Running Head: PARENT’S MINDSET OF THEIR CHILDREN

Parent’s Mindset of their Children’s Abilities Impacts the Development of Growth Mindset in Students

by

Vanessa O. Barattini

AN APPLIED PROJECT
Submitted in partial fulfillment of the requirements for the degree of
MASTER OF EDUCATION IN SPECIAL EDUCATION
VANCOUVER ISLAND UNIVERSITY

We accept the Applied Project as conforming to the required standard.

Amanda McKerracher, PhD Applied Project Faculty Supervisor 04/20/2017
Faculty of Education,
Vancouver Island University

Harry Janzen, Dean, Faculty of Education, Date
Vancouver Island University

Copyright 2017
Abstract

The relationship between student perception of ability and their academic success rate is a well-known discussion topic within the education field. As the principles of growth mindset have become more prominent practice in teaching practice, there has also been a large focus on asserting that how teachers respond to their student’s success or failure can impact how their students approach their academic work. However, there has not been much research conducted on how parental influence can impact student mindset, with particular focus on how a parent’s mindset of their child’s ability affects the mindset that their child creates for themselves. Through extensive review of important terms and definitions relating to growth mindset and intelligence, the current research literature on growth mindset, along with evaluations on teacher and parental influence on children’s behaviour, the paper sought to prove that it is highly likely that parents are also a major factor in whether or not their children build a growth mindset. The evidence based created through the research allowed for the creation of an applied project, which is a book on growth mindset created for parent and child to engage with together. The purpose of having both parent and child read the book together was so that they could create a co-growth mindset that parents can further help their children develop.

Keywords: growth mindset, fixed mindset, parents, teachers, implicit intelligence, explicit intelligence, motivation, resiliency, learned helplessness, praise, effort, self-efficacy

Acknowledgements

There are many people whom I wish to acknowledge for their continued support throughout the Masters of Education in Special Education program. Firstly, I am gratefully to Vancouver Island University for providing a program that was not only informative and relevant to the education field, but that allowed me to continue full time work while completing my studies online. There were also many wonderful professors provided by the university who were supportive through the program. Amanda McKerracher, my advisor, was one of the faculty members who helped give direction to my research and improve my stylistic delivery. Gail Krivel-Zacks is another faculty member who has been supportive since my first semester in this program. Gail helped me narrow down my focus before I began my research and acted as my second reader to make sure that my finished product reflected my utmost effort. Thank you to all who supported me through the last two years. I am proud of what I have been able to produce with the support I was so kindly given.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>ii</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>iii</td>
</tr>
<tr>
<td>Chapter 1 - Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Explicit vs. Implicit Intelligence: Definition</td>
<td>1</td>
</tr>
<tr>
<td>Explicit Intelligence.</td>
<td>2</td>
</tr>
<tr>
<td>Implicit Intelligence.</td>
<td>2</td>
</tr>
<tr>
<td>Thought on Intelligence</td>
<td>3</td>
</tr>
<tr>
<td>Growth and Fixed Mindset: What are They?</td>
<td>4</td>
</tr>
<tr>
<td>Why is Growth Mindset Important to Education?</td>
<td>5</td>
</tr>
<tr>
<td>Factors that Affect Mindset: Definitions</td>
<td>6</td>
</tr>
<tr>
<td>Motivation</td>
<td>6</td>
</tr>
<tr>
<td>Resiliency versus. Leaned Helplessness</td>
<td>7</td>
</tr>
<tr>
<td>Resiliency.</td>
<td>7</td>
</tr>
<tr>
<td>Learned Helplessness.</td>
<td>9</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>10</td>
</tr>
<tr>
<td>Parental Influence</td>
<td>11</td>
</tr>
<tr>
<td>Synthesis</td>
<td>13</td>
</tr>
<tr>
<td>Purpose of Project</td>
<td>14</td>
</tr>
<tr>
<td>Chapter 2 – Literature Review</td>
<td>15</td>
</tr>
<tr>
<td>Introduction</td>
<td>15</td>
</tr>
<tr>
<td>Does Adjusting from Fixed to Growth Mindset Actually Help Student</td>
<td>15</td>
</tr>
<tr>
<td>Achievement?</td>
<td>15</td>
</tr>
<tr>
<td>Contradicting Evidence</td>
<td>16</td>
</tr>
<tr>
<td>Supporting Research</td>
<td>19</td>
</tr>
<tr>
<td>Why is Parent Influence Important to the Creation of Growth Mindset?</td>
<td>23</td>
</tr>
<tr>
<td>Parents Impact on Student Resilience</td>
<td>23</td>
</tr>
<tr>
<td>Teachers and Mindset Affecting Student Performance</td>
<td>24</td>
</tr>
<tr>
<td>A Parent’s Mindset and Resulting Interactions with their Children: The</td>
<td>28</td>
</tr>
<tr>
<td>Gaps in Research</td>
<td>32</td>
</tr>
<tr>
<td>The Current Project</td>
<td>32</td>
</tr>
<tr>
<td>Contributions to the Field</td>
<td>32</td>
</tr>
<tr>
<td>Chapter 3 – Considerations for Implementation of the Project</td>
<td>34</td>
</tr>
<tr>
<td>Creation of the Growth Mindset Book</td>
<td>34</td>
</tr>
<tr>
<td>What is Growth Mindset</td>
<td>34</td>
</tr>
<tr>
<td>Why is Growth Mindset Important</td>
<td>35</td>
</tr>
<tr>
<td>Who Can Help Create a Growth Mindset in Children</td>
<td>36</td>
</tr>
<tr>
<td>Steps for Helping Children Grow a Growth Mindset</td>
<td>36</td>
</tr>
<tr>
<td>Step One.</td>
<td>37</td>
</tr>
<tr>
<td>Step Two.</td>
<td>37</td>
</tr>
</tbody>
</table>
Step Three--------------------------------------------------------------38
Final Pages-------------------------------------------------------------38
Chapter 4 – Reflection--------------------------------------------------39
References---------------------------------------------------------------41
Appendix-----------------------------------------------------------------47
CHAPTER ONE

Introduction

Recently within the field of education, there has been increased interest about how student mindset can impact the way students approach challenges and view their success and failures (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988). Mindset, briefly defined, refers to how one perceives their intelligence and their ability to acquire new knowledge (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988). The two different types of mindset will be further defined later in this chapter. Researchers have explored how educators can work towards promoting and teaching ideal mindsets, encouraging students to take on academically challenging work and changing thoughts around what constitutes success (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988; Mueller & Dweck, 1998). While there is a great deal of research on the impact of teachers on student mindset, research on the impact of parents is limited (Mueller & Dweck, 1998; Moorman & Pomerantz, 2010). Therefore, the current project will explore the relationship between parent and child mindset.

Explicit vs. Implicit Intelligence: Definitions

In order to successfully promote growth mindset in students, students must be able to distinguish between growth mindset and fixed mindset (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988; Mueller & Dweck, 1998). In doing so, students will be able to recognize when they are using self-talk, which are internal messages regarding performance, that may be counterproductive so that they can adjust to self-talk that promotes success (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988; Mueller &
Dweck, 1998). Below is an explanation about what implicit and explicit intelligence are, and how implicit intelligence relates to the mindset discussion.

**Explicit Intelligence**

Before exploring the different views of intelligence, it is important to first distinguish the two forms of it: implicit and explicit (Sternberg, 1985). Theories around the explicit forms of intelligence measure intelligence from standardized intelligence tests that compare people to one another relative to their performance (Sternberg, 1985). The goal of evaluating explicit intelligence is to determine what intelligence behaviour looks like (Sternberg, 1985). Indicators of high or low intelligence are referenced in terms of intelligence quotient (IQ) scores, which do not typically factor in more qualitative or personal measures such as socio-economic status, effort, and specific areas of strength or weakness (Sternberg, 1985).

