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Perception of Motivation on Adult Student Academic Achievement

By

Hailey S. Swanson Alsaker

A capstone thesis submitted in partial fulfillment of the requirements for the degree of
Master of Arts in Teaching: Adult Basic Education (MAT).

Hamline University

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Primary Advisor: Julia Reimer
Content Reviewer: Scott Helland
Peer Reviewer: Sally Welsh

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CHAPTER ONE

Introduction

Introduction

This research investigated *how do adult learners describe their motivation to pursue education?* To determine descriptive motivation categories the study focused on intrinsic motivation, extrinsic motivation, and external factors as investigated through reviewing previous related studies, surveying adult students enrolled in adult education classes using mixed-method approaches, and describing the findings of that data. The research leveraged these factors to understand how adult learners describe their motivation to pursue education and to prescribe ongoing research opportunities as well as classroom applications in accordance with those findings.

The research investigated factors related to intrinsic motivation such as approach motivation, motivational intensity, reactive approach method, coping mechanisms, ideation flexibility, and self-determination. The research also investigated the effects of extrinsic motivation such as reward-based motivation, parental expectations, stressors, the association of the combined effect of intrinsic and extrinsic motivation, and the establishment of self-determination and autonomy. In addition to intrinsic and extrinsic motivational effects, the research also took into account the external factors and influences' effect on achievement such as trauma, reactive approach motivation, avoidance, learning disabilities, income, and access.

Identifying Research Topic

In focusing on and defining this particular research thesis, the general focus was determined due to the profound and residual impact of observing and working in adult education classrooms. In the seven years working in and in conjunction with adult education learners, educators, and programs my interest was sparked in relation to observing the tenacity and dedication with which these students committed to their studies in order to obtain their goals. The research topic was created to develop an understanding of this perseverance.

Establishing the research topic was influenced heavily by the desire to develop an understanding from the many factors that can influence motivation. The usefulness of understanding motivation is that it allows programming to be reactive to and align with effective methods. Similarly to how trauma-informed teaching practices allows instructors to more effectively guide their students, understanding the myriad of factors impacting adult students allows adult basic education (ABE) programs to do the same.

This research topic attempted to address the effects of intrinsic and extrinsic motivation on educational persistence as well as the effects of external influences or factors that affect that persistence. Participants of this study were identified as adult students actively enrolled or finishing courses in adult education classrooms, either seeking to obtain their high school equivalency (HSE) diploma, enrolled in a certification course, or dual enrollment. The research question was an attempt to leverage the understanding of *how do adult learners describe their motivation to pursue education?*

Context

The impact of parental expectations on academic achievement is a significant predictor of student academic achievement (Yan & Lin, 2005). Throughout my life education was always important to my family. Both of my parents completed schooling beyond high school and there was always room for curiosity and growth in our house. In defining the context of the research it became clear that my own experiences in education were reflected by my students and peers. The research was created as a tool that can be used to learn more about how other adult students were influenced, to understand the barriers adult students face when approaching continuing education, and how as a part of the process, can I better my understanding, along with others in the field of education, in an effort to provide better quality support and education opportunities to adult students.

When I began formal schooling I, like many future adult education students, struggled to fit into the rigidity of the classroom structure. I struggled with the pacing of the curriculum and when concerns about my ability to finish tasks were voiced by the school I was coached by my parents and teacher to finish my work on schedule going forward. I share this because it was in kindergarten that I began to hate school. I stopped caring about being creative and having curiosity towards learning because if I had to get it done on time, I would meet that goal and not put any additional effort into it. I would simply produce the grade and move on. I never had passion for learning again, I never enjoyed a project, never got satisfaction out of my work, but I was successful. The only reason I continued to produce good grades was because of the external influences of my family. The family who had always valued education and hard work. I did well for them because it was expected.

When I finished my undergraduate degree I began working in education. It seemed like a logical step, I had family members in the field and I had always done well in school. Unfortunately, like many adults in my shoes, I was influenced by necessity rather than passion. I began working in Adult Education in Minnesota in 2017 and found that I was wildly impressed by the students that I had the opportunity to interact with. They had a myriad of factors impacting their educational journey and yet continued to make the time to come to class week after week. In interacting with these students I was reminded of my own educational path and how I had struggled to stay motivated to finish my high school degree, my undergraduate degree, and then additionally a graduate degree.

Adult students have vastly more societal pressures than when they were in K12. The pressures range from time constraints to work schedules, child care, finances, access, and beyond. As an individual who pursued education after K12, I sympathized with what it felt like to be an adult student. Many times the people around you are intentionally or unintentionally unsupportive. Adult students face many tangible obstacles to their educational endeavors in addition to less obvious factors such as motivational factors and the mental load of each day, which is at times, overwhelming.

My students shared with me their stories, their struggles and influences and I found myself over the years becoming more and more inspired by them. I saw students who were facing homelessness, poverty, job insecurity, abuse, family struggles and all the while were still making the time and effort to obtain their high school equivalency and beyond. I knew that, personally, my biggest influence was my family who motivated me to stay in school and continue to pursue my education.

The first learner I worked with when I started teaching adult education was in his early twenties and came to class to make his second attempt at joining a program. He had joined ABE first in 2017 shortly after stopping out of his senior year of high school. This individual had all of the skills needed to pass the high school equivalency (HSE) exams, what he didn't have was support and confidence in his abilities. After opening up to me about his educational struggles with ADHD he shared the external factors that led to him leaving K12. In high school he experienced the death of his father resulting in a lack of motivation and removal from traditional classes into remedial and special education classes with supports. This learner told me that when he was placed into these supported classrooms it embarrassed him and he refused to care or participate in school any longer. This very skilled and academically capable person even joined adult education the year after his class had graduated and only attended a handful of hours before leaving for another several years and eventually returning in 2022 to finish his diploma. This became the beginning of my interest in student motivation. What factors could have better prepared and supported this individual in their educational journey? Witnessing the external pressures these students faced I began to wonder about the connection between motivation and student pursuit of academics.

After around five years in the field, in 2021, I decided to return to school and obtain a teaching license in Adult Education. During my second year of graduate school, I simultaneously began a year of teaching adult students and actively assisting them in obtaining their high school equivalency. I thought about the strong influences that motivation had on the completion of my own education. For me, motivation was an external force, was it the same for my students? Additionally, if external influences can

affect outcomes how can the appropriate use of andragogy positively impact these students?

Rationale

The time I spent in Adult Education reminded me that determining how to best support your students is not a simple task. Students are facing all kinds of external and internal influences that all work together to determine outcomes. Seeing the barriers my students faced such as income, trauma, and learning disabilities, factors that I could not affect, made me begin to wonder whether intrinsic motivation and supporting the students emotionally was a better use of effort.

With the proposed research: investigating factors such as approach motivation, motivational intensity, reactive approach method, coping mechanisms, ideation flexibility, self-determination, extrinsic motivation, reward-based motivation, parental expectations, stressors, the association of the combined effect of intrinsic and extrinsic motivation and the establishment of autonomy, external factors, trauma, reactive approach motivation, avoidance, learning disabilities, income, self-advocacy, resilience, and attitudes could impact the fields of k12, adult education, and higher education. By addressing the aforementioned factors, better implementing student supports, and assisting the individual student, programs would see higher retention, student graduation, and greater program completion rates (Hock, 2012).

The research attempted to determine how to better promote adult student learning and achievement by determining internal motivation factors impacting continued pursuit of education. By doing so educators could better mitigate external factors' influence on student success. Additionally, if a student is intrinsically motivated to participate in their

education the support may need to instead be on the side of differentiation and attention to previous educational trauma of the student rather than social and emotional support (Cordova, & Lepper 1996).

I witnessed a connection between my students who had dyslexia and their struggle to understand and answer critical thinking comprehension questions. I found that I had a relatively high number of students in my classroom that had identified learning disabilities such as dyslexia, ADHD, and autism. Students who received additional support in k12 were ending up in an adult education classroom. With no background in special education I was somewhat at a loss for developing curriculum, supporting my students as individuals, and how to best differentiate their coursework. I witnessed a relationship between student trauma, and also learning (educational) trauma and students who did not obtain their HSE. This research sought to find correlations between external factors and intrinsic motivation allowing teachers to better address differentiated instruction paired with the importance of teachers getting to know their students' emotional needs. Studying student stressors such as home life situations and mental health issues may lead to better instructional interventions to be in place allowing for the student to reach their educational goals.

Addressing the existence, especially of educational trauma, in adult students can inform curriculum and assist with adult student retention. Students pursuing adult high school equivalency or transitioning from an ABE program into higher education can benefit from research done in the field of intrinsic motivation. If instructors can better understand their students' trauma, stress, learning disabilities, learning preferences, reasons for withdrawing from k12 systems, then they will be better equipped to facilitate

instructional material and time-sensitive interventions (Deci & Ryan, 2008). Adult students do not, in many cases, have the luxury of time on their side and if we are able to adequately support students they are more likely to achieve learning outcomes (Ackerman, 2018).

