teacher at a school that focused on PBL. Allison had the same experience as Gabriella. She is currently teaching at a school that is dedicated to PBL and therefore has had quite a bit of training on growth mindset. Even with the amount of training that the teachers have received, she feels as though it has lost some of its effectiveness as the years have gone by.

When we first started the school, the school has been around for nine years, so when we first started, we had a lot of PD around how to teach growth mindset, how to develop your own growth mindset and that as the school’s grown, I do notice we’ve kind of, like, moved away from necessarily talking about growth mindset as much. I do feel like we don’t, we don’t talk about it as much, but we also don’t have as many PDs around our school as we used to. (Gabriella, personal communication, March 12, 2021)

As she talked, it became apparent that she really believes in growth mindset and its effectiveness and wishes there were more emphasis on it as they had in years past. She does believe now that they have started talking about culturally responsive teaching, it might make a comeback.

Charlotte has not received any formal training in teaching growth mindset. When asked the question about training about growth mindset, she replied

not at our school. I [am] going to be very forthright, I feel like I said it’s been made mention of the terms, they are thrown out there. I know that our admin team has talked about implementing these professional developments, um, but we haven’t seen a lot. To be perfectly honest, I feel like the opportunity of, you know, I’ve been there for five years, and the opportunity to have a professional development where not only do we
learn about the growth mindset model, but we explore it from the perspective of the students, probably been there many, many times over. (Charlotte, personal communication, March 3, 2021)

Sam smiled as he also commented that growth mindset was presented in a staff-wide bulletin but was never implemented. As he shook his head, he said, “Here it is, go do it” (Sam, personal communication, April 19, 2021). He also mentioned that it was never in a professional development session that he can remember.

Nine of the fourteen participants agreed that in order for growth mindset to be effective, it needs to begin with the principal. Over and over again the sentiment came through loudly: the principal needs to be engaged in the process of implementation. Gabriella explicitly stated, “You don’t have these things and are leaving the teachers on their own, it’s not going to work; as a principal, you have to be just as involved” (Gabriella, personal communication, March 12, 2021). Abigail, Evelyn, and Olivia all stated that in order for it to be effective the principal needs to be the first one to implement it with the staff. Abigail, when asked if she were the principal, what would she do to make sure it was implemented, responded, “I think that asking the staff to do it, there would be a lot of pushback. I think it has to start from the principal” (Abigail, personal communication, March 5, 2021). She also went on to say that “it comes top down; teachers follow an example, they don’t necessarily follow an order.” It was evident that she completely believes that if the principal were to implement it in this way, “it’s much more buy in, rather than an email being sent out on something being rolled out” (Abigail, personal communication, March 5, 2021). Evelyn even went a step further by saying that as a principal she would use growth mindset on the teachers first before even expecting them to implement it in their classrooms. “Well, first, I would start using it myself with my teachers; that would be step
number one. I’m modeling would be step number one” (Evelyn, personal communication, April 14, 2021). She believes that the principal should be trained on growth mindset before expecting staff to begin the process of using growth mindset. Olivia mentioned that for this to be a staff-wide school project the principal needs to start with a solid foundation (Olivia, personal communication, February 26, 2021). Karen also mentioned the idea of teacher buy-in. “The biggest thing is, there has to be buy-in from the staff. You can’t just throw it at the staff and say, ‘Here’s another thing we’re going to do;’ you have to use it as a principal first” (Karen, personal communication, April 14, 2021). She agreed with Evelyn in that she believes the principal needs to be trained first. “You need to almost do the training, as in terms of getting teachers into the growth mindset first” (Karen, personal communication, April 14, 2021).

Margret felt that the principal needs to be directly involved with the implementation. She said that this could happen in a variety of ways.

I would as a principal do monthly class pop-ins. And also by having discussions, even doorway discussions, with teachers about what’s happening and encouraging it, you can look for it. You can encourage it if you’re doing teacher-based teams, saying, ‘This is a goal; how do we make it better?’ I think it works best if an entire team is doing it consistently and working together on that, then even kids get the message reinforced.

(Margret, personal communication, April 14, 2021)

Robert was another participant who argued for the idea that the principal must be engaged in this process if there was going to be success. He believes that the principal first needs to get the staff to buy into the concept of change. He also agrees that the principal needs to be one of the first to get trained on using growth mindset.
So, the first thing is, I feel like the best way to get buy-in by staff is they have teachers, a collective, along with the admin member, go to, like, a PD that is actually rolling it out to learn what the procedure is. I hate when only one person goes to, like, become the expert, and then they come back to present it to the staff, one where admin is not involved. That is where they lose the buy-in because you didn’t send the people that are going to need it, like, really know. (Robert, personal communication, March 2, 2021)

Five of the participants found that for growth mindset to be effective there needed to be a group of teacher leaders that would be at the forefront of the process. Gabriella stated, “As a principal you have to be engaged and make that commitment to either be engaged yourself or designate leaders, and you know in your teams and everything to give you reports and all that, because otherwise it doesn’t work” (Gabriella, personal communication, March 12, 2021).

Brandon suggested that there needed to be one expert teacher that the staff all respected to be the one that was educated in the method and be able to bring back the training to the staff.

I would send a trusted colleague, someone that has the respect of the staff to get trained in it and be the one that educates them, and ensure, and then have follow-ups and meetings, where you go over it and make sure that everyone is understanding because that’s been for me the hardest part.” (Brandon, personal communication, March 17, 2021)

Evelyn was another one that said that there needed to be what she termed “buddy teachers.” She believed that there should be teacher leaders that partner up with teachers who may not be that familiar with growth mindset.

You need buddy teachers who, and strategically done buddy teachers, because as a principal if you know your staff, you’re going to know the ones who are bought hook, line, and sinker. And the ones who are not, you need to buddy them together; you don’t
need people who are going to go and gripe and complain to one another about this as buddy teachers because they’re never going to get it done. You also don’t need the “gung-hos” together because they already kind of know what they’re doing. You need to let the excitement catch fire, and what we did at our school, all of a sudden magically there were posters up on the bulletin boards. (Evelyn, personal communication, April 14, 2021)

Robert was the fourth participant to acknowledge that it is important to create a school culture by first having a select group of teachers that would be considered leaders to participate in training. “So, the big thing is about, like, finding your teacher leaders that are willing to also go with you, and then bring that back to your staff to then roll that out” (Robert, personal communication, March 2, 2021). Charlotte stated that she would use teachers who are good at growth mindset to help her disseminate the information to the staff. “I definitely be like, ‘Hey teachers that are really good at this, help me out’” (Charlotte, personal communication, March 3, 2021).