**Implicit Intelligence**

When referring to implicit intelligence, Sternberg (1985) asserts that levels of intellect in this form “are based, or at least tested, on people’s conceptions of what intelligence is” (p. 31). The important difference between explicit and implicit concepts of intelligence is the source of the evaluation – external or internal. With the internal source of evaluation, it is possible for each person to have a slightly different view of their own capabilities (Sternberg, 1985). The difference between these views will become very important when discussing mindset, because the foundation of mindset research focuses on implicit theories. The intent of mindset theories and research is to help people understand the importance of creating a flexible view of intelligence in order
to maximize effort and improve upon their skillsets (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988; Sternberg, 1985).

**Thoughts on Intelligence**

Over the years, the discussion around whether intelligence is fixed or flexible has been a focus of debate (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988; Herrnstein & Murray, 1994; Sternberg, 1985). Herrnstein and Murray (1994) explored intelligence, particularly how to improve your explicit intelligence level through tangible efforts such as improving diet or educational exposure. Within the research, other factors that affect intelligence were noted, such as those that are not within an individual’s control (e.g., being born into wealthy families). These were said to have a significant influence on intelligence, and were impossible to overcome through hard work. Ultimately, the tone of Herrnstein and Murray’s research was that explicit intelligence is largely fixed, is mostly unaffected by effort, and can only grow under the right socio-economic and familial conditions.

In contrast to Herrnstein and Murray (1994), Dweck (1975, 1986, 2000, 2006), and Dweck and Leggett (1988) researched intelligence from an implicit perspective. Across studies, the result indicated that there was evidence that self-perception can influence how one approaches tasks and whether one is successful in meeting one’s goals. The findings from the studies listed above provide evidence that how personal intelligence is viewed can impact how tasks are approached. Further, those self-perceptions either led to increased effort or withdrawal from challenges when adversity was present (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988; Dweck & Reppucci, 1973; Olson & Dweck, 2008). These patterns would eventually form the basis

**Growth and Fixed Mindset: What Are They?**

Before developing the larger theory of growth and fixed mindsets, Dweck (1975, 1986) and Dweck and Leggett (1988) discovered that behaviour around motivation could be categorized into two main approaches. The first approach was not viewed as adaptive because students demonstrated a pattern of helplessness, as seen by their tendency to reject opportunities to engage with perceived challenges regardless of actual current explicit intellectual capacity (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988). Conversely, the second approach was seen as very adaptive as these individuals efforts focused on mastery, as seen in their tendency to pursue potentially challenging tasks and persevere even if success was not easily reached (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988). Researchers in this field next turned their focus to determining what factors led to either the pursuit or avoidance of challenges. This culminated in a theory that proposed that a person’s mindset in relation to their own intelligence could determine how they approached challenges (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988).

The first type of mindset described by this theory is the fixed mindset. This mindset is associated with avoidance of opportunities that have a potential for failure. Individuals with a fixed mindset believe that intelligence is static, thus lacking the motivation to take on challenges that are unachievable to avoid risking social embarrassment (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988). Alternately, growth mindset is associated with a belief in an individual’s ability to change any quality
that they wish to improve through persistent hard work, no matter how long the effort must be sustained (Dweck, 2006). In light of this view of intelligence, people who hold a growth mindset are more likely to take on challenges because they see that working through something difficult can improve their future ability levels (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988). An important note about growth mindset is that students who hold this mindset do not believe that their efforts will bring them to an expert level of understanding, but believe that the effort they put into learning or improving on their pre-existing knowledge will bring them some beneficial level of improvement (Dweck, 2006).

**Why is Growth Mindset Important to Education?**

A student’s mindset toward their own learning will affect how they put forth effort and approach learning as a whole (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988). Put another way, the amount of effort a student is willing to put into their studies can be directly linked back to their personal mindset (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988). For example, if a student has a fixed mindset, they will likely set goals that reflect positively on the effort put into the task. Conversely, if a student has a growth mindset, they will work to improve their knowledge base and will set more academically ambitious and challenging goals for themselves (Dweck, 1986; De Castella & Byrne, 2015). Thus, if a student can adopt a growth mindset, they are more likely to be engaged in their education and find the educational process valuable and enjoyable (Dweck, 2006). For students with any kind of perceived struggle, whether it be a learning disability or learning a new language, mindset can also play an important role
in how the students pursue the challenges they will inevitably encounter (Sriram, 2014; Mercer & Ryan, 2010)

Factors that Affect Mindset: Definitions

Motivation

Motivation is a term with various definitions and schools of thought (Atkinson, 1964; Hebb, 2002, McClelland, Atkinson, Clark & Lowell, 1953). For a general overview, Atkinson (1964) defines the primary source of motivation as the act of trying to achieve a pleasurable end, or to avoid something self-defined as uncomfortable or unsavoury. The Organization of Behavior: A Neuropsychological Theory (Hebb, 2002) was originally published in 1949, looked at motivation in animals and humans. Hebb concluded that for a person to be adequately motivated to do a task when the outcomes have been clearly laid out, there must be some form of a motivator presented – whether it is a goal being reached or a more tangible reinforcement (Hebb, 2002). McClelland, Atkinson, Clark and Lowell (1953) state that “all motives are learned [and] that they develop out of repeated affective experiences connected with certain types of situations and types of behaviour” (p. 275). For example, Yunus, Osman and Ishak (2011) found that teachers can help promote motivation in their students by building encouraging and supportive relationships with them, and that students are more likely to pursue challenges in this type of learning atmosphere. Similarly, research presented by Fan and Williams (2010) found that students whose parents had healthy relationships with schools and who sought to find ways to support their children with their struggles motivated their children more than parents whose communication with school had negative tones where students felt belittled and judged by their perceived failures. In both studies, the motivation comes
from a tangible source (i.e., parent or teacher) with the power to act as a stimulant that motivates the student to continue, or a deterrent that discourages the student from putting in effort. The findings from these studies support Atkinson (1964).

When Dweck (1986) refers to motivation in terms of growth mindset, she breaks her definition into two distinct categories: one where students show an ability to stay focused when they are challenged, and one where students start exhibiting avoidance strategies when they start to experience failure. Dweck’s (1986) perspective on motivation fits very well with Hebb’s (2002) insistence that motivation can only be sustained if one perceives a true benefit at the end of the task they are required to complete. What Dweck (1986) does make very clear in her definition is that motivation is not linked to intelligence level, as it is about the impression of an obstacle or hardship, rather than the actual threat of one being present.

**Resiliency versus Learned Helplessness**

**Resiliency.** Resiliency is the first term connected to student success and positive instances of motivation in the context of growth mindset (Dweck, 1986). According to Masten (2001), the definition for resilience itself is fairly concrete and refers to the appearance of “good outcomes in spite of serious threats to adaptation and development” (p. 228). The perceived risk to student success is of the utmost importance in this definition, because a person cannot be considered resilient if there was no adversity to work against when attaining their goals (Masten, 2001). While the definition of resiliency seems fairly clear, the methods in which researchers determine whether people are resilient can vary (Masten, 2001). According to Masten’s (2001) article, researchers
evaluate resiliency in students based on either a comparison to the variables in their environment, or comparisons to various people.

In quantitative studies, researchers look to make sense of statistics around a person’s potential struggles such as “linkages among measures of the degree of risk or adversity, outcome, and potential qualities of the individual environment that may function to compensate for or protect the individual from the negative consequences or risk of adversity” (Masten, 2001, p. 229). When a researcher engages in resilience research that focuses on people, the researcher holds a standard to which they compare various types of people, in order to assess whether there are commonalities or differences that may either contribute to the degree of resiliency of a person (Masten, 2001).