Adult Education is funded primarily based on student contact hours within the state of Minnesota. Funding is additionally tied to measurable outcomes of each individual student as determined by Minnesota statute 124.26. If students are not achieving measurable skill gains, by removing themselves from the program or stagnating in their progress, then the state will have an unsustainable model. What benefits the student, benefits the program. By studying motivational factors of adult students, educator policy makers and programs can support and grow existing programs and also develop additional program offerings based on the findings.

Collecting data from students about their external factors regarding their educational goals and decisions and pairing that with data in relation to intrinsic motivation of students may inform programmatic decisions. Learning about students' intrinsic motivation would allow for development of curriculum that aligns with self-regulated learning supporting both adult students with and without learning disabilities through use of authentic curriculum choices, as Deci and Ryan (2008) note, intrinsic motivation is closely related to the students' stress levels and mental health.

Summary

Using the concept of intrinsic vs extrinsic motivational factors the research investigated adult learner motivation and the persistence to pursue continuing education. By collecting data regarding the motivations of both learning disabled students and those

without diagnosed learning disabilities, and their decision to withdraw from high school to pursue their high school equivalency; the study sought to inform curriculum decisions and andragogical practices with the hopes of higher and more consistent program completion rates.

The literature reviewed in Chapter Two investigates factors such as educational trauma, ACES, differentiation, self-advocacy, resilience, attitudes, instructional practices, and mental health factors as they contribute to the students likelihood to complete a high school equivalency. Additionally, Chapter Two explores extrinsic motivation, the association of the combined effect of intrinsic and extrinsic motivation and the establishment of competency and autonomy. In addition to intrinsic and extrinsic motivational effects, the research also took into account the external factors and influences' effect on academic pursuit such as trauma, reactive approach motivation, avoidance, learning disabilities, income, and access.

Chapter Three describes the methodology used in this research study. Data was collected from adult students attending GED or HiSet prep classes in the state of Minnesota online, in-person, and hybrid with the intention of gathering information regarding leading causes of withdrawal from k12 systems, decisions to enroll in adult education, future plans, education functioning level, self-identified learning disabilities, trauma, learning style, educational trauma, adverse childhood experiences (ACES), self-advocacy, resilience, attitudes, instructional preferences, and mental health. Studies related to this work were used as a guiding factor moving forward in the investigation of intrinsic, extrinsic, and external factor motivation in adult students pursuing their high school equivalency.

Chapter Four contains a review of the data collection and data analysis procedures, found in greater detail in Chapter Three. Following the section on Data Analysis Procedures is the Results section. The Results section is divided into the themes of *quantitative qualitative results overview*, and a combined analysis of emerging themes found across all survey data including the following themes: *money, personalization, grounding, support, access, and other*. Chapter Four has the following sections: *introduction, data collection, data analysis procedures, results, reliability, defined themes*, and the *summary*. The purpose of Chapter Four was to review the data collected from students regarding their motivational factors, their educational goals, and decisions and connect that to prior research on the subject as outlined in the Literature Review of Chapter Two.

Chapter Five contains the learnings gained through the capstone process as a researcher, writer, and learner. It shares the results of both those that were anticipated and any unexpected conclusions. Draws connections from this capstone to previous research references in Chapter Two literature review, discusses new understandings of the data and overlaps or disagreements of previous literature review findings, shares implications and limitations of this capstone as well as outlines potential uses and future studies that continue the understanding of learner motivation. Chapter Five ends with anticipated uses of this capstone such as communication and use of the results by both myself and the adult education field.

CHAPTER TWO

Literature Review

Introduction

Chapter Two shares an overview of the current research available in the field of motivation in relation to adult students and the effects of external factors on academic achievement. The research focuses on three primary subtopics divided into additional related research. The three primary subtopics are intrinsic motivation, extrinsic motivation, and external factors. These subtopics are defined as follows; intrinsic motivation: the desire to perform behaviors purely for personal enjoyment, extrinsic motivation: the desire to perform behaviors to achieve a specific outcome, and external factors: circumstances that affect the likelihood of success. While previous research addresses many aspects of motivation there is a lack of connections between theories. This purpose of the research is to fill those connective gaps in previous research. As illustrated in Chapter Four and Five there is an unconnected nature between motivational factors. The data collected shows that the ways in which learners describe their motivation to pursue education are interrelated, rather than singular anomalies and previous data fails to acknowledge. The question this research sought to answer is *how do adult learners describe their educational motivation?*

Intrinsic Motivation

Intrinsic motivation, defined as behaviors performed purely for interest and enjoyment, informs the first theme introduced in this literature review. In this literature review, intrinsic motivation was broken down further into the following categories: approach motivation, high-approach motivation, motivational intensity, reactive approach

method, negative intrinsic motivation, coping mechanisms, ideation flexibility, and self-determination. To draw connections between theories, the section on intrinsic motivation ended by comparing the concepts of intrinsic motivation and extrinsic motivation.

Approach Motivation

A recurring theme regarding the study of intrinsic motivation is the investigation of the theory of approach motivation and oftentimes its relationship to optimism (Claro et al., 2016). Approach motivation has been found to affect perception, perspectives, attention span, flexibility in thinking patterns and ideation, solution generation, self-determination, and adaptation (Claro et al., 2016). This has led researchers to view an interrelatedness between self-determination, or the ability of a student to guide and determine their desired outcome, and intrinsic motivation. Approach motivation is one of the most common ways to interpret intrinsic motivation. Positive approach motivation has been shown to improve cognition and memory. Individuals who have high positive approach motivation are more likely to achieve their goals as they are more likely to attempt new skills and retain information more readily (Claro et al., 2016).

Connecting the effects of motivation on achievement can be done using the theory of approach motivation. Gable and Poole's (2012) research found the age-old proverb 'time flies when you're having fun' to be, in fact, accurate. In their 2012 study on approach motivation and time perception, they found that students who enjoyed their curriculum reported a shortened perception of time. Not only did time fly, but student content acquisition and achievement were higher. The curriculum in the study was based on the principle of approach motivation, here defined as the desire to continue receiving

positive stimulation. As students interact with reward loops, approach motivation can strengthen. The positive effect of safe and familiar activities encourages a corresponding response resulting in the desire to seek out novel and purposeful stimuli (Gable & Poole, 2012).

While enjoyment of a task is an important aspect of achievement, if one is too focused on the outcome or the goal they may find difficulty in retaining the majority of the information shared. If the focus on outcomes is too highly stressed an individual is more likely to tune out ‘extraneous information’ focusing on the larger goal at hand and may be missing some of the smaller key elements (Gable & Poole, 2012).

High-Approach-Motivation

According to Gable's and Harmon-Jones (2008, 2013) later findings, while time may fly when using approach-motivated tactics, the global understanding and attention span may lessen. In this literature review, I put forward Gable and Harmon-Jones' (2008) definition of high-approach-motivation as the process by which a goal or outcome is too highly stressed, resulting in the student tuning out unnecessary stimuli to focus on the end goal, and therefore retaining less and having a less full understanding of the topic at hand.

If the desired outcome is understanding or mastery of a topic or skill, high-approach motivation may be an ineffective way to learn. If the goal is simply to complete a project without thought of mastery or obtaining the skills or content to further build one's knowledge, then high approach motivation is effective in the scheme of task completion (Gable & Harmon-Jones, 2008). Approach motivation can be understood to have a distinct relationship to motivational intensity.

Motivational Intensity

Whereas approach motivation focuses on positive stimuli, motivational intensity narrows the concept to the desire for positive stimuli and the avoidance of negative ones (Smillie, 2013). Motivational intensity and the reactive approach method, described below, are interchangeable terminology in describing avoidance of or desire to achieve certain stimuli. The desire to either pursue events and stimuli that encourage and foster positive reactions, or avoid events that cause negative reactions, can either advance or stunt an individual's progress toward their goal (McGregor et al., 2009). Furthering our understanding of the different types of motivation theory is the reactive approach method.

Previously we have viewed motivation through the lens of positive stimuli, goal-oriented stimuli, and motivational intensity and through those lenses investigated the bridge between positive and negative stimuli. Now it is important to investigate motivation through the lens of the reactive approach method.

Reactive Approach Method

With the use of the reactive approach method, one can see how negative stimuli can lessen the ability of an individual to succeed. Personal uncertainty can profoundly affect anxiety, worldview, depression, beliefs, and coping mechanisms. Research performed by McGregor et al., (2009) shows that having or experiencing anxiety can lead to negative outcomes, adverse, and consequential outcomes such as depression and suicide. The connection between the Reactive Approach Method and documented negative outcomes lies in avoidance.

As an individual receives negative stimuli such as bad grades, bullying, anxiety, or depression, amongst others, one possible outcome is the desire to avoid said stimuli

(McGregor et al., 2009). As one internalizes negative comments or reviews of their effort, not only does it lead to personal uncertainty, but it is also linked to the development of negative intrinsic motivation (McGregor et al., 2009). Taking the understanding of negative motivation one step further one must look at the possible outcomes of individuals who develop negative intrinsic motivation. The reactive approach method outlines how individuals tend to avoid negative situations and to seek out positive ones (McGregor et al., 2009). As one continues to have negative experiences the likelihood that the desire to experience any unfamiliar situation or skill is lessened. If one experiences enough negative stimuli it is possible to develop a negative intrinsic motivation approach resulting in a defensive and inflexible view of the world.