Eight of the participants believe that some type of regular follow-up meeting is necessary for this model to be implemented effectively. Olivia mentioned that there needs to be a time set apart weekly for reflection and asking these questions: “What did I do well?,” “What can I improve upon?,” and “How can I focus on this and do better?” (Olivia, personal communication, February 26, 2021). Evelyn suggested that staff meetings were the perfect place to do a regular check-in. “When we get together for staff meeting, that coming back together and being able to ask questions and being able to get into small groups and really talk about what is working, what have we found that works” (Evelyn, personal communication, April 14, 2021). Margret even goes a step farther by suggesting that a principal can have impromptu meetings with the teacher.
“By having discussions, even doorway discussions, with teachers about what’s happening, a principal can look for it” (Margret, personal communication, April 12, 2021). Charlotte suggested that the staff needs to experience growth mindset regularly for it to mean anything.

“We don’t just give our students information, right, and enhance it for them exactly so that they not only get the knowledge, but they get to negotiate the experience” (Charlotte, personal communication, April 3, 2021). Abigail believes that the principal should hold daily meetings, even if for ten minutes, to do a check-in. “I’ve seen some really good examples of principals holding daily meetings where the principal is able to set the standard and maybe have a school-wide meeting every Friday for a half-hour; it comes from a leader that way” (Abigail, personal communication, March 5, 2021).

Robert is another participant who believes that there should be regular check-ins with the staff.

And then it’s about checking in with people. It’s about doing a check-in periodically. You can’t just do a PD once and be, like, “We are growth mindset experts, and we are going to be this for, like, forever,” so it’s about having other PDs. After that, not just like the same one again, but where are we at, what are your thoughts, like, what do we need to change, how can we, like, still fit what the model is. (Robert, personal communication, March 2, 2021)

Gabriella, when asked how this could be implemented, came right out with the idea of weekly meetings. “You have to establish weekly meetings, establish teams; there has to be accountability” (Gabriella, personal communication, March 12, 2021). She then went on to say that teachers left to themselves will not commit to making this change in their classrooms.

Brandon also stated that principals need to have follow-up meetings. “Have follow-up meetings
where you go over it and make sure that everyone is understanding because that’s been for me the hardest part” (Brandon, personal communication, March 17, 2021).

The participants in this study overall expressed a desire for administration support and follow-up regarding the implementation of growth mindset in their classrooms. They often expressed frustration at the lack of support and professional development with implementing this concept into their classrooms. All participants readily agreed that they would be open to having the extra help and support from their principals.

**Research Question Responses**

Through an extensive narrative analysis in response to the phenomenon of using growth mindset in the urban high school setting, the research questions provided a framework by which themes were able to create a picture of the participants’ experiences. Moustakas (1994) stated that a “phenomenological approach involves a return to experience in order to obtain comprehensive descriptions that provide the basis for a reflective structural analysis that portrays the essences of experience” (p. 13). These themes helped the researcher understand how the participants experienced life in their classrooms.

**Response to research question 1.** How do the teachers feel the growth mindset model helps students with motivation, grit, and achievement? The theme of student motivation was evident when discussing this question with the participants. It became clear that the participants understood the importance of motivation in students, especially those in the urban environment. The theme of building relationships was also very evident in this question. Participants agreed that in order for growth mindset to be effective there needed to be a relationship developed with the students.
When describing their experiences teaching growth mindset, the participants often stopped to reflect on their own individual classrooms. They described what it was like teaching students from an urban district, the difficulties and the challenges. Most of the participants regarded growth mindset as valuable; however, when describing their students, they suggested that growth mindset does not always work on students in the urban environment.

Irma viewed growth mindset as challenging. “If you have 20 kids in a room then it works, but 40 is too difficult. It’s harder to get interaction with them” (Irma, personal communication, March 4, 2021). Mia expressed frustration by commenting, “Like, we really struggle with our student body population, as so many of them don’t seem motivated” (Mia, personal communication, April 14, 2021). She sees the value, but she feels as if not everyone buys into having a growth mindset. Charles said that high school students are challenging in that they often spend their time thinking about other things and not about what they are in school to do (Charles, personal communication, April 13, 2021). He feels as if college-age students would be more apt to engage in growth mindset as they are better equipped to see the big picture.

Brandon believes that using the growth mindset model is easier if his students happen to be involved in athletics. “Unfortunately, it’s going to sound terrible, but our kids don’t have any grit whatsoever. If things get tough, they shut down. It took us three years to build that in the football program” (Brandon, personal communication, March 17, 2021). When describing his experience, he felt that it would be valuable if given enough training and time.

It was interesting how Robert described his experience with using and teaching growth mindset to his students. He was animated and passionate about the effectiveness of using growth mindset and recalled an experience that he had with a student:
So, when I was in Oklahoma as a teacher, there was a tenth-grade student who probably got into maybe two or three, not big fights, but just like pushing and shoving a week. And he had other suspensions for, like, repeatedly doing things in class and had failed two or three courses. He couldn’t really read at his grade level, probably a fourth or fifth grade level. And what I was able to do over the three years that I had him was amazing. I started having him come, like, after school, and we would just do these close readings of the books he liked. We just started getting to know each other and over that time, I didn’t want him to think that this was just about education. Over the time I spent with him, he stopped getting suspended, and he was able to close the gaps in his reading. Now he is a great student. That was one of the biggest successes I saw when it came to growth mindset. (Robert, personal communication, March 2, 2021)

Abigail got very excited about the idea of growth mindset. In her reflecting, she exclaimed, “It works, it works!” She went on to describe when she had the lightbulb moment.

When I heard about growth mindset, it was like a lightbulb, I was like, “Oh my gosh, this is what I’m doing and it’s working.” My kids started seeing that they could do things and I was with the same group of kids for two years in a row, and they were making tremendous gains. (Abigail, personal communication, March 5, 2021)

Evelyn finds the experience of teaching growth mindset rewarding when she can see the students who are frustrated and overwhelmed becoming encouraged by the process.