When looking at resiliency as it applies to growth mindset, Yeager and Dweck (2012) add more specificity to Masten’s (2001) work by suggesting that resilience is any positive reaction to an adverse event that would otherwise deter someone from being successful. Additionally, resiliency is not only a student’s reaction to actual tangible adversity, but the student’s perception of said adversity (Olson & Dweck, 2008; Yeager & Dweck, 2012). Through an analysis of some of the available research on growth mindset and resiliency as presented by Diener & Dweck (1978, 1980), Dweck (1975) Olson and Dweck (2008) and Yeager and Dweck (2012), students are being compared to their peers to see what constitutes resilient behaviour. Thus, growth mindset research has been more focused on the individual and their reaction to adverse environments, rather than an examination of the external factors experienced by the individual and evaluating whether they are indeed facing circumstances that would deem them a resilient person.
Learned Helplessness. Learned helplessness is another concept that is relevant when discussing motivation in terms of fixed and growth mindset (Dweck, 1975, 1986; Diener & Dweck, 1978, 1980; Dweck & Reppucci, 1973). Mowrer (1960) discussed the idea of learned helplessness as hopelessness, and asserted that “the individual is not unmotivated, [or] driverless; it is rather that so far as he can see no action he can take will better the situation” (p. 197). With this definition, Mowrer (1960) also notes that this feeling of hopelessness does not happen by chance, but from being placed repeatedly in situations where a person is felt to be able to make no meaningful change to an adverse situation. When personally reviewing the research presented by Kinlaw and Kurtz-Costes (2007) the conclusion drawn was that the researchers asserted that as children move through the education system, they can become more vulnerable to fostering a sense of learned helplessness as academic achievement becomes associated with grades because they begin to see success as related to marks rather than to effort.

When considering learned helplessness as it pertains to mindset, there is a strong link with Mowrer’s (1960) definition of hopelessness. Dweck & Reppucci (1973) examined learned helplessness in children, and found that a child’s view of their own potential success or failure was not linked to their actual ability, but how they interpreted their own failure. In addition, Dweck & Reppucci (1973) noted that learned helplessness is seen more in students who look for factors outside of their own performance to blame their perceived failure on, and thus, avoided the chance to self-reflect and improve performance. In similar fashion to intelligence, Dweck (1975) adds to the definition by
stating that a student’s motivation can be changed if their mindset about how they interpret their failure can adapt to suit that of a growth mindset.

**Self-Efficacy**

Self-efficacy is a multi-faceted concept that focuses on how a person’s view of their abilities matches with the perceived success (Bandura, 1997). According to Bandura (1997) “[self-] efficacy is a generative capability in which cognitive, social and behavioral subskills must be organized and effectively orchestrated to serve innumerable purposes” (p. 36-37). What is important to note is that Bandura (1997) also asserts that people of like ability level and competence may not perform at the same level because their personal success is reliant on how they view their own capabilities in various situations.

When it comes to influences of self-efficacy, Bandura (1997) highlights that, as people go through different life phases, different groups of people have the potential to affect one’s self-efficacy. As a young child, it starts with parents being the primary sources of building self-efficacy, but moves to social groups and teachers as people become more self-sufficient and move away from the home (Bandura, 1997). What is important to note, especially for the purpose of the current project, is that self-efficacy is not innate, but is something that is strongly developed by the environment and people that surround us, making people like parents and teachers one of the primary influences to our self-efficacy development (Bandura, 1997).

After critical analysis of the research presented on mindset, it is reasonable to conclude that Bandura’s (1997) work supports the idea that a person’s implicit ideas of their own intelligence can affect their effort (Dweck, 1975, 1986, 2000, 2006; Dweck &
Leggett, 1988; Dweck & Reppucci, 1973; Olson & Dweck, 2008). Bandura makes it clear that personal thoughts and opinions about an individual’s capabilities have a direct impact on what they are able to do, while Dweck’s (2000, 2006) mindset research also supports the notion that one’s motivation to complete a task is supported or deterred by one’s thoughts on what they can achieve. The idea of self-efficacy being influenced by important people in one’s life throughout time also underpins the present project as parental influence on student mindset is examined in the next section (Bandura, 1997).

**Parental Influence**

Before looking at the importance of parental influence in terms of mindset specifically, it is important to acknowledge Bronfenbrenner’s (1979) ecological systems that impact a child’s development. According to Bronfenbrenner (1979), a child’s most influential system is their microsystem where they have daily interactions with environments and people within those environments, such as parents. The microsystem has the ability to affect all areas of development within the child by creating homes where their children come in contact with certain belief systems, behaviours, and patterns that the children then have to make sense of by creating personal perceptions (Bronfenbrenner, 1979). With that broader issue of parental influence recognized, one can begin to look more specifically at how to introduce the idea that parents can have an impact on the mindset their children develop (Bronfenbrenner, 1979; McCoy & Bowen, 2015; Moran, Bundick, Malin & Reilly, 2012; Moorman & Pomerantz, 2010; Mueller & Dweck, 1998; Nichols, Kotchik, Barry & Haskins, 2010).

A parent’s ability to affect their child’s academic resiliency has been studied previously (McCoy & Bowen, 2015; Moran, Bundick, Malin & Reilly, 2012; Nichols,
Kotchik, Barry & Haskins, 2010). Throughout the research presented, there is a common theme of students having a higher rate of success if they have parents who supported their choice of life direction, if the parent believed in their child’s ability to achieve, and that socio-economic factors did not dictate failure if parental support was steadily in place (McCoy & Bowen, 2015 Moran, Bundick, Malin & Reilly, 2012; Nichols, Kotchik, Barry & Haskins 2010).

Through continued and deeper study into mindset research, there is evidence in the field that shows how influential adults in a child’s life can have a significant impact on a child’s academic performance (Mueller & Dweck, 1998; Moorman & Pomerantz, 2010). In Mueller and Dweck’s (1998) study about the influence of language used by teachers and whether teachers choose to verbally praise a student based on their intelligence level or output of effort, they found that students were demotivated by praise of intelligence and motivated to keep pursuing tasks when their effort was acknowledged. Research conducted by Gunderson, Gripshover, Romero, Dweck, Goldin-Meadow and Levine (2013) also show that using praise within the home that reflects growth mindset ideals when children are of the toddler age range can have an effect on the type of mindset that children develop as they enter into school. Similarly, a study presented by Moorman & Pomerantz (2010) showed that parents who viewed their children’s intelligence as fixed were more likely to demotivate their children on academic tasks by becoming overly involved, while parents who went to the task with a growth mindset of their child’s intelligence were more likely to allow their child to work independently and support in more appropriate ways to keep motivation sustained. The ideas presented on parental influence will be further expanded on and examined in the next chapter.
Synthesis

In this chapter, through an examination of definitions for explicit and implicit intelligence, as well as the varying views of the flexibility of intelligence, an understanding of intelligence as potentially changeable when positively influenced by the implicit theory of growth mindset was explored (Dweck, 1975, 1986, 2000, 2006; Dweck and Legget, 1988; Herrnstein & Murray, 1994; Sternberg, 1985). Next, the two types of mindset, fixed and growth, were defined so that further discussions around the different mindsets could use the terms without confusion (Dweck, 2000, 2006). When defining the factors that affect whether a person develops a fixed or growth mindset, the broader definition of motivation was defined first, as were two behaviours that are important to the discussion: learned helplessness and resiliency (Atkinson, 1964; Diener & Dweck, 1978, 1980; Dweck, 1975, 1986; Dweck & Reppucci, 1973; Hebb, 2002; Mowrer, 1960; Masten, 2001; McClelland, Atkinson, Clark & Lowell, 1953; Olson & Dweck, 2008; Yeager & Dweck, 2012). From there, self-efficacy was defined to show the link between the definition as offered by Bandura (1997) and the presentation of how mindset affects behavior (Dweck, 1975, 1986, 2000, 2006; Dweck & Legget, 1988; Dweck & Reppucci, 1973; Olson & Dweck, 2008).