Negative Intrinsic Motivation

Negative intrinsic motivation is highly connected to the concept of the reactive approach method primarily in the sense that the reactive approach method warns of the follies of avoidance. According to the study put forth by McGregor et al. (2009), developing personal uncertainty can result in one developing a negative motivational intensity, or a reluctance to even approach, pursue, or complete goals.

Negative perceptions of worldviews and personal convictions are heightened through threats, causing one to cling to their beliefs as a coping mechanism. Such as a student believing they aren't smart enough to get good grades, that they will never live up to familial expectations, that school is an unsafe and unwelcome experience, etc. Through this perception, the subject's opinions begin to form concrete worldviews (McGregor et al., 2009).

If exposed to enough negative stimuli one can begin to develop coping mechanisms to protect themselves from those negative situations. Through coping mechanisms, an individual develops a reluctance to try new skills or experiences from fear of either failure or criticism of their work.

Coping Mechanisms

In the same manner that reward loops can increase motivation, negative stimuli can have the opposite effect. The constant input of negative stimuli encourages the development of coping mechanisms and stimuli avoidance (Roskes et al., 2014). In an educational context, this can lead to educational trauma and as previously mentioned negative mental health consequences. Situations that cause negative stimuli can trigger the development of a coping mechanism which results in avoidance and a feeling of safety in that avoidance, thus informing the worldview of the subject (McGregor et al., 2009).

As avoidance proves effective, the worldview shapes into concrete information resulting in the idea that avoidance can minimize threats (McGregor et al., 2009). Students with concrete worldviews are less likely to have ideation flexibility. Ideation flexibility has been positively associated with higher achievement and outcomes (Li et al., 2019). If an individual is able to think about and approach novel situations in varied and flexible ways they are more likely to obtain their desired outcome.

Ideation Flexibility

Ideation flexibility, the ability to approach problems from a flexible perspective, is in many ways the antonym of concrete worldviews. Whereas a student who holds concrete worldviews would be reluctant to develop alternate thought pathways, a student

who is flexible in their approach results in more effective outcomes (Li et al., 2019).

Ideation flexibility is shown to be effective in spheres of creativity and problem solving ideation flexibility is noted as influential to motivation. As understood by Li et al., (2019) optimism moderates the relationship between avoidance motivation and ideational flexibility, flexibility in thinking patterns, and solution generation. In their study, Li et al. found that adults who had been identified as having low optimism were more likely to experience and positively correlated to avoidance motivation.

The usefulness of the study of optimism on adult motivation lies in the fact that if optimism could be encouraged and fostered it would result in more effective programming and supports and potentially lead to a shift away from avoidance motivation or a reactive approach method towards a high-approach-motivation tendency. If a student is optimistic about their abilities, they are better able to leverage their intrinsic motivation and overcome the folly of avoidance. This allows for the investigation of creativity overcoming motivation orientation or the motivation to approach tasks or actions (Li et al., 2019). The ability to adapt to situations is integral to success. Individuals who have ideation flexibility are more likely to be able to determine and guide their own desired outcomes (Elliot & Covington, 2001).

Self-Determination

Li et al. (2019), Roskes et al. (2014), and McGregor et al., (2009) have illustrated a connection between ideation flexibility, coping mechanisms, and the impact of concrete worldviews. The development of those traits, as previously discussed in this review, can negatively affect outcomes. In contrast to that, students who can effectively interact with

their environment show traits such as ideation flexibility, self-determination, and proactive coping.

Connecting the concepts of the self-determination of adult students with diagnosed learning disabilities, and the adaptation or ideation flexibility of said adults, shows that adaptation is closely related to successful education, employment, and social settings (Elliot & Covington, 2001). Those who are performing at or above social and cultural expectations are seen as having effective adaptive behavior (Weller et al., 1994). Students who can perceive implied meaning from circumstances and stimuli are hypothesized to be more successful in developing social identities, social experiences, behavioral traits, values, and response patterns (Weller et al., 1994). One of the more specific and notable outcomes of adaptive behavior is that adults who develop strong perspectives and see themselves as life-long learners are able to leverage their strengths by taking advantage of assistance resources, proactive coping, and developing flexible, purposeful responses to environmental stimuli. All of this leads the individual to positively engage with environmental demands (Weller et al., 1994).

The interrelatedness of the topics is seen in the correlation between self-determination and intrinsic motivation (Weller et al., 1994). Those who have developed the skill of self-determination are more likely to respond with higher levels of motivational intensity and ideation flexibility and are less likely to develop coping strategies, reactive approaches, or negative intrinsic motivation.

As the understanding of intrinsic motivation grows it is important to take into account other factors that can affect outcomes. In addition to intrinsic motivation, extrinsic motivation can have a profound effect on achievement.

Intrinsic Motivation vs. Extrinsic Motivation. Linking the subtopics of extrinsic motivation and intrinsic motivation is a meta-analysis by Cameron and Pierce (1994) suggesting that verbal praise can produce intrinsic motivation. Additionally, if the external factor of praise is removed or lessened the intrinsic motivation is suggested to remain ingrained in student performance (Cameron & Pierce, 1994). While intrinsic motivation can be encouraged through the use of rewards, research indicates that if a reward is given simply for doing a task rather than doing a task well, the impact on intrinsic motivation may be less.

Individuals who were given a reward simply for completing a task saw no negative effect on motivation when the reward was removed (Cameron & Pierce, 1994). Concerns over the potential outcomes such as lessened intrinsic motivation, the effects of encouraging specific behavior using a reward system, scaffolding, and finally removing the reward were investigated. Most interestingly, while rewards are most commonly associated with extrinsic motivation the study shows that reinforcement or rewards do not negatively impact or harm one's existing intrinsic motivation (Cameron & Pierce, 1994).

Understanding the impacts and effects intrinsic motivation can have on adults begins to inform the context of this research capstone. We first need to understand how motivation impacts learner outcomes in order to develop the survey questions that allow participants to describe their motivation for the purpose of this capstone research. To have a full and clear understanding of motivation and the effects it has on achievement or goal completion it is important to contextualize the effect that extrinsic motivation can have on these goals and outcomes.

Extrinsic Motivation

Following the review of relevant intrinsic motivation literature it was necessary to this research to examine extrinsic motivation. Extrinsic motivation is defined as the desire to complete a task in order to achieve a certain outcome. There are many subsets of extrinsic motivation that could have been explored, however, for this project the research focused on the following subsets: reward based motivation, reward processing, undermining effects of rewards, effect of reward motivation on perception, rewards vs. punishment, parental expectations, stressors, and connecting the impact of the combined effects of extrinsic and intrinsic motivation. Mirroring the purpose of synthesizing intrinsic data is the following section on extrinsic motivation. Through understanding the potential extrinsic motivating factors, survey questions were designed and added to give a wider ability for participants to express their motivational description.

From reward processing, stressors, avoidance, trauma, to familial expectations, extrinsic motivation plays an important role. Similarly to how approach motivation can affect intrinsic motivation, it is also capable of affecting extrinsic motivation. In the context of extrinsic motivation, approach motivation is defined as the force of being motivated by the possibility of achieving either a negative or positive external outcome (McGregor et al., 2009). By taking motivation into account it could affect all aspects of education from students and faculty to programs and curricula. As Gangé and Deci noted in their 2005 study, curricula failing to account for motivation will be less effective in achieving outcomes.

Reward-Based Motivation

Reward-based motivation and approach motivation go hand in hand, considering that while approach motivation describes an individual's drive toward an outcome, reward motivation characterizes the influences that can affect an individual's desire for a certain outcome. Approach motivation is defined as being motivated by the possibility of either a negative or positive external outcome (Claro et al., 2016). Reward-based processing is composed of approach motivation and behavior patterns in response to stimuli (Smillie, 2013). This literature review goes into greater detail about multiple aspects of reward-based motivation. Below is a brief overview of each reward subtopic that was included in this review.

By affecting stressors, focus, and creating opportunities research has found that avoidance motivation can be lessened, this concept is defined as reward desire and reward enjoyment (Rokes, 2014). This process was discussed in the reward processing subtopic section. Hidi (2016) defines the differences between extrinsic and intrinsic motivation, the undermining effects of rewards, and differences in individual reward processing. Highlighting that positive rewards should be utilized and negative effects avoided in order to increase motivation (Hidi 2016), Gangé and Deci (2005) connected the self-determination theory and the effect of extrinsic reward motivation's effect on intrinsic motivation as discussed in the subtopic section undermining effects of rewards.