I think it’s a lot about relating with students, personally, on a one-to-one basis seeing when they get frustrated and kind of getting to the bottom of what’s got them overwhelmed and frustrated, and encouraging them and teaching them how to break
things down into steps. Instead of seeing just the whole picture, it’s all those pieces.

(Evelyn, personal communication, April 14, 2021)

Charlotte shared a significant experience where using growth mindset became an essential part of her year. She described a time where she had over one hundred students and they spent the year working toward an independent science fair. She worked through the process using growth mindset with the students for them to persevere until the end. At the end of the year, they had a very successful fair. “As an educator it is really phenomenally empowering because I watched my kids struggle and struggle and be successful and universally across the board, like I said, I didn’t have a student that didn’t complete a fully fleshed out project; it was a success” (Charlotte, personal communication, March 3, 2021).

Effective, personal, building a relationship, and challenging were words and phrases commonly used to describe the experience of using growth mindset in the urban high school classroom.

**Response to research question 2.** What preparations are given to teachers to ensure that they are teaching the growth mindset model based on best research practices? The theme of ongoing professional development could not have been clearer in the participants’ responses to this question. They fully understand that for a new program or idea to be effective there needs to be concise and focused training provided for staff and employees.

In many of the interviews and focus group discussions, the idea of teacher preparation for teaching growth mindset was a hot topic. It evoked a wide range of emotion in the participants. For the majority, they believe and were quite adamant that there has not been the support and training necessary to ensure that growth mindset is implemented correctly. Several of the participants even chuckled or smirked when responding to this question.
Irma was one of the participants who, with raised eyebrows, commented, “Training? What training? When they want us to do something, they throw it at you and say, ‘Go ahead, go ahead and watch these videos and start working in your classroom’” (Irma, personal communication, March 4, 2021). Sam also described his experience with learning about growth mindset from a set of videos.

I guess my first year teaching it became fashionable for schools to show, like, a three-minute or a five-minute video about growth mindset, but it was never actually implemented in the culture. Oh, this is great, but like many things, just because it’s popular doesn’t mean you can really go down, see the marrow of what it is and how to incorporate it effectively. (Sam, personal communication, April 19, 2021)

Mia expressed her frustration at her experience in learning about growth mindset. She stated, “So definitely talked about it in a PD on the school level, I feel like we’ve addressed it. I mean, we’ve talked about it; do they always give us the best options for growth mindset beyond that?” (Mia, personal communication, April 14, 2021). She went on to say that she believes it is effective, but teachers are not given the best skills for implementing it.

Karen readily admitted with a chuckle that she learned about growth mindset on her own. She recalls that she heard about growth mindset from an offhand conversation between two co-workers. “I had no idea what it was” (Karen, personal communication, April 14, 2021). It was not until a few years later that she was in a PD where the presenter kept repeating, over and over, the words “growth mindset.” In her frustration, she began the journey of learning on her own.

Charlotte was a bit more direct in relating her experience with learning about growth mindset:
A lot of the time it’s just input, input, input. We’re sitting in a meeting and that’s not growth mindset for anyone. So, I feel like major balls have been dropped on the part of our administration in terms of developing this if this is something they want us to implement in the classroom. (Charlotte, personal communication, March 3, 2021)

She believes that having professional development is important to learning about growth mindset. Margret agreed. “It’s not been anything for that, other than discussions that we’ve had maybe in PD. We’ve talked maybe about it, but doubtful, and certainly not in our administration level; I mean, he’s told us about it” (Margret, personal communication, April 14, 2021).

Teachers will often suggest that more professional development is needed in order to implement a new strategy in their classrooms. These teachers all agree that for students to get the full effect of growth mindset, the teachers need to first be fluent in how to use it properly. Only then can they convey the true intention of the method or strategy to their students for maximum effectiveness.

Response to research question 3. How do the teachers feel that they are supported in using the growth mindset model for the long term? Teachers often do not want to expose the notion that they are not provided with the needed support in utilizing a new method or program. The theme of ongoing professional development and support emerged throughout the interviews.

Participants pointed out that for the most part there is little to no support for teachers who are using growth mindset in the classroom. As much as they were attempting to use growth mindset, they still felt as if the administration did not provide the necessary support for them. What support they did receive came from their colleagues.

Olivia was the first to suggest that there was no support coming from the principal. He did allow them to create the curriculum in the freshman seminar class where growth mindset was
taught. This class was taught by a team of teachers, which is where she got her support (Olivia, personal communication, February 26, 2021). Abigail was another participant who expressed her feelings about the lack of support. “I haven’t, there was a lot of support for social emotional learning, but if teachers want to focus on this, that’s their choice and prerogative. But there is not a message of support coming from administration, no” (Abigail, personal communication, March 5, 2021).

Evelyn also stated that she felt the lack of support from the administration. She sarcastically related her experience:

I was like, “Are you kidding me? Support, training, what? Wait, what’s that?” I would say 99.5% I have had to figure out on my own. And so, the support I’ve had is from other teachers and other groups out there posting and sharing about it and commenting on it. We may have had it briefly mentioned in a staff development at some point along the way. (Evelyn, personal communication, April 12, 2021)

Charles related his experiences with support. He told the story about when he was at a different district and the support he received there; however, since moving to this district, he stated that there really has not been the support. “This is a bigger district; things tend to get lost in the cracks because there’s so much more going on, so much more to manage” (Charles, personal communication, April 13, 2021). Karen also felt as though the district let her down in terms of support. She stated, “As a teacher you are thrown into this and you are told, ‘This is what it is.’ And you must use it without even been told how to use it, how it’s going to affect you. So most of my learning about it has been on my own” (Karen, personal communication, April 14, 2021).
Overall, the participants believed that with more support, using growth mindset in the classroom would make help students be more effective in their overall learning. They believe that without support it is hard for the teachers to implement the growth mindset model effectively. With lack of support, there is no continuity of practice. Each participant is practicing what they believe is the right way to implement growth mindset.