In the discussion of parental influence, an overview of how parents are an influential part of their child’s development through the Bronfenbrenner model (1979) was presented alongside research that shows a positive relationship between student resiliency and parental support (McCoy & Bowen, 2015; Moran, Bundick, Malin & Reilly, 2012; Nichols, Kotchik, Barry & Haskins, 2010). Lastly, the connection between showing parental influence as significant in their children’s development and resiliency
as used to help present the idea that parents could have potential to influence the mindset
that their children develop (Bronfenbrenner, 1979; McCoy & Bowen, 2015; Moorman &
Pomerantz, 2010; Moran, Bundick, Malin & Reilly, 2012; Mueller & Dweck, 1998;
Nichols, Kotchik, Barry & Haskins, 2010).

**Purpose of the Project**

The purpose of the present project is to examine whether parents have the
capacity to affect the mindset that their children formulate of their own intelligence based
on the mindset that the parents have regarding their child’s intelligence. While it has
been shown that parents can positively affect their children’s resiliency, there is a lack of
research available about how the creation of mindset can be influenced in children by
their parents (Bronfenbrenner, 1979; McCoy & Bowen, 2015; Moran, Bundick, Malin &
Reilly, 2012; Moorman & Pomerantz, 2010; Mueller & Dweck, 1998; Nichols, Kotchik,
Barry & Haskins, 2010). A specific example of this comes with the research as presented
by Moorman and Pomerantz (2010) because while they show how parents change their
mode of support based on the mindset they hold on their child, they do not investigate
how the parents behavior made the children feel about their own capabilities on the task
and if it influenced their mindset of the child’s their own intelligence
CHAPTER TWO

Literature Review

Introduction

A growth mindset has been shown to be a concept that can help individuals see intelligence as flexible, which in turn could support motivation (Dweck, 1975, 1986, 200, 2006; Dweck & Leggett, 1988; Herrnstein & Murray, 1994; Sternberg, 1985). Motivation plays an important role in the mindset discussion because it determines whether a person shows resiliency through their struggles or loses the desire to push forward (Atkinson, 1964; Diener & Dweck, 1978, 1980; Dweck, 1975, 1986; Dweck & Reppucci, 1973; Fan & Williams, 2010; Hebb, 2002; Kinlaw & Kurtz-Costes, 2007; Mowrer, 1960; Masten, 2001; McClelland, Atkinson, Clark & Lowell, 1953; Olson & Dweck, 2008; Yeager & Dweck, 2012; Yunus, Osman & Ishak, 2011). Self-efficacy contributes to the mindset conversation because a belief in one’s current ability will affect how much effort one is willing to put into a task, which in turn could also influence the mindset that one creates about one’s strengths and weaknesses (Bandura, 1997). Thus, parents become an integral part of the discussion, because of the potential influence they could have on their child’s mindset development (Bronfenbrenner, 1997; McCoy & Bowen, 2015; Moran, Bundick, Malin & Reilly, 2012; Nichols, Kotchik, Barry & Haskins, 2010). The purpose of Chapter Two is to explore some of the current research more carefully to expose the gaps in parental and child dynamics in the development of growth mindset that the current project hopes to address.

Does Adjusting from Fixed to Growth Mindset Actually Help Student Achievement?
As covered in Chapter One, Dweck (2006) asserts that the development of a growth mindset could have the potential to help students who struggle with motivation because of a lack of belief in their own intellectual abilities. The students who lack motivation, and are stuck within a fixed mindset, struggle because they do not see the purpose in continuing with effort if there is no positive outcome, such as grade improvement, when they try to complete the task (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988). Even if there is no tangible threat to achievement, the student may not pursue the task because they believe there is something that has the potential to hold them back from success, and want to avoid the possibility of failure (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988; Olson & Dweck, 2008; Yeager & Dweck, 2012). The impact of a fixed mindset and therefore, perpetuation of learned helplessness, can either be widespread throughout a student’s education, or can only appear in some subjects that the student finds challenging (Diener & Dweck, 1978, 1980; Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988; Dweck & Reppucci, 1973; Mercer & Ryan, 2010; Mowrer, 1960; Olson & Dweck, 2008; Yeager & Dweck, 2012). Regardless of the overall impact that a fixed mindset could have on a student’s performance, the ideas presented by Dweck (1975, 1986, 2000, 2006) suggest that fostering growth mindset in our students has the potential to empower them to take on challenging tasks, reassess their failure, and engage more in all areas of their learning.

Contradicting Evidence

Recently, research has been conducted that questions whether learning about growth mindset can make a difference in student academic achievement and motivation (Dupeyrat & Marine, 2005; Kornilova, Kornilov & Chumakova, 2009; Ravenscroft,
Waymire & West, 2012; Sriram, 2014). To augment previous research, Dupeyrat and Marine (2005) studied how education about changing one’s mindset to growth would affect the achievement and effort of older students who are returning to college level schooling after a significant break. While Dupeyrat and Marine (2005) were able to show (by collecting data from questionnaires on what the student’s mindset currently was and by keeping a record of how many tasks were completed for select courses to measure engagement in work) that a student’s mindset could have an effect on motivation, the researchers admitted that their study lacked more qualitative data on how the participants used personal strategies related to mindset when completing tasks, and thus could not confirm that mindset had a positive overall effect with academic success. While the study does show some areas that growth mindset might not be as effective for adult students, it does demonstrate that the effort put forward by students when they returned to post secondary schooling did increase, while also conceding that more research need to be done to see if there is a link to school engagement and goal setting (Dupeyrat and Marine, 2005).

In their more recent examination of factors that can predict academic achievement, Kornilova, Kornilov and Chumakova (2009) sought to prove, and were eventually able to show, that growth mindset did not have an effect on student academic achievement. The research was conducted on students studying at Moscow State University in Russia, all of whom were in the beginning of their university career. This is not dissimilar to the research that was presented by Dupeyrat and Marine (2005), possibly supporting the notion that growth mindset might not be as affective when introduced to older students. Additionally Kornilova, Kornilov and Chumakova’s (2009) research does
not address how cultural attitudes towards school and achievement could play a role in the ineffectiveness of growth mindset in their participants, and therefore could be an area to further research.

Most recently, Ravenscroft, Waymire and West (2012) and Sriram (2014) researched how graduate students’ improvement across academic tasks was attributed to the adoption a growth mindset mentality. Through analyzing tests results from students pursuing graduate level classes over a semester and comparing those results to the students’ mindset, the researchers found no significant difference in improvement levels of students who claimed to have a growth mindset from students who subscribed to a fixed mindset. Admittedly, the authors stated that one of the limitations of their study came in their timeline, as the research only took place over a semester, and are interested to see if the results change when the research is conducted over a longer period of time.

In addition, Sriram (2014) followed students who were being taught growth mindset principles in university level schooling where the support being given and current level of ability categorized them as students at risk of failure, to see if their effort and achievement were affected by their growth mindset teaching. In this study, it was found that achievement was not greatly impacted when mindset intervention was integrated into instruction. When discussing limitations, of the research, Sriram does caution that the study covers a sample of the students at the university and may not represent the whole student body.

Through the research presented in this section, it is apparent that while a growth mindset can have an impact on the effort that a student is willing to put into their studies, they may not see an associated improvement in grades (Dupeyrat & Marine, 2005;
Kornilova, Kornilov & Chumakova, 2009; Ravenscroft, Waymire & West, 2012; Sriram, 2014). While this research does explore some valid criticisms of this field of inquiry, the research that follows shows that a growth mindset can be valuable to students in different stages of their schooling (Blackwell, Trzesniewski & Dweck, 2007; Chen & Wong, 2015; Dupeyrat & Marine, 2005; Haimovitz, Wormington & Henderlong-Corpus, 2011; Kornilova, Kornilov & Chumakova, 2009; Mercer & Ryan, 2010; Ravenscroft, Waymire & West, 2012; Sriram, 2014).