Continuing forward into the research, reward processing was examined including the effects on motivation and how influences are processed resulting in changes to outcomes. The resulting effects of Hidi's (2016) work illustrated that behavior was influenced primarily by pre-established values, but could be manipulated through the

introduction of reward and punishment. These values were created or enforced by the order in which reward and punishment were applied to the subjects (Hidi, 2016).

Reward Processing. Motivation affects behavior patterns in many different ways. To begin the discussion of extrinsic motivation on outcomes, it was necessary to acknowledge the effects of reward processing on motivation. Reward processing is, in essence, composed of the two components of incentive motivation and behavior patterns; an individual who receives positive stimuli will develop behavior patterns and incentive motivation in response to said stimuli (Smillie, 2013). If one receives reward enjoyment, they will develop reward desire. As the rewards are processed they can develop into the structure of reward loops and result in dopamine increases as the individual achieves the desired results of their efforts (Smillie, 2013). While positive reward processing can be attributed to the likelihood of achieving outcomes there are certain disadvantages to rewards that need to be considered.

Undermining Effects of Rewards. While Hidi's study (2016) also makes connections between how the brain processes reward circuits and the development of behavioral outcomes, they find varying results and note potential follies in the use of rewards on behavior modification. There are distinct undermining effects associated with the use of rewards in achieving behavioral outcomes (Gangé & Deci, 2005). Noting differences and potential relationships between intrinsic and extrinsic motivation patterns, such as personal satisfaction of achievement vs. the desire to achieve outcomes, it can be argued that if rewards are used to encourage extrinsic motivation, it can have a negative effect on intrinsic motivation (McGregor et al., 2009). Under this view, rewards essentially encourage the development of behavior patterns that strengthen individuals to

desire rewards rather than building or fostering growth in developing intrinsic motivation self-determination behavior patterns.

Noted negative effects of reward motivation are recognized as creating an obstacle in developing satisfaction of personal needs, conceptual learning, creativity, and self-regulation (Hidi 2016). Positive rewards could be utilized if negative effects, such as diminishing intrinsic motivation, avoided, suggesting the potential of additional research on the integration of psychology and educational research (Hidi 2016).

While rewards can have a profound effect on motivation, they are not universally effective. Preexisting mores, values, and worldviews can affect the outcome motivation has on outcomes.

Effect of Reward Motivation on Perception. With the goal of investigating behavior motivation and the effect of external factors on behavior, Athota et al. (2017) designed a study where behavior was premeditated by either a reward followed by punishment or punishment followed by a reward. The effect on the behavior illustrated that behavior was influenced primarily by the study participant's pre-established values (Athota et al., 2017). These values were either fostered or solidified by the order in which reward and punishment were applied to the subjects. Similarly to the research done respectively in 2019 and 2009, in reference to intrinsic motivation, enforcing values, or as McGregor et al. (2009) and Li et. al (2019), identified as forming concrete world-views, can affect behavior leading to achieving defined outcomes.

Individuals who were characterized as having the desire to seek outcomes, stimuli, or sensations were also found to be more likely to develop behavior that led to

risk-taking (Athota et al., 2017). Some researchers are attempting to affect the outcomes of behavior through the input of rewards versus punishment.

Rewards vs Punishment. If negative stimuli or punishment was introduced the reward system results shifted. According to the study implemented by Athota et al. in 2017, by alternating reward and punishment variables the resulting behaviors were affected. Additionally corresponding with the behavioral outcomes was the influence of pre-existing values. If an individual valued novelty and excitement they were more likely to respond to a reward followed by punishment behavioral modification design. Whereas if an individual valued pleasure seeking they were more likely to be affected by the punishment followed by reward model (Athota et al., 2017).

What this study illustrates is that while rewards and punishment can have an effect on behavior or motivation it is not a foolproof indicator of outcomes if existing values and worldviews are not taken into account as well. Rewards and punishment are effective in creating outcomes. The source of the stimuli or rewards proves impactful as well.

Parental Expectations on Extrinsic Motivation

Extrinsic motivation viewed through the lens of reward-based motivation suggests that parental expectations are a high predictor of academic success (Yan & Lin, 2005). While this research thesis, *how do adult learners describe their motivation to pursue education*, was intended to review motivation in adult students it was relevant to follow their educational journey up to this point. With many students having previously developed worldviews, values, expectations, preferences, and educational trauma while

in traditional school settings, analyzing the source of a handful of these topics assisted in informing the creation of this current research.

By following that students carry educational practices and trauma into their adult endeavors, it is relevant for the research to include practices in adolescence that can affect outcomes going forward. A study by Yan and Lin in 2005 showed that parents across ethnic groups who were involved in their children's studies, in this particular case mathematics, had children who performed higher academically than those whose parents were less involved or not involved in their studies.

The study suggested that parental educational expectations have a strong correlation to student achievement. Yan and Lin (2005) focused their research on several subtopics of parental involvement such as family forms, obligations, and parent information networks. There was some variation across ethnic groups, such as the social expectation of parents to be involved in schools being a high predictor of academic achievement among Caucasian students, or the effect of close-knit family relationships being a high indicator among all ethnic groups with the exception of Hispanic families. Overarchingly, the number one predictor of academic success across ethnic groups regardless of race was parental educational expectations (Yan and Lin 2005).

Linking extrinsic motivation to parental expectations lies in the previously referred to concepts of punishment vs. reward processing and the effect of predetermined values on outcomes. Students instilled with concrete world-views in regard to academic achievement will achieve higher than those who do not hold such values (Mcgregor et al., 2009). While parental expectations and guidance can be beneficial, motivation can

additionally be affected by stress and the individual's ability to positively deal with stress and the resulting possibility of avoidance.

Stressors

By affecting stressors, providing structured focus, and creating invigorating and replenishing opportunities research has found that avoidance motivation can be lessened therefore reducing often observed negative consequences of avoidance motivation (Rokes, 2014). Many of the negative consequences are displayed as decreased performance, depleted resources, and reduced well-being (Rokes, 2014). Conversely, to approach motivation, avoidance arouses feelings of alertness, caution, rigid attention to detail, a change in processing, and concrete, systematic thinking. While these skills may be constructive in the realm of avoiding negative stimuli, they can have profound effects on motivation (Rokes, 2014).

By developing avoidance motivation one has the potential to develop a rigidity in approach which makes fluid creative tasks difficult. The tendency to develop chronic, persistent avoidance in response to any stimuli grows, and with it comes negative outcomes such as decreased performance and well-being along with reduced energy levels, and negative consequences such as anger, fear, and anxiety (Rokes, 2014). As Athota et al., 2017 illustrated that while seeking particular outcomes is a common theme among the studies of motivation, oftentimes there are other mitigating factors such as previously held beliefs and desires.

Impact of Extrinsic and Intrinsic Motivation on Motivation

Self-determination theory connects the effect of extrinsic motivation on intrinsic motivation. Dividing extrinsic motivation into categories based on degrees of autonomy

leads us to consider the theory of self-determination. The theory of self-determination suggests that individuals are motivated by the desire to achieve competence and autonomy (Ackerman, 2018). Structuring an environment to combine and leverage individual intrinsic and extrinsic motivation factors encourages an increase in effective and positive performance (Gagné & Deci, 2005). The study by Levesque et. al, (2010) went on to show the positive motivational effect of increasing both intrinsic and extrinsic motivational factors. By increasing the size and scope of tasks, researchers found that intrinsic motivation was increased. Additionally, by increasing the extrinsic rewards such as compensation, the researchers found that extrinsic motivation was increased.

Moving forward in the available research on motivation it is important to consider how external factors can affect motivation. While intrinsic motivation, the desire to achieve an outcome due to personal satisfaction, and extrinsic motivation, the desire to achieve an outcome due to the expectation of a reward or outcome, have both been determined to be impactful on results, external factors such as income, relationships, learning disabilities, and trauma may also have a significant impact on achievement.

External Influences

Following the review of relevant extrinsic motivation literature it was necessary to this research to examine external influences. External influences are defined here as the combined effects of the myriad of barriers adult students face that are outside of the students' sphere of control. There are many subsets of external influences that could have been explored, however, for this project the research focused on the following subsets: trauma, the effect of trauma on perception, the effect of the reactive approach motivation on avoidance, environmental factors, learning disabilities, income, and opportunities.

Prior trauma affects intrinsic motivation and self-view Crabtree (1999).

Identifying factors such as the winner-loser effect, learning disabilities, self-image, past aggression, income, relationships with valued mentors, instructional practices, and social dominance begins to draw the connection between achievement motivation and the effect of external influences on motivation (Beacham, 2003). Through the influence of events and stimuli an individual's processing of their experiences and environment becomes automatic (Richman, 2013). The Richman study goes on to illustrate the ways in which individuals begin to develop coping styles as a means of stressor avoidance. Questioning the effects of motivation on adult student achievement guided the research, illustrating connections between the effects of trauma and external influences on motivation and the desire to interact with novel situations.