**Summary**

This chapter presented a description of the lived experiences of fourteen high school teachers who teach in an urban district in northeast Ohio. Detailed descriptions of the study’s participants were followed by the description and explanations of three emergent study themes: Building Relationships, Student Motivation, and Ongoing Professional Development and Support. Three data sources contributed to the triangulation of the data to ensure reliability and validity (Creswell & Poth, 2018). Through the transcription of open-ended interviews, a focus group discussion, and classroom observations, the researcher identified and described these three themes.

The three research questions were also answered in this chapter.Participants described their experiences about using growth mindset to help with student achievement, motivation, grit, and determination. Participants also described their experiences with learning how to use growth mindset in the classroom and the continued support that they have received or not received in the continuation of using growth mindset with their students.
CHAPTER FIVE: CONCLUSION

Overview

The use of growth mindset has been growing in popularity in the urban classroom. The problem identified in this study is that many teachers may be unfamiliar with the growth mindset model of teaching and therefore are reluctant to utilize this model to benefit their students. The purpose of this transcendental phenomenological study was to describe the experiences that high school teachers have with the implementation of the growth mindset model in one urban high school district in northeast Ohio on student achievement, motivation, and grit and determination.

Through the framework of Dweck’s (1999) theory of growth mindset and motivation and the expectancy-value theory of motivation (Wigfield & Eccles, 2000), this chapter examines a summary of each research question. The summary of each research question provides a narrative that will connect the experiences of the participants to the themes that emerged. Along with the findings of this study as they relate to the three themes, there is a discussion of the implications in light of the related literature.

Summary of Findings

Three themes emerged from this transcendental phenomenological study of urban high school teachers who have used growth mindset with their students. Through the in-depth analysis of the interviews, focus group discussion, and classroom observations, findings were triangulated to ensure a reliable and valid depiction of the participants’ experiences (Creswell & Poth, 2018). The study wrapped itself around three research questions meant to encourage responses that would include data in order to inform a vibrant and detailed narrative of the
participant’s experience. The following discussion provides an explanation of how the responses to each of the research questions influenced the findings of this study.

**Research Question 1**

How do the teachers feel the growth mindset model helps students with motivation, grit, and achievement?

All participants, in describing their experiences with teaching growth mindset to students, believe that using this model does, to varying degrees, help with motivation, grit, and achievement. A few of the participants stated that it was more difficult using the growth mindset model to reach the students in “our densely populated, urban student body”. Some stated that they believed that for “our students,” using growth mindset enhanced the educational experience as they were teaching using the PBL model. They stated that their school focused heavily on growth mindset as it is a key proponent of project-based learning.

This researcher found it interesting that while many of the participants claimed to have used growth mindset, in actuality they lacked some of the understanding of the whole idea of growth mindset. Despite this revelation, they were still trying to make sure that students understood the concept that in order for them to grow they had to stretch their brains. It became apparent that the participants knew this model would be successful to increase student motivation, grit, and achievement.

**Research Question 2**

What preparations are given to teachers to ensure that they are teaching the growth mindset model based on best research practices?

Without exception, all the participants agreed that there is a lack of preparation for teachers to teach growth mindset effectively. Many learned about growth mindset on their own,
while others learned it from colleagues or partner teachers. Only a couple of the participants had any significant training in using growth mindset, and even those who did suggested that this training was a “one and done” type of training. The general feeling was that they would have liked to have more training in using growth mindset. The participants agreed that in order for them to see any results from using growth mindset, they would need more training. Many felt that in order for growth mindset to be used correctly and with effectiveness it needed to be developed as a school-wide program that would create a school culture of growth.

**Research Question 3**

How do the teachers feel that they are supported in using the growth mindset model for the long term?

The participants described their feelings about this in various ways. They all had strong feelings about the lack of support they received from their various administrators. The participants smirked, laughed, raised their eyebrows, and rolled their eyes in response to this question. The response “What support?” was the most common one that was heard. This was a tender subject since the participants did not want to speak negatively; however, they felt as though they needed to be heard. The common theme was that all the participants wanted more training. They felt as though they needed more professional development, more check-ins, and more weekly meetings to ensure that they were all learning and on the same page when it came to ensuring that this was done correctly and effectively. Not one said that they had had enough professional development on the subject of growth mindset. It became apparent with their feelings about professional development that they believed that growth mindset was valuable and needed to be given priority if they were to see student motivation, grit, and achievement grow in the students.
Discussion

The purpose of this transcendental phenomenological study was to describe the experiences of fourteen high school teachers who have taught growth mindset to students in an urban district in northeast Ohio. Empirical and theoretical literature was used in the initial formation of this study while the identified themes, Building Relationships, Student Motivation, and Ongoing Professional Development and Support, served to center the connections to the research and the themes used to shape this study.

Empirical Literature

While there have been studies that have looked at teaching growth mindset to students, the current research shows that there is a definite connection between teachers’ perceptions of the effectiveness of using growth mindset and the actual outcome in regards to student achievement, motivation, and grit.

Growth mindset encourages achievement. Several studies examined the notion that implicitly teaching growth mindset to students does in fact encourage motivation and grit. Providing students with specific interventions to increase their understanding of the growth mindset will improve academic performance (Andersen & Nielson, 2016; Blackwell et al., 2007; Miller, 2019; Wilson & Linville, 1985). Mills and Mills (2018) suggested that if the interventions are intentional they can have significant academic success. They recommend teaching students a growth mindset and how the brain develops with challenge. Teachers should ensure that students feel as if they belong in the classroom and encourage collaboration. Teachers must challenge the myth that raw ability is what matters the most (Mills & Mills, 2018). This study corroborated this idea. This current study did show that teachers do believe
that utilizing growth mindset with their students does in fact increase achievement, motivation, and grit.

In fact, the participants gave an average score of 3.7 out of 5 in terms of growth mindset helping with achievement, a 3.3 out of 5 for helping with motivation, and a 3.6 out of 5 for helping with grit and determination. However, this study did show that teachers believe this at varying levels due to several obstacles that are faced by the students daily in the urban environment. Table 5 shows the overall rating each teacher gave to student achievement, motivation, grit and determination.