**Supporting Research**

Although the research referred to above has demonstrated that a growth mindset does not always play a significant role in student achievement, there are research results that show how mindset impacts student performance and academic success (Blackwell, Trzesniewski & Dweck, 2007; Chen & Wong, 2015; Haimovitz, Wormington & Henderlong-Corpus, 2011; Mercer & Ryan, 2010). While there is research that suggests that mindset might not be a factor in improving grade performance and effort for students in a college setting, there is research that suggests that it makes a difference for students in grade school (Blackwell, Trzesniewski & Dweck, 2007; De Castella & Byrne, 2015; Dupeyrat & Marine, 2005; Haimovitz, Wormington & Henderlong-Corpus, 2011; Kornilova, Kornilov & Chumakova, 2009; Ravenscroft, Waymire & West, 2012; Sriram, 2014).

In Blackwell, Trzesniewski and Dweck’s (2007) longitudinal study, the researchers found that seventh grade students with various levels of academic success within their school system prior to the start of this study, who came from diverse backgrounds culturally and socio-economically, and subscribed to a growth mindset, had
better work ethic and goal setting strategies than their fixed mindset peers. When followed up on two years into the five-year study, those same students had greater academic success than their fixed mindset peers (Blackwell, Trzesniewski & Dweck, 2007). Furthermore, Blackwell, Trzesniewski and Dweck (2007) used the same research protocol with students who had low levels of academic achievement and who previously had not been instructed in growth mindset. The students, in the second study, also showed gains in their levels of motivation and performance in math after they were taught growth mindset concepts, while their peers who held a fixed mindset saw a steady decrease in motivation and grades (Blackwell, Trzesniewski and Dweck’s (2007). The study presented by Blackwell, Trzesniewski, and Dweck (2007) is extremely thorough, covers an array of students and follows them over a longer period of time to ensure that the results are reliable and valid.

In an attempt to explore whether growth mindset development improves a student’s chances of being successful, Haimovitz, Wormington and Henderlong-Corpus (2011) examined how growth and fixed mindsets could affect student motivation and grades among grade eight students in a year long study. The researchers were able to show that students who stayed in a fixed mindset experienced a loss of motivation and a drop in their grades, while students who adopted a growth mindset showed a healthy maintenance of their achievement and effort. While there may not have been a significant increase in grades for the students who held a growth mindset, what is shown is that students with growth mindsets were more likely to keep persisting through their schoolwork and keep consistency in their marks while those who subscribed to a fixed mindset eventually lost their level of motivation and saw their grades suffer. This
suggests that growth mindset can be an effective tool in education to prevent a decline in effort and grades among students during the middle to high school grades. Although the results are slightly different, both studies presented results that show that teaching students in a grade school setting about growth mindset can help to negate possible declines in school performance and encourage either maintenance or improvement (Blackwell, Trzesniewski & Dweck, 2007; Haimovitz, Wormington & Henderlong-Corpus, 2011).

Through conducting a critical review of the extensive research, it is apparent that the articles that discredit the importance of the growth mindset to performance and achievement largely focus on older students, whether they are returning back to school after a significant break or pursuing graduate level work (Dupeyrat & Marine, 2005; Kornilova, Kornilov & Chumakova, 2009; Ravenscroft, Waymire & West, 2012; Sriram, 2014). In contrast, there is some research that suggests that it can benefit some university level students (Chen & Wong, 2015; Mercer & Ryan, 2010). In their study, Chen and Wong (2015) saw that already high achieving students in China could attribute said success to their growth mindset mentalities that advocate for students to set goals, improve their knowledge base, and maintain their work ethic. Chen and Wong’s research findings involved correlating answers from a qualitative questionnaire to the academic success that the students were already experiencing to see if there was a link between mindset and achievement. The researchers found that there was substantial, correlational evidence to support their posed research question. Although the study does not report on specific improvements, it does give reason to why already academically high achieving students are experiencing such success (Chen & Wong, 2015). Additionally, there is
some research that shows growth mindset is effective for older students who may have to show resilience in their education (Mercer & Ryan, 2010). As noted in Chapter One, resilience can be defined as having to overcome a life challenge, or perceived challenge that cannot be positively changed by external factors in someone’s environment and where the individual is able to have success (Masten, 2001; Olson & Dweck, 2008; Yeager & Dweck, 2012). In the study presented by Mercer and Ryan (2010) it was found that older students who had to show resilience in the challenge of learning a new language benefited from adapting a growth mindset and saw more effort and better grades as a result. Although it was also found that growth mindset was a factor in success, Mercer and Ryan (2010) assert that mindset is most effective if the student understands what mindset is and believes that it applies to their individual learning as well.

The idea that growth mindset cannot purely understood by students on a rational level, but must be internalized with the belief that it applies to a student’s individual learning profile has been researched (De Castella & Byrne, 2015). In their study, De Castella and Byrne found that “the students’ belief in their personal ability to improve their intelligence [was] an even better predictor of achievement and motivation in school” (p. 259). Ultimately, what De Castella and Byrne (2015) found in their research was that students who understood what growth mindset was and how it could work, but did not see mindset as being applicable to their own intelligence, were less likely to show improvements in grades and effort. In contrast, students who were able to apply growth mindset concepts to their own intelligence and make adaptations to their learning saw an increase in their school engagement and academic performance. The results presented by these researchers is a good summation on the evaluation of the current research because it
helps to distinguish why belief in growth mindset might not lead to well-rounded success in education, because while one might believe that growth mindset in principle, they might not experience success with its implementation if the ideals are not being internalized and applied on a personal level.

**Why is Parental Influence Important to the Creation of Growth Mindset?**

Parents are one of the most influential people in terms of their child’s development because they help to expose their children to specific attitudes, beliefs, cultures, and living situations that will help to inform the ideals that children build and internalize as their own (Bronfenbrenner, 1979). In understanding that parents can have an overall influence in the development of their children, the current purpose of examining the parent and child dynamic is to show that it could be plausible for one of the areas that parents can impact their child’s development is the creation of their individual mindset, which is important because it will inform the way their child perceives and takes on challenges in their education (Broomhead, Skidmore, Eggett & Mills, 2010; Henderlong-Corpus & Lepper, 2007; McCoy & Bowen, 2015; Moran, Bundick, Malin & Reilly, 2012; Mueller & Dweck, 1998; Nichols, Kotchik, Barry & Haskins, 2010; Rattan, Good & Dweck, 2012).

**Parents’ Impact on Student Resilience**

People display resilience when they are able to overcome a tangible or perceived obstacle without any external factors helping to negate the possible failure (Masten, 2001, Olson & Dweck, 2008; Yeager & Dweck, 2012). Whether or not students are able to rise above their struggles and show resilience can greatly be influenced by parents’ attitudes about their child’s ability and whether or not they provide encouragement for their
children to move forward (Moran, Bundick, Malin & Reilly, 2012; Nichols, Kotchick, Barry & Haskins, 2010). When looking into the study from Moran, Bundick, Malin, and Reilly (2012) about student perception of self and resilience as affected by relationships with families, students of various grades, socio-economic status, and ethnicities were asked “to describe what they cared about […] what supports and obstacles they encountered in relation to what they cared about, and how they projected themselves in their future lives” (p. 358). The student’s answers were then compared to what practices the students were engaging in to meet their future goals or engage in areas of importance and if there were any factors that helped encourage or mitigate success (Moran, Bundick, Malin & Reilly, 2012). The researchers showed that students who had familial backing in their future aspirations and valued activities were more likely to pursue goals or persevere through their perceived obstacles than students who did not have the same support (Moran, Bundick, Malin & Reilly, 2012). Similarly Nichols, Kotchick, Barry, and Haskins (2010) researched students in high school that had a history of school absence, poverty, and a range of academic success to see what external factors had the greatest impact on their success or struggles in an academic setting. Through their research, Nichols, Kotchick, Barry and Haskins showed that the ideas students formulated about school, effort, intelligence and how they saw parents involved in their schooling had an influential impact on the attitudes that the students generated for themselves and in turn, affected how they approached their own schooling and the potential problems that could impede their success.