Effect of Trauma on Motivation

By connecting the research between stress avoidance and the relative effect of external influence on trauma one can utilize the research in ways that inform programming related to behavioral and cognitive instructional practices. Trauma has been observed to have effects on motivation; as Crabtree (1999) notes it is not always the event itself that causes trauma to be activated but oftentimes the interpretation of those events that lead to disturbances. Individuals experiencing trauma responses such as negative coping mechanisms, which were explored later on in this review, may develop the tendency to avoid stimulation that reminds them of the existing trauma. Those who avoid threatening situations will be less likely to attempt novel situations, advocate for themselves, or graduate on time (Butler et al., 2000).

Leveraging the available research interventions could assist in developing practices of trauma-informed teaching and reactive methods to mitigate existing education trauma responses (Richman, 2013). The effect of the ways in which trauma is perceived, the resulting coping mechanisms, and the impact of mentors can profoundly affect an individual's motivation and desire to attempt novel situations (Beacham, 2003, Claro et al., 2016, Crabtree, 1999, McGregor et al., 2009, Richman, 2013).

The Effect of Trauma on Perception

Intrinsic motivation is affected by prior trauma (Beacham, 2003). The ways in which motivation is affected by trauma vary depending on the situation. Crabtree (1999) proves this phenomenon through their research on the brain's interpretation of trauma and the effect it has on motivation. He notes that the brain's interpretation of said stimuli or events potentially leads to psychological disturbance. Trauma itself can be described in this research section as an individual suffering from PTSD, forms of ACES, and those who develop educational trauma responses. In addition to using the aforementioned definition of the word trauma, we will also be referring to trauma outcomes or responses such as coping, stressor avoidance, tactics, and interventions.

If a person experiences PTSD they tend to avoid stimuli that remind them of the situation (Roskes et al., 2014). The processing of their environment is aggressively influenced by the automatic thoughts occurring from activated schemata (Crabtree, 1999). In response to the application of stimuli that trigger a post-traumatic stress response, individuals have been observed developing a coping style referred to as stressor avoidance (Crabtree, 1999). Stressor avoidance and avoidance motivation have been proven to negatively affect the goals and outcomes of individuals (Roskes et al., 2014). It

is important to note that the study Crabtree presents does illustrate for us that not all who experience trauma will develop effectual PTSD.

The study goes on to support prior research done by McGregor et al. (2009) and Lie et al. (2019), that much of the processing is relative to an individual's interpretation of the situation, meaning that the previously held beliefs of an individual can affect the processing of trauma (Crabtree, 1999). Furthering this study the research on PTSD has turned to studying the application of cognitive-behavioral models of interventions. A study by Richman (2013) suggests these cognitive-based interventions would assist in developing knowledge relating to the application of said interventions on individuals experiencing PTSD, trauma, learning trauma, and ACES. Research on this topic could inform the development of additional interventions related to cognitive and behavioral techniques that keep in mind trauma-informed teaching, stress relief activities, and education trauma responses (Richman, 2013).

Reactive Approach Motivation on Avoidance

Previously we have viewed the effects of the reactive approach motivation related to and through the lens of intrinsic motivation. Some of the connections noted were the effects anxiety has on the desire of an individual to attempt a novel situation or stimuli. McGregor et. al (2009) noted that individuals who experience high levels of anxiety are more prone to developing a reactive approach method. This method tends to encourage avoidance of negative situations and to seek out positive ones, resulting in a defensive and inflexible view of the world. If one experiences enough negative stimuli it may trigger the development of Personal Uncertainty and is found as the cause of aggressive displays such as repression, prejudice, hate, and suicide (McGregor et al., 2009).

The Reactive Approach Motivation is used as a lens to understand the worldview that develops as a result of persistent anxiety (McGregor et al., 2009). Connecting the research McGregor et al provided on intrinsic motivation, we can make the connection between external factors and stimuli having a profound effect on motivation and perception of events and world-views. The research proposed by Richman (2013) illustrates the connection between traumatic events and the development of PTSD. Similarly, the results found by McGregor et al. showed negative stimuli can result in the development of anxiety, depression, suicide, and avoidance.

Related to the effects of trauma and coping mechanisms is a study by Baumeister and Leary produced in 1995. Noted in that study was the connection between hierarchy and how prior experiences could lead to outcomes that affected intrinsic motivation styles. Individuals who had a high social ranking experienced more access to resources (Baumeister & Leary 1995). The study notes that while hierarchy exists in all social groups, it is unique to humans to use aspects such as body size, aggression, winner-loser effect, and social experience (Baumeister & Leary, 1995). Individuals who had more success in the past (i.e. passing exams, positive social interactions, triumph at a game, etc.) are more likely to succeed in the future (Beacham, 2003). This research, along with many others utilized in this review, suggests that individuals who experience losses consistently are less likely to attempt or find success in novel experiences (Beacham, 2003, Claro, 2016, Crabtree, 1999, McGregor et al., 2009, Richman, 2013).

Connecting those theories to the proposed research question of the effects of motivation on student academic achievement is the resulting assumption that individuals who are exposed to negative experiences develop debilitating traits resulting in negative

responses to stressful situations or stimuli (McGregor et al., 2009; Richman, 2013). To view the effect of negative experiences and external influences on motivation, we examined resources that illuminate the effects of learning disabilities, income, growth mindset, and relationships with mentors.

Effect of Environment on Outcomes

By defining environment as the factors outside of an individual's sphere of influence, we are able to begin to review literature available in regards to the influence of external factors on achievement, attitude, and motivation. In order to understand a fraction of the effect of external influences on outcomes, we will begin by highlighting research done about adult students' academic performance and success while navigating the effects of diagnosed learning disabilities.

Effects of Learning Disabilities on Outcomes

Following adult students into the realm of academic success of college students, studies have found that students with ADHD and other learning disabilities, such as dyslexia or autism, take longer to graduate than others. Butler et al. (2000) went on to share findings that indicate that while many students facing these barriers not only may take longer to graduate, but they are also less likely to graduate, have lower GPAs, higher rates of withdrawal, and course underloads. As Gangé and Deci (2005) illustrated through their research, students who have learning disabilities can mitigate the effects of those learning disabilities through work and growth on their ability to use adaptive behavior, such as leveraging their strengths and using these strengths to positively react to their environment and taking advantage of assistance available.

While Gangé and Deci (2005) suggest that students with learning disabilities will achieve better outcomes if they leverage their strengths and take advantage of available supports, Morrison and Cosden (1997) observed that adult students with learning disabilities are unlikely to take advantage of services even if they register for them, but interestingly, whether they utilize additional services did not affect their academic success in comparison to those who did. Shifting away from the effects of learning disabilities on achievement we will turn our focus to the effects of environmental factors such as family income on student achievement.

Effects of Income on Outcomes

Research conducted by Claro et al. (2016) presents the findings that family income is a strong predictor of achievement. Conversely and equally effective is that a growth mindset is also associated with and is a strong predictor of achievement. Claro et al. note that the two effects are interrelated as students from low-income families were identified as less likely to have a growth mindset.

Growth mindset is defined in this study as the belief and mindset that intelligence can be altered and is not a rigid fixed phenomena. Claro et al.'s (2016) research suggests that students who live in poverty or are low-income are less likely to have a growth mindset than their wealthier peers. However, the study does go on to note that if a student who lives in poverty has a growth mindset, defined as the belief that they can impact and improve their intelligence, it can be used as an instrument to buffer against the effects of poverty on achievement (Claro et al., 2016). As previously noted in relation to intrinsic motivation the mindset, world-view, and beliefs of an individual can have an incredible influence both positively and negatively on motivation and achievement (Li et al., 2019;

McGregor et al., 2009). While students who have higher-income families are more likely to believe they can achieve their academic goals they are also more likely to have access to safe schools and educational opportunities (Vega et al., 2015).

Effects of Educational Opportunities on Outcomes

In centering the research on external factors or barriers, varied studies report findings that support the idea that external factors can have either a positive or negative effect on educational achievement. Noted in previous studies in this literature review was the reality that individuals stay more engaged when they enjoy the task they are presented with, while, equally important to curriculum is the relationship between students and their mentors (Gable & Poole, 2012). The study put forth by Vega et al. (2015) noted that relationships proved impactful to a students' access to education. Noted in the same Vega et al. (2015) study, the most common barriers to academic achievement were identified as relationships with teachers, counselors, school policy, and peers.

Connecting previous research discussed in this review is the effect of parental expectations on achievement. Parents who were involved in their children's academics instilled extrinsic motivation in their children to achieve academically (Yan and Lin, 2005). Vega et al. (2015) set forth the implication that if a student has parental or mentor involvement or support, they are more likely to achieve their goals and desired outcomes. In addition to identifying the importance of relationships and school policies noted by Vega et al. (2015) was the barrier to safety and the ways in which that affected a students ability to achieve.