Table 5

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<th>Growth Mindset: Achievement, Motivation, Grit, and Determination</th>
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<td>Gabriella</td>
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<td>Robert</td>
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<td>Charles</td>
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<td>Irma</td>
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<td>Allison</td>
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Growth mindset increases grit. Duckworth et al. (2007) and McGlynn and Kelly (2017) suggested in their study that if teachers can figure out how to influence students after they have had a failure, there could be a chance that student might then develop grit and perseverance. This study showed that teachers believed that students need to be able to experience failure for
grit and growth mindset to be developed. This current study went even a step further in that four of the participants explicitly stated that failure needed to happen inside the classroom environment, but that it was the teacher’s job to make the classroom a safe place for them to have those experiences.

Growth mindset enhances motivation. Hsieh (2014) and Murayama et al. (2015) concluded that the enjoyment students get from learning a new skill will trigger their internal motivation and create the mindset that they have the ability. The participants categorically claimed that motivation was lacking in their students. Many cited examples of students that “just don’t care.” The participants all agreed that the urban student, unless they learned motivation from home or earlier in their academic career, are just not going to develop motivation. It does not seem to matter how much they enjoy their learning. Creating a growth mindset is a key to students’ motivation, which was a conclusion that most of the participants had; however, they prefaced it by saying that growth mindset would only work if it was taught correctly and implemented as a school culture.

Student and teacher relationships. The theme of student–teacher relationships seemed to be a central one that ran through this study. Hendricks (2016) concluded that when it comes to a student’s self-efficacy, getting encouragement from teachers, parents, and peers whom they trust will go a long way in boosting their self-efficacy. Students are often not academically capable of making an evaluation of their own work, hence the reliance on others. Four of the participants explicitly stated that for a student to grow there needed to be a strong relationship between the teacher and the student. This was seen in the idea that if the student believes that they are safe and respected then they will more likely be motivated to learn and show growth. The other
participants hinted at the idea that this relationship created an environment that enabled growth and learning to occur.

**Theoretical Literature**

The first theory that guided this study was Dweck’s (1999) theory of motivation and growth mindset. Because teachers need to find ways to impact their students inside the classroom for academic achievement, the theory of motivation and growth mindset applies to this study as it seeks to try and discover ways in which teachers can understand and help students deal with the obstacles they face in the urban classroom. The participants corroborated this idea that teaching the students growth mindset does in fact help students with achievement, motivation, and grit. Developing a growth mindset has been shown to have many benefits for the student. Studies have shown that providing students with specific interventions to increase their understanding of the growth mindset will improve academic performance (Andersen & Nielson, 2016; Blackwell et al., 2007; Miller, 2019; Wilson & Linville, 1985). Researchers believe that if the interventions are intentional that they can have significant academic success (Mills & Mills, 2018). They recommend teaching students a growth mindset and how the brain develops with challenge. Teachers should ensure that students feel as if they belong in the classroom and encourage collaboration (Mills & Mills, 2018). This idea of student belonging in the classroom runs directly concurrent to the theme that emerged of building relationships.

The growth mindset model teaches students that intelligence is not a fixed quality (Aguilar et al., 2014). Intelligence can be nurtured through challenging tasks, and it can grow as long as one perseveres through hard work on those challenging tasks (Aguilar et al., 2014; Ng, 2018). The participants agreed that it is necessary for there to be rigorous tasks assigned since those encourage perseverance and grit.
On multiple occasions during the interviews, the participants suggested that “our students,” speaking about the low-income urban student, have greater difficulty understanding motivation and growth mindset. They felt that due to the many obstacles that are faced by these students, more priority should be placed on teaching growth mindset. Destin et al. also suggest that students from lower SES will have a greater risk for lower achievement due to the lack of opportunities afforded them (2019). It might be more detrimental for students from lower socioeconomic status to have a fixed mindset since they have fewer educational opportunities (Destin et al., 2019).

Participants had conflicting beliefs about the idea of student grit. They all believed that it is essential to promote grit in the classroom; however, they suggested that it becomes difficult when students have had many challenges and failures in their academic and nonacademic careers. There are those who believe that interventions that are put in place to increase students’ grit without also increasing students’ belief in their own abilities in the classroom will not likely bring about the expected success in core academic subjects (Usher et al., 2019). Student perseverance and grit must be accompanied by a belief in their own academic abilities.

The second theory steering this study was the theory of expectancy-value (Atkinson, 1957; Eccles et al., 1983; Wigfield, 1994; Wigfield & Eccles, 1992). This belief system will determine whether one will overcome the challenges and face them head on with persistence, motivation, and resilience or give up before completing the task. This is especially important for socioeconomically disadvantaged high school students as they face challenges which can lead to many of them giving up and dropping out of school (Campbell, 2003; Rumberger, 2020). Participants revealed that this was especially true for their students in the inner-city.
Many of the participants revealed that students often do not try to be successful or are not motivated in the classroom because they do not see the value in what they are learning. The challenge for many students comes from having so many obstacles to face even before getting into the school building each day. The students often do not find the need or the desire for an education. They just do not see the value of spending their time in the classroom. The participants all believed that to have any impact on their students they need to first show them the value of what they are expected to accomplish in the classroom. Expectancy-value theory highlights the need for educators to be cognizant of what students see as valuable, which will then in turn underscore the need for students to believe that they are capable of certain tasks even if they do not value them. If a student expects to do poorly on a task, then they will not see the value in doing that task and risk sinking into a false narrative that they are not capable of the task, thereby operating within a limited mindset. They will not even try to accomplish the task. However, if a student sees value in the task, they will try harder to accomplish it, and thereby fulfill the growth mindset narrative that states the brain can grow and develop.

The third theory that can be attributed to this study is that of motivation or Self-Determination. Motivation can be defined as inspiration to act and move toward a specific goal or end. Those who don’t feel the need to move in a certain direction would then be considered unmotivated students in the classroom. Researchers desire to understand what makes students want to learn. Several research studies have focused on how students are intrinsically motivated to complete a task. These studies showed that positive performance feedback increases intrinsic motivation (Deci, 1971; Harackiewicz, 1979) and the opposite also holds true: negative performance feedback diminished motivation (Deci & Cascio, 1972). Due to the very fact that many tasks in school are not designed to be interesting, creative, or enjoyable, the question is
how to get students to value and motivate themselves to complete these tasks (Ryan & Deci, 2017). Participants agreed that motivation was a key component to creating a successful growth mindset, but that students often times lack the intrinsic motivation needed to complete the required tasks. Many suggested that if students did not develop the intrinsic motivation early in their school career then developing it in their later high school classes is an uphill battle.