**Teachers and Mindset Affecting Student Performance**
Although the focus of the present project is parental influence on their children’s mindset, there are currently gaps in the research that will be touched on later in this chapter. In light of this, teacher influence on mindset will be examined in place to show how influential adults within a child’s microsystem can impact the mindset that students develop for themselves (Broomhead, Skidmore & Eggett, 2010; Bronfenbrenner, 1979; Mueller & Dweck, 1998; Rattan, Good & Dweck, 2012). Once established, the purpose of the examination would be to explore the question of whether it could be shown that parents can impact the mindset their children develop if a teacher also has the potential to influence the mindset that their students develop.

Original research on the implication of a teacher’s influence on a child’s mindset came in the form of Mueller and Dweck (1998) examining how an adult’s verbal communication with their students impacted how they viewed their intelligence. In their research, Mueller and Dweck found that after the fifth grade participants were given feedback, that “praise for effort versus praise for intelligence after success leads children to hold different achievement goals” (p. 39). Mueller and Dweck (1998) replicated their study 6 times and reported that in each of the six studies that the attributions students make about their success or failure, be it intelligence or effort, helped to form the basic foundation for how students viewed their own intelligence and predicted whether students set goals to achieve mastery or lost motivation because they did not view themselves as intelligent. Henderlong-Corpus and Lepper (2007) conducted similar research on adult feedback on grade four student work and how that feedback, whether it be referring to the student’s level of ability, their work ethic, or the absence of any verbal feedback, affected the student’s level of motivation. The results of Henderlong-Corpus and Lepper’s study
were very similar to what Mueller and Dweck (1998) found, as Henderlong-Corpus and Lepper saw that “process and product praise had particularly beneficial effects, and person praise had particularly harmful effects” (p. 505). Mueller and Dweck (1998) provides support for the idea that teacher influence is important in a student’s formation of a growth mindset and that said influence is mostly facilitated by the language used when attributing success, while Henderlong-Corpus and Lepper (2007) give a more recent example of how motivation and effort can be effected by adult feedback.

Before looking into the positive effect teachers can have on a student’s view of their intelligence, it is important to look at how teachers can work to negatively affect the mindset that a student forms for themselves by using fixed mindset language (Rattan, Good and Dweck, 2012). In research that focuses on how teachers can negatively influence mindset in math class, Rattan, Good, and Dweck (2012) found that university level math teachers who gave feedback to students that reflected a fixed mindset mentality were more likely to give feedback to their students that suggested they lacked intellectual ability in the subject matter. In turn, the students who received said feedback were then more likely to adopt the fixed mindset self-perceptions in the area of mathematics and displayed lower levels of performance and achievement. Rattan, Good, and Dweck conducted a four-part study to analyze student mindset and professor mindset separately, with the last part of their study looking to analyze how the two perceptions could be influenced by each other. What was most disheartening about their findings was that instructors who believed in a fixed view of math intelligence usually passed judgement on their student’s ability from a limited number of completed tasks and did not offer ways to support their students to improve their performance (Rattan, Good &
Dweck, 2012). Predictably, students who got feedback that reflected their perceived lack of intellectual ability were more likely to lose motivation and create a fixed mindset towards their math centered school work (Rattan, Good & Dweck, 2012).

While teachers can have a potentially damaging effect on the mindset students develop on their intelligence, they can also have a positive effect on the creation of growth mindset if the teacher promotes feedback that reflects ever-changing intelligence (Broomhead, Skidmore, Eggett & Mills, 2010; Rattan, Good & Dweck, 2012). In Broomhead, Skidmore, Eggett and Mills’ study of university level choir students, the participants were trained by their teachers to think of encouraging words and statements during warm up breathing exercises. The participants were also asked to perform gradually more challenging tasks over a three-session period, all of which started with the pre-breathing warm up exercise. Teachers were also instructed to give verbal feedback that referred only to the student’s focus and effort and not on ability. During the study duration, it was found that there were noticeable improvements in areas such as vocal expression and performance. It is noted that even though most of the research focuses on how the music instructors taught growth mindset, and not as much on their feedback, the study’s finding are still considered relevant to the current conversation because it shows how important mindset instruction can be to student performance. Although this study does not reflect how teachers can directly impact a student on an academic task, it does show that teachers have the potential to influence how students view their skills and their ability to improve upon their current skills, which will become even more important in the current project.
Through examining the research, the idea that a teacher can have an impact on whether a student develops a fixed or growth mindset has been explored (Broomhead, Skidmore, Eggett & Mills, 2010; Henderlong-Corpus & Lepper, 2007; Mueller & Dweck, 1998; Rattan, Good & Dweck, 2012). By referring back to Bronfenbrenner’s (1979) research, we can see that both teachers and parents are included in a child’s microsystem, meaning that both adults have the capacity to influence the development on a child’s ideals, perceptions, and values. Since it has been shown how one adult within the microsystem – the teacher – can affect the development of either a fixed or growth mindset in their students, it raises the question of whether parents could have the same effect on a child’s ideas of their intelligence as a part of the same microsystem (Broomhead, Skidmore, Eggett & Mills, 2010; Bronfenbrenner, 1979; Mueller & Dweck, 1998; Rattan, Good & Dweck, 2012). However, parental influence on children’s mindset is underexamined in the research literature.

**A Parent’s Mindset and Resulting Interactions with their Children: The Gaps in Research**

Research has been conducted examining mindset and how parents have the potential to influence their children (McCoy & Bowen, 2015; Moorman & Pomerantz, 2010; Narain, 2010). Although not specific to mindset, McCoy and Bowen (2015) present research on how parents can affect their children’s sense of self-efficacy, which is linked very closely to their views on intelligence (Bandura, 1997; Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988; Dweck & Reppucci, 1973; Olson & Dweck, 2008). In their research, McCoy and Bowen show that adolescent students who have healthy, supportive family relationships and encourage their children to pursue their future goals,
despite disadvantages they might face, were more likely to believe in their own abilities and work through both perceived and tangible struggles than those adolescents that did not have the same supports. The importance of McCoy and Bowen’s research in the current review is to show that student belief in their ability to perform and achieve future goals can largely be affected by the support that they receive from influential family members such as parents.

There has also been research conducted on how early parental praise can affect the mindset students develop as they enter school. In their study, Gunderson et al. (2013) periodically studied the type of praise that was attributed to success and failure within the home by someone in a parental role with children in their toddler years to see if the type of praise received affected their attribution of success. The students were then assessed 5 years from when the parental praise was observed to see if that praise made an impact on the mindset that they developed as school-aged children. What Gunderson et al., found in their research was that students who had praise that reflected effort rather than intelligence from an earlier age had a better chance of developing a theory of intelligence that reflected growth mindset. One aspect of this study to note it that the adults giving the praise were not given any pre-teaching on growth and fixed mindset, nor were they aware that their praise reflects growth of fixed mindset principles. As well, the students then were not aware that their view of intelligence reflected that of a growth or fixed mindset.

Research presented by Moorman and Pomerantz (2010) show that when parents are asked to approach their child’s individual work with a fixed or growth mindset about their child, that it changes the way the parents offer their support. When observing the parents who were asked to hold a fixed mindset, the researchers noted that parents
“displayed heightened unconstructive involvement in children’s learning [in the form of] greater performance oriented teaching, exerted heightened control, and were more affectively negative” (p.1359). Alternately, while the parents who were asked to hold a growth mindset when working with their children showed more encouraging and supportive behaviour than the fixed mindset parents, it was observed that they still did not have the appropriate skills necessary to help their children from an education perspective, suggesting that regardless of mindset, parents need more teaching around appropriate academic methods of support. In summation, Moorman and Pomerantz’s goal in their research was to explore if a change in parental mindset affected the way parents supported their children with their schooling to better improve the process of completing homework together, and their research supported the idea that a growth mindset lead to healthier and more encouraging working relationships between parent and child, but did not explore the impact of parental support influenced on the mindset that the child built of their own intelligence.