As previously noted, a lack of safety can lead to trauma and negative trauma coping responses, therefore denying students access to educational opportunities

(Richman, 2013). It is important to note that race affects students in the ways in which they are perceived by mentors and by the ways in which motivation is encouraged (Yan & Lin, 2005). The study by Vega et al. (2015) focused on minority students identified as Black and Latino. Kember (2000) focused their study on mentor expectations of student outcome on Asian students, noting that Asian students are perceived culturally as being opposed to inventive teaching styles. The ways in which individuals are perceived by mentors, parents and peers, and by the ways in which motivation is encouraged is impactful to the success they may face in both life and in academics (Kember, 2000; Richman, 2013; Vega et al., 2015; Yan & Lin, 2005). This section on external factors informed the creation of certain qualitative research questions. Research on external forces were so widespread and varied it indicated the need for certain questions in the data collection tool to be vague and open-ended in nature as well. For participants to capture their description of motivation as it is affected by external factors, qualitative open-ended questions were added in order to give a flexible and research-grounded option for sharing their perspective. To answer the question *how do adult learners describe their motivation to pursue education*, derived from the learnings from the external factors section, six short answer responses were included in the capstone data survey.

Conclusion

Transitioning from this literature review and moving forward into the methods section of this thesis will determine and discuss the best implementation of the implied knowledge gathered from this review. Noted holes in the research to this date is connecting motivational factors across a spectrum of disciplines. Each study defined in

the literature review isolated one motivational factor rather than considering the interconnectedness. Findings from the review were used in the creation of this capstone research survey tool in order to answer *how do adult learners describe their motivation to pursue education?* Chapter Three will introduce the research paradigm, choice of method, setting, participants, IRB process, methods, research tools, and the data analysis methods used to gather the data.

CHAPTER THREE

Methods

Introduction

The goal of this research was to determine *how do adult learners describe their motivation to pursue education?* Data collected from the survey was intended to be used to prescribe interventions to curriculum and programming for adult students. Based on the outcomes of the surveys the data allows stakeholders to leverage the knowledge of motivational effects on achievement. The overarching goal of this study was to determine empirically how motivation can affect academic achievement and additionally how impactful the effects of external factors and influences are on academic achievement.

The data was gathered through an asynchronous survey method that utilized both quantitative ranking questions and open-ended qualitative responses. The survey used, placed the research design as a mixed methods approach to data collection. This chapter describes the research paradigm, choice of method, setting, participants, IRB process, methods, research tools, and data analysis methods.

To begin examining the data collection effort first will be the description of the research paradigm and the choice of methodology. In creating the data collection tool there were several iterations developed and presented to educators within the field of adult education. Taking their insight and advice into consideration a survey was produced. The methodology used to collect data as previously stated was a mixed methods approach to data collection. In utilizing this mixed-method approach it was possible to collect data that gave both a numerical and a synthesized personalized understanding of how motivation affects achievement.

In this chapter, following sharing the paradigm and the research methodology, information was shared about the setting, participants, and the ethics process. The setting consisted of several ABE high school equivalency test preparation courses, students of those courses, and additionally adult students who were pursuing certifications. The IRB process is outlined in this section as well. The setting and the participants are also further defined as this chapter progresses.

To finish Chapter Three methods exploration, there is a discussion of the methods used, the research tool is described in detail, and the data analysis methods are also defined. The rationale for this procedure is provided as well as an analysis of the strengths and weaknesses of the procedure. The method justification explores why this particular analysis method was selected and identified potential shortcomings of the chosen method.

Research Paradigm and Method

Research Paradigm

The purpose of this research survey is to determine how adult learners describe their motivation to pursue education by collecting both quantitative and qualitative data from students participating in high school equivalency test preparation courses, dual enrollment, or adult certificate courses. The survey was designed to allow students to share their insight into their intrinsic and extrinsic motivation and additionally to determine the most impactful external influences that affected outcomes (Creswell & Creswell, 2022).

The rationale for using the mixed method approach and the additional choice to use a survey as the data collection method was chosen due to the time constraints of both

the researcher and the students. The survey was used in HSE preparation and certification courses and administered by their ABE instructor. A survey allowed students to more quickly give their insights and allowed them to determine to what extent they desired to participate. For example a student who was less apt to share could complete the ranking questions or simply disregard the survey entirely. Due to the time constraints of the researcher and the inability to participate in interview style data gathering methods the use of a survey was the preferred method.

The survey was cross-sectional in design as it was able to be shared with students as they joined the program in open enrollment periods or were already participants. While the survey method was preferred based on time constraints of both surveyee and surveyor it was anticipated and confirmed that less full or robust data sets were collected in comparison to interview style data collection methods.

The population, as mentioned previously, were students who were active participants, meaning they had attended at least twelve hours of class, of a high school equivalency test preparation or certification course. The survey was implemented at two programs, one was an urban program and the other was rural. The sample size of the urban program was larger than that of the rural ABE program. The survey included wide ranges of ages, students from age 18 to 46 and older. The participants varied in gender as well as socioeconomic status, ethnicity, and previous formal education level.

The decision to survey students from different programs and regional settings was chosen in order to minimize researcher bias (Creswell & Creswell, 2022). The sampling was done through a sample of convenience, as survey participants were obtained through their connection to an adult education program. The nonprobability sample method was

implemented as the survey was obtained through availability and opt-in participation from students who were participants of their adult education program as defined as students at or above twelve hours of class time. Stratification occurs in this study as there were no students surveyed from general adult education classes such as English language classes, but rather only those choosing to obtain either an HSE, certificate, or higher education (dual enrollment). The students in other courses such as citizenship, English language, or other courses were excluded from the survey.

Method

The methodology of this research was data collection via asynchronous surveys. The decision to use surveys to collect data was chosen foremost with the participant in mind. As the many of the adult students who were surveyed were working towards obtaining a high school equivalency degree, it was noted foremost that their studies and the time devoted to their studies must be respected. In direct response to this key characteristic of the survey participants, the method chosen was deemed to be least time consuming and impactful. In order to allow students to complete the survey in a timely manner it was determined that asynchronous surveys would be least intrusive to class time and participation.

The survey was shared with the students by their instructor with information included; explanations of the participants' right to opt out, the purpose for collecting data, the potential impact the data may have on the field, and any potential harm the survey could cause a participant. Another related aspect to the decision of this method of survey implementation was that the research was conducted in multiple geographic areas by a single researcher as opposed to a centralized location and a team of researchers available.

As both quantitative and qualitative data was collected it led to a mixed methods approach, the approach centers on a convergent design (Creswell & Creswell, 2022). The data collected was both quantitative and qualitative response synthesis. The choice of design was chosen by the researcher based on their previous experience of the field of adult education and particular data sets desired. By including ranking quantitative questions individuals were given a framework and guidance to consider their motivation and educational experience. Whereas by including qualitative short answer prompts individuals were able to provide unstructured responses that were unique to their experience without the strict leading parameters of multiple choice questions.

While the design method was not informed by advisors, reviewers, or mentors, the aforementioned were consulted in the process of developing the data collection survey. The survey allowed the data to be collected in line with a convergent design, as quantitative and qualitative data was collected and analyzed simultaneously. The expected intent of the study was to collect data that illustrates the barriers to achievement as well as informing programming decisions to the field with the intent of leveraging the data to design those interventions.

Setting, Participants, and IRB process

The Setting of the research was adult education classrooms. In this study two programs were utilized. In order to maintain integrity of the study and to minimize bias the programs chosen varied in location, size, and student population. The sampling procedure was a clustering procedure as the surveys were kept anonymous with only a set of demographics that could be analyzed, but could not be assigned to any singular participant. Additionally the participants were identified as a convenience or

nonprobability sample (Creswell & Creswell, 2022). Of the two participating adult education classrooms, one of the programs studied was a small rural program the other was a large urban program.

Setting and Participants

The students surveyed at the rural program were participants from several different sites which varied in classroom setting. There was no central location where all students met, attended class, or participated. The students from this program varied in gender, age, socioeconomic status, and education functioning level. Some students participated via one-on-one instruction, some one-room school-house, and others were classes aligned with the local community and technical college with students who were testing at or below an ABE level 5. Most of the classrooms were not leveled based on education functioning level, but some, such as those associated with the community and technical college did have leveled enrollment. Students in this rural survey population were all from adult education classrooms in Minnesota connected through a central district office. The students were attending class in order to either obtain a GED, higher education degree (dual enrollment), or program certificate. Additional data points were collected however, the following figure shares only a few demographic data points describing the participants of the survey.

Figure 1

Demographic Information of Participants

Age	Frequency	Percent
18-25	2	8.3

26-45	20	83.3
46 or older	2	8.3

Gender	Frequency	Percent
Male	7	29.2
Female	17	70.8
Other Gender Identity	0	0

Race	Frequency	Percent
Am. Indian/Alaskan Native	2	8.3
Asian	0	0
Black or African Am.	1	4.2
Native Hawaiian/other Pacific Islander	0	0
Hispanic/Latinx	0	0
Two or more races	1	4.2

White	21	87.5
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The students surveyed at the urban school attended class at a central location or remotely. The students from this program varied in gender, age, and socioeconomic status. These students varied from the rural program as they were sorted into classes based on their EFL. Students in these ABE classes were participants working towards obtaining their HSE degree or certifications. In this research students were surveyed from three leveled HSE test preparation sections and three ongoing local and statewide certification courses.