The fourth theory framing this study was Bandura’s (2001) social cognitive theory. This theory revolves around the idea that one can produce a desired effect through the actions that one takes in their lives. How students feel about their ability to learn will then reflect on their achievement. How teachers relate to students can also have a positive influence on their achievement. Participants corroborated this theory by suggesting that the student–teacher relationship is one of the main keys in how students feel about themselves and their learning. Bandura (1994) suggested that a strong sense of self-efficacy enhances the human experience by the very fact that if one has a high self-efficacy they approach difficult tasks as ones to be mastered rather than to be avoided. On the other hand, those who have a weak sense of self-efficacy approach difficult tasks in quite the opposite way. They tend to avoid difficult challenges and they have little faith in their capabilities.

One of Bandura’s self-efficacy belief sources is informed by emotional and physiological states such as anxiety, stress, fatigue, and mood. Strong emotional reactions to school-related tasks can provide cues to expected success or failure. High anxiety can undermine self-efficacy (Bandura, 1997; Usher & Pajares, 2008). A bad mood may lead individuals to misconstrue their mistakes as signs of inability, which in turn lowers their self-efficacy (Seligman, 1990). A good mood, however, raises self-efficacy beliefs, motivation, and subsequent achievement, initiating a reciprocal process that enhances well-being (Usher &
Pajares, 2008). This can be directly related to the student–teacher relationship, where the teacher is responsible for establishing the mood in the classroom. Participants all agreed that building this relationship is one of the most important measures that a teacher can take to create the environment of achievement, motivation, and grit.

**Implications**

Several theoretical, empirical, and practical implications emerged during the course of this qualitative study. Implications for educational administrators, professional learning communities, and collaborative teaching practices appeared through the rich descriptions of the teachers who teach growth mindset in the urban setting. Each narrative provided a glimpse into the phenomenon, which could be used to promote the use of growth mindset in the classroom.

**Theoretical Implications**

This study aids in the advancement of Carol Dweck’s (1999) theory of growth mindset by providing teachers and administrators a deeper look at the advantages and necessity of using this theory in the urban environment. With specific interventions students have been able to increase their understanding of the growth mindset which in turn will significantly improve their academic performance (Andersen & Nielson, 2016; Blackwell et al., 2007; Miller, 2019; Wilson & Linville, 1985). Researchers have spent plenty of time teaching students that their brains were like a muscle and that they were malleable—they would stretch and grow the more that the students learned (Aronson, Fried, & Good, 2002; Aronson & Inzlicht, 2004; Conyers & Wilson, 2020). There seems to be a lack of motivation and grit with student in the inner city. As soon as students encounter a challenging situation, many quit (Hochanadel & Finamore, 2015). While studies have been done around the idea of using growth mindset, no known studies focused on this theory for the urban classroom and how educators feel about its effectiveness. This study
provides an overview of teachers’ perception of the effectiveness of using growth mindset with high school students in order to increase achievement, motivation, and grit. The current study promotes the theory of growth mindset by confirming that inner-city educators believe that using growth mindset with their students does in fact increase their achievement, motivation, and grit.

This study also aids in the advancement of the expectancy-value theory by confirming that educators in the urban environment have an uphill battle to climb in the classrooms by motivating students to value the tasks that are assigned. The participants in this study commented more than once that they struggle with getting students motivated to complete their assignments as they do not see the value in them. Those that believe the theory of expectancy-value argue that individuals’ choice, persistence, and performance can be explained by what they believe about how well they will do on a specific activity and how much they believe the activity is valued (Atkinson, 1957; Eccles et al., 1983; Wigfield, 1994; Wigfield & Eccles, 1992).

Helping students see value is especially important for socioeconomically disadvantaged high school students as they face many challenges which can lead to many of them giving up and dropping out of school (Campbell, 2003; Rumberger, 2020).

Efficacy beliefs play an important role in shaping how we lead our lives. They can decide what activities we engage in and what paths we choose to follow. These beliefs also play a key factor in the development of the competencies that mark our internal dialogue about who we say we are. A person who sees themselves one way in a particular area, skill-wise, may behave differently than another depending on their efficacy belief (Bandura 1997, 2001). This study shows that students have a great need for teachers that will build those strong relationships with them. Students tend to listen to the voices in their head about themselves unless a teacher
can come alongside of them and help them change the dialogue. The participants could not stress enough the importance of developing those relationships with their students.

**Empirical Implications**

This study’s findings help to underscore the importance for administrators and educators alike to prioritize using Dweck’s (1999) theory of growth mindset in the urban classroom. Students need to be provided with another tool in their wheelhouse that will move them along the path of success. Administrators are often well intentioned when it comes to providing educators with needed professional development; however, educators are frustrated by the lack of meaningful sessions that will encourage student achievement in the classroom. The participants’ experiences support the idea that they would welcome any professional development that centered around growth mindset if in fact it would help them motivate and encourage their students toward success. It is within the educator’s power to provide a framework for demonstrating the value of each task, and therefore it is critical for all students to believe they are capable to accomplish and value each task even if they do not believe that they will be successful.

This study stressed the need for teachers and administrators alike to place importance of building relationships with students. This is essential. Getting encouragement from teachers, parents, and peers whom they trust will go a long way in boosting the student’s self-efficacy (Hendricks, 2016; Usher & Pajares, 2008). This study demonstrates that educators recognize the importance of creating an environment of growth, sharing the value of the student’s work and effort, and building those relationships.
Practical Implications

This study supports the idea that students in the urban setting often lack motivation and determination to complete the tasks that are assigned to them. Students come to school already facing many challenges just to get to school, whether it is lack of food, trouble at home, or social issues (Chang & Romero, 2008; Smith & Medalia, 2015). Teachers need to have a practical way to encourage students who may struggle with achievement, motivation, and grit. Researchers believe that if the interventions (i.e., growth mindset) are intentional they can have significant academic success (Mills & Mills, 2018). What these researchers have found is that socioeconomic status (SES) levels help determine the contexts of students’ experiences and how they see themselves and the world around them. This leads them to understand the opportunities that might be available to them (Destin et al., 2019). Destin et al. also suggest that students from lower SES will have a greater risk for lower achievement due to the lack of opportunities afforded them (2019). This research was significant because not only did it shed light on the fact that teachers believe that growth mindset is effective for their urban student population, but that they believe that more professional development is needed for it to be implemented correctly and for there to be consistency as a whole staff across the school. This study can encourage both teachers and administrators to begin the process of developing a plan to implement growth mindset with their students and to create a school culture that encourages achievement, motivation, and grit.