Research conducted by Narain (2010) showed how parents can have an impactful influence on the frameworks that their children develop on social constructs and attitudes. By developing and analysing the results of a questionnaire given to both parents and their teenage children, Narain was able to establish that cultural attitudes upheld by parents could be seen to also be upheld in their children, with fathers having a substantially greater influence in the framework that their daughters develop, and mothers with their sons. While Narain refers to this linkage in framework and a dissemination of mindset, it is not the mindset as defined by Dweck (2000, 2006) nor is it the definition that will guide the current project. In spite of this, what Narain is able to show is that parent’s
viewpoints can largely impact the viewpoints that children develop, and sometimes adopt, as their own. This also confirms Bronfenbrenner’s (1979) ideas on the impactful nature of the microsystem on a child’s development, and lends further support to the idea that a parent’s mindset toward their child’s intelligence could have influence on the mindset that the child develops for themselves.

While Moorman and Pomerantz (2010), Narain (2010) and Gunderson et al., (2013) present important research to the present project, their research does not fully address the question that the current project plans to explore. As previously mentioned, Moorman and Pomerantz (2010) provide important insight into how growth and fixed mindsets can change parental support when working on academic tasks, but does not address how the child interprets their parent’s support and if it positively or negatively impacts the way the child views their own intelligence. Narain (2010) presents research that helps to cover the gaps presented in the Moorman and Pomerantz’s (2010) study by showing how a parent’s ideals help to influence and create the ideals their children make for themselves. While the research is valuable in potentially validating the possible impact of parental influence on children’s development, Narain’s (2010) research does not address how this could translate into views on intelligence and thus, confirms that there is still limited research in the area of parental influence on a child’s beliefs on their own intellectual mindset. Additionally, Moorman and Pomerantz (2010) provide very little insight into how the verbal supports provided by parents impacted the student performance, while this is the major focus of mindset development in students when examining the research on teacher influence, showing another gap that needs to be addressed (Broomhead, Skidmore, Eggett & Mills 2010; Henderlong-Corpus & Lepper,
try to fill in the gaps around parental praise and how it affects growth mindset for students by showing that the way parental figures verbally support their children through challenges affects the mindset they develop over the years, the parents and children were not made aware that their language and attributes reflected a growth mindset and were not specifically given instruction on what growth mindset is to promote longevity and understanding of the concept. While it is comforting to know through Gunderson et al.’s (2013) research that parents have the potential to positively affect the mindset development of their children without specific teaching in growth mindset principles, it would be important to explore if the chances of growth mindset development in children increase when both parents and children are instructed in growth mindset principles. Additionally, the research focuses on students who were introduced to effort based praise at a very early age, still leaving in questions how parents can influence their children’s mindset when they introduce growth mindset principles into their dialogue once children have already entered into school (Gunderson et al., 2013). Although the gaps in research have been established, Moorman and Pomerantz’s (2010) and Narain’s (2010) research work alongside the research presented on teacher impact on mindset, and parent’s influence on resiliency, suggest that parents could have an impact on the mindset that children make of their own intelligence (Broomhead, Skidmore, Eggett & Mills, 2010; Henderlong-Corpus & Lepper, 2007; McCoy & Bowen, 2015; Mueller & Dweck, 1998; Rattan, Good & Dweck, 2012).

The Current Project

Contributions to the Field
Currently, the preferred method of contributing the field would be through the project based method of creating something that parents and students can use to help positively affect their mindset development. In order to facilitate that method, the preferred project will be to create a book that is meant for parents to read with their children that they can engage with together to create a like-minded growth mindset. The book will highlight what growth mindset is, how it can improve learning, and the ways in which we can mentally talk through our challenges so that persistence can be maintained, while also giving parents helpful strategies for supporting their children through using growth mindset principles (Dweck, 1975, 1986, 2000, 2006; Dweck & Leggett, 1988; Dweck & Reppucci, 1973)
CHAPTER THREE

Considerations for Implementation of the Project

Creation of the Growth Mindset Book

When creating the growth mindset book, it was important to make sure that it was relatable to a student currently in elementary school while providing relevant information about what growth mindset is, why it is important to education and how adults can support it. After looking into children’s books that fulfill the same purpose, I found a book entitled Your Fantastic Elastic Brain (Deak, 2010) that talks about brain biology by using color, highlighting key words in different fonts so that they stand out, and breaking down the biology of the brain so that it is accessible to young students. I decided to use Deak’s (2010) formatting as inspiration for my own book in hopes that it would be intriguing to children and informative for their parents. From there, it was important to emphasize what growth mindset is, why it can help learning outcomes and how parents can foster growth mindset through the research that was presented in earlier chapters. The book itself was created by using the website Laffoon and Grosz (2017) created entitled Mixbook, which is an online website geared towards creating photobooks.

What is Growth Mindset?

Establishing definitions for growth and fixed mindset, resilience and motivation was important to ensure that both parent and child had a firm understanding of the topic at hand before moving onto mindset’s importance and how to support it. When establishing these definitions, I referred to Dweck’s (1975, 1986, 2000, 2006) and Dweck and Leggetts’s (1988) research to help differentiate a growth mindset from a fixed one. In order to further explain what growth mindset is, I decided that it was important to
establish definitions for motivation, resilience and learned helplessness as well, so that both parent and child could understand what factors affect growth mindset and what characteristic behaviour is associate with each mindset. When defining motivation, the research of Hebb (2002), Atkinson (1964), McClelland, Atkinson, Clark and Lowell (1953) to give the definition a well-rounded perspective. The definition for resilience stemmed from the research presented by Dweck (1986), Masten (2001) and Yeager and Dweck (2012). Dweck (1986) initially introduced the idea of resiliency as connected to motivation while Masten (2001) helped to further define resilience. Yeager and Dweck (2012) add to the definition of resilience as they use their research to show how resilience relates to growth mindset through more recent research. Learned helplessness was also as equally important to define in the book, and was done so using Mowrer’s (1960) original definition of what learned helplessness looks like in children, while Dweck and Reppucci (1973) and Dweck (1975) show how learned helplessness works against the development of a growth mindset.

**Why is Growth Mindset Important?**

The section on growth’s mindset importance to education is very brief and works to highlight the positive attributes while dispelling and misconceptions that people may have about growth mindset. All of the information presented largely comes from Dweck’s (1975, 1986, 2000, 2006) research as well as the research presented by Dweck and Leggett (1988). De Castella and Byrne (2015) provide some more recent research that supports the positive outcomes presented by adopting a growth mindset and gave extra evidence for explaining how growth mindset can support learning. The page that
clarifies any misconceptions one might have about growth mindset comes purely from the research presented by Dweck (1975, 1986, 2000, 2006).

**Who Can Help Create a Growth Mindset in Children?**

The main body of research that was referenced was Bronfenbrenner’s (1979) ecological systems model shows how parents are in a child’s microsystem and is therefore has primary influence over how a child develops their ideas on the world and themselves. Bandura’s (1997) research on self-efficacy also supports the idea of parental influence on the development of growth mindset when he asserts that parents are crucial in the development of their self-efficacy in the early years. Additionally, the research directed by Narain (2010) directly shows how parents’ ideals can impact the types of ideals that their children develop on the same topics. Some additional supporting research that showed how parents affect motivation (Fan & Williams, 2010; Yunus, Osman & Ishak, 2011) self-efficacy (Bandura; 1997; McCoy & Bowen, 2015) and the very limited research available about how parents can affect their child’s mindset (Gunderson et al., 2013; Moorman & Pomerantz, 2010; Moran, Bundick, Malin & Reilly, 2012; Narain, 2010; Nichols, Kotchik, Barry & Haskins, 2010) helped to add to the validity of the statements presented in my book. Although the write up on this topic was brief, the hope was to quickly show that parents are important to their child’s development of growth mindset and to transition into the next section of the book, which are the strategies for how they can help their children build a growth mindset.