Demographic Information

It was found that no significant correlation existed between any of the demographic information that was gathered and responses to the qualitative or quantitative questions. The resulting information from the demographic items is described and synthesized in the following Demographics section of Chapter Four.

Most of the participating individuals (83%) were women who were ages 26 to 45 years old. Almost all (91.7%) were employed and not using public assistance. Seventy-nine percent have obtained some type of credential after leaving k12. Most participants (78.3%) came from a family setting where one or both of their parents had either completed high school or obtained additional schooling such as post-secondary (60.9%). Of the barriers to success that were listed in the survey, only three were chosen: learning disabled (33.3%), low income (44.4%), or single parent (44.4%).

Categorized in the Demographic section are several additional ‘yes-no’ items. These items are included in this section as they helped define the survey population.

Yes-no items included in the demographic section that did not pertain to specific criteria, such as age, gender, income, education, ethnicity, and employment were ones such as the following, “Is this your first time pursuing education after k12?”.

Individuals who had more success in the past, such as passing exams and positive social interactions, are more likely to succeed in the future (Beacham, 2003). Around half, 57.9% of the surveyed individuals had attempted school after k12 at some point in the past. Findings outlined in Chapter Three illustrate that many students who have been exposed to negative education experiences in the past take longer to graduate, are also less likely to graduate, and have higher rates of withdrawal (Butler et al., 2000). Additionally, individuals who have learning disabilities, such as ADHD, autism, or dyslexia take longer to graduate than others (Butler et al., 2000).

Additional yes-no items resulted in the findings that most participants had at least one or more parents who completed either an HSE, high school diploma, or post-secondary credentialing. Vega et al. (2015) set forth the implication that if a student has parental or mentor involvement or support, they are more likely to achieve their goals and desired outcomes. As all participants in the survey were actively pursuing educational credentials, the findings in this research support those proposed by Yan and Lin (2005) in which they found that individuals who had parents who were involved in their academics instilled extrinsic motivation in their children to achieve academically.

Ethics

The proposal for this study was reviewed and approved by Hamline University’s Institutional Review Board. Participant anonymity was protected by the process of anonymous online surveys. The surveys were provided to the participants by their adult

education classrooms and no identifiable personal data was collected such as name, location, DOB, or contact information.

Both programs were contacted and formally agreed to participate in the study. The researcher electronically shared information such as research outcomes and goals, survey procedures, methods of implementation, and survey submissions with the program managers and lead teachers. Once the survey was completed and determined to be useful and unbiased to the satisfaction of the review team, the survey was shared with those program managers and lead teachers participating in the study. Included and shared with the students in addition to the survey, was the same information that was given to the lead teachers and program managers in regard to the data privacy, data use, desired program outcomes, and goals of the research. The completed or partially completed survey data sets were collected from the participants survey responses and compiled. The research tool and data analysis methods are explained in the next section of this chapter.

Research Tools, Methods, and Data Analysis Methods

Research Tools

The survey was developed using a mix of ranking items followed by open-ended statements. This method of student data collection was chosen as it would allow for the survey to be shared and implemented at multiple sites, multiple occurrences, and at varying times. The method was also selected as it allowed the student to participate anonymously and to the extent of their desire to share or contribute. The survey allowed students to answer none, some, or all of the items. The survey began with the ranking items followed by the short answer responses. The ranking items allowed the survey to reflect quantitative data, while the open-ended short-answer items allowed for the

collection of qualitative.

The revisal of the survey consists of the following adaptations and alterations. The singular IRB protocol changes were small updates consisting of adding the researcher contact information and estimated sample size. One of the most common alterations of the survey were addressing points of readability. For example, while the data collected was used in a scholastic nature, one of the main goals of the survey was to be accessible and understandable to students without support. The forms were upgraded from a three point rating score to a four point rating score in order to provide more choices for the students, while disallowing a neutral reply.

Finally two of the most notable additions to the survey were the environmental short answer items. The two items: “what can your ABE program do to better support your learning” and “what could your current instructors do to better support your learning” were added to the survey in order to allow the students to provide feedback that could touch on a wide range of motivational factors. For the extent of this research those two items allowed students to potentially provide information regarding how they are affected by intrinsic, extrinsic motivation and external factors.

As noted earlier in this chapter, if the survey had been implemented in interview style the data would have been more complete, however in order to respect the time of the researcher, the students, and the instructors an asynchronous method was used.

Methods

Ranking Survey Items. The ranking items provided to students attempted to address both the impact of intrinsic and extrinsic motivation as well as the perceived effect of external influencing factors such as income, access, safety, perceived

intelligence etc. There are twenty items that ask a participant to rank their agreement. The ranking items allow four choices that range from disagree to strongly agree. For the following Methods' section four ranking items were chosen to illustrate the types of items asked, the format, and to connect the items to the research presented in Chapter Two.

Posing the item: "I consider myself a life-long learner", was done in order to determine whether adaptive behavior is a common motivating factor. Adaptive behavior is one of many categories that attempt to determine the effects of extrinsic motivation. Adults who develop strong perspectives and see themselves as life-long learners and are able to leverage their strengths and develop flexible, purposeful responses to environmental stimuli (Weller 1994). Adaptation or ideation flexibility in students with diagnosed learning disabilities is closely related to successful education, employment, and social settings (Elliot & Covington, 2001). Again, this item could be answered by students ranking their agreement on a 1-4 scale, 1 correlating to disagree and 4 being strongly agree.

"I enjoy attempting new (unfamiliar) projects". This item was given to students on the survey to gather data about the impact of several aspects of intrinsic motivation such as: approach motivation, reactive approach method, negative intrinsic motivation, and coping mechanisms to name a few. Optimism is an important factor of approach motivation (Claro et al., 2016). Individuals who have high positive approach motivation are more likely to achieve their goals as they are more likely to attempt new skills and retain information more readily (Claro et al., 2016). The positive effect of safe and familiar activities encourages the desire to seek out novel and purposeful stimuli (Gable

& Poole, 2012). Whereas conversely, students who have experienced previous trauma were found to be more likely to avoid novel situations (McGregor et al., 2009). As an individual receives negative stimuli, such as bad grades or failing at new tasks, a possible outcome is the desire to avoid said stimuli (McGregor et al., 2009). As one internalizes negative comments or reviews of their effort, not only does it lead to personal uncertainty, but it is also linked to the development of negative intrinsic motivation (McGregor et al., 2009). This item could be answered by students ranking their agreement on a 1-4 scale, 1 correlating to disagree and 4 being strongly agree.

“I experience personal satisfaction when I finish difficult tasks”. Personal satisfaction was used as a term in this item of the survey as a way to ascertain the influence of both extrinsic and intrinsic motivation. A study by Gable and Poole (2012) reported that students who enjoy their curriculum experience an altered perception of time. Not only did students perceive tasks as shortened, but student content acquisition and achievement were higher as well (Gable & Poole 2012). A student who experiences the personal satisfaction of task enjoyment, content acquisition, and higher achievement will be more likely to continue their education as well as attempt new and novel situations. (McGregor et al., 2009). The reactive approach states that individuals avoid negative situations and to seek out positive ones (McGregor et. al, 2009).

Noting the relationship between intrinsic and extrinsic motivation patterns, such as personal satisfaction of achievement vs. the desire to achieve outcomes, it can be argued that if rewards are used to encourage extrinsic motivation, it can have a negative effect on intrinsic motivation (McGregor et al., 2009). Relying on rewards rather than personal satisfaction of completing a project can lead to a student lacking the

development of satisfaction of personal needs, conceptual learning, creativity, and self-regulation (Hidi 2016). This item could be answered by students ranking their agreement on a 1-4 scale, 1 correlating to disagree and 4 being strongly agree.

“The bullying I experience(d) in school affected my educational success”. By asking the previous item, the survey was attempting to determine the impact of trauma, the effect of trauma on motivation, the effect of trauma on perception, the effects of the reactive approach method on avoidance, the effects of safety on achievement as well as other categories all falling under the umbrella category of external influences. Lack of safety in schools can lead to negative trauma coping responses, such as avoidance, therefore denying students access to educational opportunities (Richman, 2013).

An individual's method of processing their experiences and environment becomes automatic in response to continued negative stimuli leading to the development of coping styles as a means of stressor avoidance (Beacham, 2003; Richman, 2013). By asking items relating to environment and trauma experiences the research strives to determine if there is a connection between stress avoidance and the relative effect of external influence on trauma. By illuminating a connection between the effects of external influences on motivation one can utilize the research in ways that inform interventions related to behavioral and cognitive instructional practices. This item could be answered by students ranking their agreement on a 1-4 scale, 1 correlating to disagree and 4 being strongly agree.

Open-ended Survey Items. The open-ended short answer statements allowed the researcher to gather qualitative data describing the effect of intrinsic motivation and extrinsic motivation on student achievement. There are six open-ended survey items. For

this methods' section three open-ended items were chosen to illustrate the types of items asked, the format, and to connect the items to the research presented in Chapter Two.