Delimitations and Limitations

The first delimitation of this study was that participants needed to have taught for at least three years. Originally, the requirement was ten years; however, after sending out the initial survey, the responses limited participation in the study. Many of the participants that had taught
using growth mindset had taught under ten years. What was discovered early on was that teachers who had taught over ten years had limited experience with or had even heard of growth mindset. Many of the younger teachers who had taught less than ten years had experience with growth mindset from a college or graduate course.

Another delimitation was that teachers must have taught growth mindset with their students in the current urban district in northeast Ohio. It was imperative that these teachers have experience with low-income urban students. Teachers outside of the current district do not understand the challenges and obstacles that many of these students face on a daily basis. The final delimitation was that I was unable to use my own experiences with growth mindset as I have prior experience in this area. I took the time after each interview to journal and limit my own bias.

The limitations to this study were the number of schools represented in this study. Originally there planned to be several schools where I could recruit candidates; however, several of the administrators did not respond to my request. This lack of respondents limited the potential candidate pool. The participants were from many different content areas but were not evenly divided by gender. More female teachers responded to the initial survey, which may cause limitations since female teachers may find it easier to create the student–teacher relationship.

**Recommendations for Future Research**

Even after completing this study, there are still significant gaps in the body of research related to using growth mindset in the urban classroom. Because only fourteen teachers participated in the study, this represents just a fraction of the teachers in a district of over 3,500 educators. Although the participants demonstrated a vast knowledge of growth mindset and its
effectiveness, they were still limited on their knowledge of specific strategies they could use. Further studies are needed that will go more in-depth into the specific strategies necessary to produce the growth mindset in students in the urban environment. Future studies should expand on the participant requirements to include teachers that have taught in multiple districts, including rural, suburban, and urban, in order to get a wider variety of input.

A definite gap still exists in the research concerning professional development for teaching growth mindset to underprivileged urban students. Studies that do exist tend to promote the general idea of professional development that encourages strategies that impact the classroom; however, those do not specify the need for specific professional development in the area of growth mindset to help urban students with achievement, motivation, and grit.

Finally, more research is recommended in the area student–teacher relationships to encourage growth mindset. Research does suggest that teachers need to develop those relationships and research suggests that growth mindset is effective; however, the relationship between growth mindset and student–teacher relationships needs to be explored.

**Summary**

The identified problem is that many teachers have a limited understanding of the growth mindset model of teaching and therefore are reluctant to utilize this model to benefit their students. Many teachers are asked to utilize the growth model with their students in order to increase student achievement, motivation, and grit. This study is personal due to the fact that I have been asked to use growth mindset with my students but was frustrated due to the lack of training in utilizing this model with my students. Teachers are asked to use certain methods and models in their classrooms without being given the proper training, which often leads to frustration and a lack of persistence on the part of the teacher. Without proper training using the
method, it often does the teachers a disservice to raise the expectations for them without the proper support. Teachers spend time, money, and effort to encourage their students daily. They do not hesitate to sign up for professional development if they know that it will benefit their students. It is essential that they have the resources necessary to accomplish what is expected of them in the classroom. A good place to start would be to include professional development on the theory of growth mindset and how to utilize this model in the classroom.
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Appendix A: Introductory Email to School Administrators

Dear Administrator,

My name is Heidi Eveland. I am a doctoral candidate at Liberty University. I am also a teacher at John Marshall High School in Cleveland, Ohio. I am conducting a qualitative research study concerning the perceptions of teachers about their experiences with teaching the growth mindset model in their classroom. I am requesting the opportunity to present my research plan to you with the hope that you will grant permission for me to include your staff in my research. Just for peace of mind, your school and the students would have pseudonyms in my dissertation to protect the identity of everyone. Thank you in advance for taking the time to read my email. I will reach out to you in a few days to set up a conference call to discuss my research and to answer any questions you may have.

Kindly yours,

Heidi Eveland
Appendix B: IRB Approval Letter

January 27, 2021

Heidi Eveland
Rick Bragg

Re: IRB Exemption - IRB-FY20-21-268 A PHENOMONOLOGICAL STUDY OF HIGH SCHOOL TEACHERS’ EXPERIENCES WITH GROWTH MINDSET

Dear Heidi Eveland, Rick Bragg:

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

Category 2. (iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

Your stamped consent form can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. This form should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office
Appendix C: Consent to be Interviewed

**Title of the Project:** A phenomenological study of high school teachers’ experiences with growth mindset in relation to student achievement, motivation, and grit.

**Principal Investigator:** Heidi L Eveland, Doctoral Candidate, Liberty University

<table>
<thead>
<tr>
<th>Invitation to be Part of a Research Study</th>
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<tbody>
<tr>
<td>You are invited to participate in a research study. In order to participate, you must be a high school teacher, in the northeast Ohio district, who has taught using the growth mindset model. Taking part in this research project is voluntary.</td>
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Please take time to read this entire form and ask questions before deciding whether to take part in this research project.

<table>
<thead>
<tr>
<th>What is the study about and why is it being done?</th>
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<tr>
<td>The purpose of the study is to describe the experiences high school teachers have with the implementation of the growth mindset model in the urban high school on student achievement, motivation, and grit. This study will hope to discover themes around teachers’ experiences with using the growth mindset model.</td>
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<tr>
<th>What will happen if you take part in this study?</th>
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<tr>
<td>If you agree to be in this study, I would ask you to do the following things:</td>
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<tr>
<td>1. Participate in an interview that will last between 45 minutes to one hour. This interview will be recorded.</td>
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<td>2. Be willing to be observed in your classroom for approximately one hour.</td>
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<td>3. Participate in a focus group with other teachers to answer follow-up questions. This should last approximately one hour. The focus group will be recorded.</td>
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<tr>
<th>How could you or others benefit from this study?</th>
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<tr>
<td>The direct benefit participants should expect to receive from taking part in this study is a greater understanding of whether or not the growth mindset, when applied to high school students, will improve their achievement, motivation, and grit.</td>
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<th>What risks might you experience from being in this study?</th>
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<tr>
<td>The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.</td>
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<th>How will personal information be protected?</th>
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The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records. Data collected from you may be shared for use in future research studies or with other researchers. If data collected from you is shared, any information that could identify you, if applicable, will be removed before the data is shared.