**Steps for Helping Children Grow a Growth Mindset**

In this part, there are the core steps that are addressed to help the formulation a growth mindset. The purpose of creating a three-step process was to present the
strategies in a straightforward format to avoid parents feeling overwhelmed with the information presented. It was also the intention for parents to walk away from the book with tangible strategies that they could implement immediately.

**Step One.** Based on the research presented by Moorman and Pomerantz (2010), parents are encouraged to be more hands off in their child’s learning so that the children can learn from their own mistakes and work through challenges. The hope is that students will become more independent if parents show their children that they have the capability to problem solve independently (Moorman & Pomerantz, 2010). The key is that the parents also need to show their children that they believe in their child’s ability to succeed as an independent learner and that they as parents believe in growth mindset as well (Moorman & Pomerantz, 2010).

**Step Two.** The second step, which focuses on how language plays an important role in the formation of growth mindset, is primarily based on the research from Mueller and Dweck (1998) and Henderlong-Corpus and Lepper (2007). These studies demonstrate that how teachers choose to praise their students’ success affects how students attribute their success, and thus the formation of their mindset (Henderlong-Corpus & Lepper, 2007; Mueller & Dweck, 1998). Since the object of the Literature Review was to show how a teacher’s ability to influence their students’ mindset shows how a parent could also have the same effect, using research on teacher influence on language is valid. In addition, Gunderson et al., (2013) research on parent language and mindset ideals also shows that how parents choose to use language affects the mindset that children develop.
Step Three. The last step is also very much associated with the research presented by Gunderson et al., (2013). In the article, when using language that was akin to growth mindset ideals, the parents were also modelling what it looks and sounds like to believe in working through problems to reach goals (Gunderson et al., 2013). Therefore, the research presented in this article is very appropriate for justifying the assertion of the last step. In addition, Narain (2010) adds support to the idea of modeling behaviour because their research shows that children do formulate their deals based on the ideals that their parents promote. The suggestions given for how to behaviour and mutually supported by Gunderson et al., (2013), Moorman and Pomerantz (2010) and Mueller and Dweck (1998) with Gunderson et al., (2013) supporting the verbal aspects of growth mindset modelling, and Moorman and Pomerantz (2010) addressing how to model what it looks like to refrain from over interfering when their child struggles.

Final Pages

The last two pages of the book are meant to be a brief summation of the content of the book so that parent and child can walk away with a concrete summation of what the book is about and why it is important.
CHAPTER FOUR

Reflection

When I decided to create a book for parent and child to educate both on what growth mindset was and why it was important, there were two apparent challenges that I faced. One challenge was to make it appealing to both child and adult, with the other being how to narrow down on what is important information when speaking on growth mindset so that the information presented did not become overwhelming to both parties. The reason that I decided to write my book in a similar format to Deak’s (2010) children’s book was because its presentation of bright colors, bolded fonts and intriguing pictures makes it appealing to the children, while the information presented is written at a level for an elementary student, but has scientific backing that appeals to adults. When creating my own book, I tried to emulate the same formatting and style of writing so that parent and child could find a hook that kept them engaged in the content.

Narrowing down the content of the book required me look through all of the research presented throughout Chapters One and Two and evaluate how I could explain concisely what growth mindset is, justify why parents would be important to encouraging growth mindset in their children and why it’s important for parents to believe in their child’s ability to persevere. Finding a way to show how parent’s perceptions of their child’s ability affects growth mindset was the important piece, since it directly connects to what I was trying to prove during my literature review. In each step, my intent was to highlight the importance of parent’s mindset of their children’s intelligence to being a part of the process to their child building a growth mindset. Because of the vast body of research that I was able to include in my previous chapters, I believe I have done an
acceptable job of using the research to create a book that gives evidence to the idea that parents can greatly impact their child’s mindset based on the mindset they have of their own child’s intelligence.
References


Herrnstein R.J, & Murray, C. (1994). *The bell curve: Intelligence and class structure in


Sometimes, it can be hard to take on challenges because making mistakes doesn’t feel very good...

**BUT!**

What if there was a way to change our view of mistakes so that we could see mistakes as a way to learn instead of a way to fail?

Well guess what...

**THERE IS A WAY!**

And it all has to do with changing our **MINDSET**.

Mindset has to do with how we view our intelligence. People can either have a **fixed mindset** where they do not believe that they can improve through learning and practice, or a **growth mindset** where they believe that taking on challenges and making mistakes is the best way to learn and grow!

What we want to do is create a **growth mindset** so that we can become motivated and fearless learners!

Fearless

The truth is, how you see failure and making mistakes will affect how **motivated** you are to work and your willingness to take on challenges. But best of all, it will make you feel **super successful**!

**However!**

Before you can have a growth mindset, you must have good **self-efficacy**!

Self-efficacy means that you believe in your ability to succeed!

Sounds silly, right? It’s not!

Because believing in yourself will make you more likely to reach your goals. Once you start to build a growth mindset and believe in your ability to grow what you know, you will be good to go!
PARENT'S MINDSET OF THEIR CHILDREN

But wait... why is motivation important to growth mindset?

Motivation is so important to growth mindset because having the desire to push through challenges and seeing the purpose of working through problems is connected with having a growth mindset, while giving up when things get hard goes with having a fixed mindset.

Someone who has the desire to work through potential problems because they believe hard work = progress.

Someone who gives up when they think things are too hard because they are afraid of making mistakes.

Resilience versus learned helplessness.

Positive effects of having a growth mindset:
- Excited to learn new things
- More engaged in school even when the subject is hard
- See the purpose behind learning
- Improvement in school performance (i.e. better grades)

What growth mindset does not promote:
- That we will become experts on everything (we still have strengths and weaknesses)
- Just trying harder (believe me! you are already working pretty hard!)

Because...

Growth mindset is a belief that anyone can make any improvements in any subject if they put in the effort and don't give up!
WHO CAN HELP ME BUILD A GROWTH MINDSET?

YOU ARE NOT ALONE! THE PEOPLE WHO CAN HELP YOU BUILD THAT GROWTH MINDSET ARE PEOPLE WHO YOU SPEND MOST OF YOUR TIME WITH, LIKE...

FRIENDS

mom

TEACHERS

dad

Family

STEP ONE: LET YOUR CHILD MAKE MISTAKES!

THIS STEP CAN BE REALLY HARD, BUT THE BEST WAY FOR OUR MINDS TO GROW IS MAKE MISTAKES AND LEARN FROM THEM. SOME GUIDANCE IS GOOD BUT RESIST THE URGE TO TAKE OVER!

IF YOUR CHILD SEES THAT YOU BELIEVE IN THEM, IT WILL MAKE THEM FEEL MORE CONFIDENT IN THEMSELVES!
**Step 2: Praise Effort and Not Intelligence!**

It’s so easy to give praise based around intelligence like, “You’re so smart” or “You got the answer right because you have a math brain.”

**Bottom Line!**

If you show your child that their success comes from how hard they work, you are helping them build work ethic by showing them that you value effort, which all works towards building a growth mindset!

If your child comes to you and credits their success to their intelligence level, have them chase the wrong goal that reflects effort or their effort!

[Image of a star student]

But here’s the thing: when intelligence is praised, students actually become unmotivated to take on challenges and fear making mistakes because they are worried about not being seen as smart anymore!
PARENT'S MINDSET OF THEIR CHILDREN

**STEP 3: MODEL GROWTH MINDSET BEHAVIOR**

Parents are the best models for their children, so if you can model what a growth mindset looks like with your actions and words, your children will be more likely to follow your lead!

---

**WHAT DOES MODELING GROWTH MINDSET BEHAVIOR LOOK LIKE?**

The most important thing you can do is use performance-centered praise and resilience in every context around the home when talking to your children about their struggles so they can see and hear what growth mindset looks like.

---

**SO THE MORAL OF THE STORY IS...**

Growth mindset is important to a child's success in school because it increases motivation and engagement in learning...

And the best way to help your child build their own mindset is to show that you believe in their ability to succeed, celebrate progress and reinforce growth mindset for them!