- Participant responses will be anonymous. Participant responses will be kept confidential through the use of pseudonyms/codes. Interviews will be conducted in a location where others will not easily overhear the conversation.
- Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Interviews/focus groups will be recorded and transcribed by the researcher. Recordings will be stored on a password locked computer for three years and then erased. Only the researcher will have access to these recordings.
- Confidentiality cannot be guaranteed in focus group settings. While discouraged, other members of the focus group may share what was discussed with persons outside of the group.

**Is study participation voluntary?**

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University or Cleveland Metro School District. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

**What should you do if you decide to withdraw from the study?**

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you, apart from focus group data, will be destroyed immediately and will not be included in this study. Focus group data will not be destroyed, but your contributions to the focus group will not be included in the study if you choose to withdraw.

**Whom do you contact if you have questions or concerns about the study?**

The researcher conducting this study is Heidi Eveland. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at 440-214-4344 or **hleveland@liberty.edu**.

**Whom do you contact if you have questions about your rights as a research participant?**

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at **irb@liberty.edu**.
By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

_I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study._

☐ The researcher has my permission to audio-record/video-record me as part of my participation in this study.

____________________________________
Printed Subject Name

____________________________________
Signature & Date
Appendix D: Interview Questions

1. Please introduce yourself.

2. Please talk me through your personal theory about student motivation and grit.

3. Please describe your views about the growth mindset model.

4. Describe your experience with learning about this model and how you implemented this model in your classroom.

5. Describe your most significant experience you had with using the growth mindset model.

6. What made that experience significant?

7. Are there any other experiences related to using the growth mindset model that you would like to share?

8. On a scale of one to five, one being ineffective and being effective, how effective would you say the growth mindset model is in helping with student achievement?

9. Explain why you gave that rating.

10. Using the same rating, how would you say that growth mindset helps with student motivation?

11. Explain why you gave that rating.

12. And finally, using the same rating, how would you say that growth mindset encourages student grit and determination?

13. Explain your rating with this.

14. Tell me about the support you received in learning how to use this model.

15. Tell me about any continued support you have received as you have implemented this model.
16. If you were a principal asking your staff to use this model, what would you do to ensure that it is implemented correctly?

17. What advice would you give a novice teacher getting ready to begin the process of implementing the growth mindset model with their students?

18. If you continue using this model, is there anything you would change going forward?

19. Before we end, what else do you believe is important for me to know about your experience using the growth mindset model?
Appendix E: Field Notes/Observation Matrix

<table>
<thead>
<tr>
<th>Field Notes</th>
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<tbody>
<tr>
<td>Date:</td>
</tr>
<tr>
<td>Site:</td>
</tr>
<tr>
<td>Activity:</td>
</tr>
<tr>
<td>Participants:</td>
</tr>
<tr>
<td>Length of Observation:</td>
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<td>Summary:</td>
</tr>
<tr>
<td>Narrative:</td>
</tr>
<tr>
<td>Questions:</td>
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<tr>
<td>Things to follow up on:</td>
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from http://www.elmsa.org/
## Appendix F: Demographics of Participants

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<tr>
<th>Pseudonym</th>
<th>Gender</th>
<th>Race</th>
<th>Age</th>
<th>Subject(s) Taught</th>
<th>Years’ Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sam</td>
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<td>English</td>
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<tr>
<td>Olivia</td>
<td>F</td>
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<td>English</td>
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# Appendix G: Identified Themes and Related Codes

<table>
<thead>
<tr>
<th>THEMES</th>
<th>RELATED CODES</th>
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| Theme 1: Building Relationships | • Build Procedures  
• Care  
• Clear Expectations  
• Constructive Feedback  
• Create Success  
• Don’t Care  
• Don’t Lose Passion  
• Failure  
• Hard Work  
• Intentional  
• Learning Environment  
• Messing Up  
• Model  
• Overcome Obstacles  
• School Culture  
• Show Personality  
• Social Emotional Learning Activities  
• Student Buy-In  
• Student Opportunity  
• Student Ownership  
• Talking about Growth Mindset  
• Trust |
| Theme 2: Student Motivation | • Determination  
• Elementary School  
• Extrinsic Motivation  
• Extrinsic Motivation Leads to Intrinsic  
• Failure  
• Fixed Intelligence  
• Frustration Level with Barriers  
• Grit Is Perseverance  
• Grit Varies  
• Growth Mindset Develops Grit  
• Hard to Teach Motivation  
• Hard Work  
• Lack of Success  
• Motivated by Learning  
• Motivation from Home  
• Motivation Varies |
• Negative Mindset
• Persevere
• Power of Yet
• Reset Thinking
• Willing to Try

Theme 3: Ongoing Professional Development
• Balls Dropped
• Implementation
• Intentional
• Little Support
• Make It Fit the School
• No Support
• Principle Participates
• Process of Teaching
• Project-Based Learning
• Reflection
• Rigorous Work
• School Culture
• Self-Taught
• Staff Buy-In
• Staff Experience
• Teacher Input
• Teacher Leaders
• Team Teachers
• Value
• Weekly Meetings
Appendix H: Reflective Journal Excerpt

Journal: 5/12/2021 (Allison)

My assumption after several of the interviews is that most of the teachers have a decent understanding of the nuances of using growth mindset. And up until this point that has been the case. Allison, however, was different. She had a very in depth understanding of growth mindset. She had had many training on this subject and uses it regularly with her students. I need to be careful not to assume that all the participants are familiar with and have a decent working knowledge of this model.
Appendix I: Growth Mindset: Achievement, Motivation, Grit, and Determination

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<th>Grit and Determination</th>
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Appendix J: A hierarchical model of approach and avoidance achievement motivation


- Mindset
  - Mastery
    - Performance - Approach
      - Emotional Engagement
    - Performance - Avoidance
      - Cognitive Engagement
      - Behavioral Engagement