The section of the survey dedicated to open-ended items was significantly shorter than the previous ranking section. Choosing to respect the time constraint of the adult students being surveyed it was determined that fewer items would require a written answer. While this choice resulted in less robust data it was deemed to be least time consuming and impactful, in order to allow students to complete the survey in a timely manner, it was determined to be least intrusive to class time and participation. This section was followed by a final prompt encouraging students to share their perspective if not otherwise identified and explored by the survey.

“What is your current goal/5 year goal/or ultimate goal in regards to your education?” The survey contained this item regarding goals in order to determine a potential relationship between academic achievement and extrinsic motivation and to investigate a connection between how high approach motivation can present in adult students. While motivation can be encouraged through the implementation of rewards, such as a diploma or potential promotion upon completion of a certificate, stressing the importance of a goal can lead to certain negative side-effects (Gable & Harmon-Jones, 2008). Having a goal that is too highly stressed can result in the student tuning out unnecessary stimuli to focus on the end goal, and therefore retaining less and having a less full understanding of the topic at hand (Gable & Harmon-Jones, 2008).

In addition to determining the frequency of goal motivated achievement the second purpose of the item was to check the students' willingness to set goals. Students who face negative stimuli such as academic failure, lack of safety, interest, or access to

class may be more reticent to set goals as their optimism may be affected by previous events (Claro et al., 2016). The desire to either pursue events and stimuli that encourage and foster positive reactions, or avoid events that cause negative reactions, can either advance or stunt an individual's progress toward their goal (McGregor et al., 2009).

“What could your ABE program do to better support your learning?” By including that item in the survey data was collected in relation to perceived academic supports. Supports can present differently in regards to each student as varying barriers to achievement exist such as income, access, safety, optimism, task enjoyment among many other potential factors. Vega et al. (2015) noted that students who live in poverty are less likely to succeed academically. This effect can be seen in students having a lack of transportation, family support, or access to class and technology among many other factors (Richman, 2013). Furthermore, while Vega et al. (2015) illustrated the effects of income on academic achievement they also noted the impact of parental or mentor involvement or support. Students were more likely to achieve their goals and desired outcomes if they had parental or mentor support (Vega et al., 2015).

One part of the item was intended to collect data determining the effects of external influences on academic achievement. Additionally the item was utilized to gather information on intrinsic motivation specifically, curriculum. Students stay more engaged when they enjoy the task they are presented with (Gable & Poole, 2012). While curriculum is important to motivation, the relationship between students and their mentors can also have a profound effect (Gable & Poole, 2012). The study put forth by Vega et al. (2015) noted that relationships proved impactful to a students' access to education. By asking students about desired supports it allows for data to be collected on

the effect of impactful curriculum, interventions, instructors, and programs. Noted in the same Vega et al. (2015) study, the most common barriers to academic achievement were identified as relationships with teachers, counselors, school policy, and peers.

“What factors impacted your decision to withdraw from K-12.” The final item shared in this methods’ section was asked to give students the ability to express any of the categories of factors explored in the research, intrinsic, extrinsic, and external factors, that led to their original educational sabbatical. Examples of potential connections to the previous literature review would be factors such as self determination, being a lifelong learner, safety, support, income, parental involvement, the ways in which individuals are perceived by mentors, parents and peers, and by the ways in which motivation is encouraged is impactful to the success they may face in both life and in academics (Kember, 2000; Richman, 2013; Vega et al., 2015; Yan & Lin, 2005).

When a student experiences constant inputs of negative stimuli they may develop coping mechanisms and stimuli avoidance (Roskes et al., 2014). Whereas students who experience negative stimuli may develop negative motivation habits, alternately students who have positive interactions and experiences are more likely to have positive motivational optimism (Li et al, 2019; Roskes et al., 2014). Adults who had been identified as having low optimism were more likely and positively correlated to avoidance motivation (Li et al, 2019).

The usefulness of the study of optimism on adult motivation lies in the fact that if optimism could be encouraged and fostered it would result in more effective interventions and potentially lead to a shift away from avoidance motivation or a reactive approach method towards a high-approach-motivation tendency (Gable & Harmon-Jones,

2013). Individuals who have ideation flexibility are more likely to be able to determine and guide their own desired outcomes (Elliot & Covington, 2001). The previously mentioned survey item gives students who have faced trauma or educational trauma and develop trauma responses or anxiety an opportunity to suggest interventions and supports allowing the student to leverage their ideation flexibility and take an active role in guiding their academic success (Elliot & Covington, 2001; Li et al., 2019). The ability to adapt to situations is integral to success (Elliot & Covington, 2001).

Data Analysis Methods

The instrument used was a repeatable survey method. The survey design was devised based off of survey models reviewed from open-source platforms such as Merlot. The survey first modified from the database, was then piloted to the review team for additional adaptations and revisals. A survey method was chosen as it would allow for the data to be collected with reliable consistency. In addition to consistency, the experiment would be able to be replicated. The reliability of the modified instrument lies in the content. The content utilized continuous scales of ranking agreement using a 1-4 scale, one being disagree and 4 being strongly agree. The quantitative data was entered into a Google form in order to determine the numerical occurrence of each response. The form was the initial output of information as it allowed for visual representation of the collected data.

The information was then used to create a Google sheet in order to further analyze the data. The number of responses from students given the survey was twenty-four out of a potential pool of around 60 active students. As previously mentioned if an interview-style method had been utilized a more complete data set would have been

garnered from the data returned. However, the number of responses and the variety of participants would have been lessened. The data analysis tools chosen for this research were the use of Cronbach's Alpha, standard deviation (SD), and mean. The data is analyzed for consensus through the use of SD and mean. Based on the lack of consistency of response, further explained in Chapters Four and Five, Cronbach's Alpha is utilized to confirm validity of the survey and selected survey questions as a data collection tool.

Conclusion

Utilizing the survey mixed method approach to data collection was the ideal collection tool for both this study and the participants. It was the least invasive to the students, instructors, participants, and the researcher. Using qualitative and quantitative methods allowed for data collection that yielded unbiased numerical results while also allowing for the flexibility of describing student experiences. To better understand how the data can be leveraged and understood, the results of that data follow this method's exploration.

CHAPTER FOUR

Results

Introduction

This research used a mixed methods survey to address the question *how do adult learners describe their educational motivation?* The survey was shared with two adult education programs working with individuals pursuing school post k12. The survey was available to any enrollee of the two adult programs who was a high school equivalency (HSE) prep student, certification student, dual enrollment student, or college prep student. This excluded certain adult education classroom populations such as English language learners or students in citizenship preparation classes. This chapter contains a review of the survey data collection and analysis procedures (both presented in greater detail in Chapter Three) along with a discussion of the results. Chapter Four is divided into themes sections allowing for the review of data collected from students regarding their motivational factors, their educational goals, and decisions.

Pairing the collected survey data with the current research related to the topics of intrinsic and extrinsic motivation allows for an emerging understanding of the factors affecting adult students' educational endeavors. By understanding students' intrinsic motivation it would allow for the development of curriculum that supports the educational goals of both adult students with and without learning disabilities through the use of authentic curriculum choices.

The upcoming *themes* section of this research thesis contains a brief overview and summary of the survey including a revisit of the data procedures and analysis. Located in the *defined themes* section, is where one can find a detailed synthesis of the data. The

results summary consists of reporting on the reliability of the data, demographic information, and a brief synopsis of the quantitative and qualitative data results.

To determine reliability of the data collection instrument, Cronbach's Alpha was used to analyze the latent variable defined as motivation. The latent variable was further separated into two separate categories of survey questions; those that described intrinsic motivation and questions that defined extrinsic motivation. Cronbach alpha was not used on any survey question outlining demographics as there existed no overarching latent variable that needed to be scaled. A full summary describing the use of and application of Cronbach Alpha is in the Appendix.

The *defined themes* section is divided into quantitative results followed by a mixed analysis of themes identified in both the quantitative and qualitative results. To describe the quantitative results, the results with the highest consensus are presented as well as any questions that garnered the least consensus around responses. The combined analysis of the qualitative and quantitative data consists of the following themes: *money*, *personalization*, *grounding*, *support*, *access*, and *other themes*.

Results

The results summary contains a brief synopsis of the quantitative and qualitative data results. Demographic data was collected in the event that any results were correlated to a societal experience or based on the mores of a certain group; however, no significant correlation was found. The resulting information of the demographic questions is described in the Demographics section in Chapter Three.

Quantitative Synopsis

Both the quantitative and qualitative data responses are addressed in this chapter,

simultaneously and interrelatedly within the *defined themes* section. The intrinsic and extrinsic-based survey items in all categories (Likert scale, open-ended, and demographic) were all grounded in previously published research, as synthesized in Chapter Two. The results of the survey indicated general support and consensus of the prior research on the topic. Because motivation was the latent variable being described in the research, the *defined themes* section does not separate between any of the question categories. Quantitative data was collected using Likert scale statements ranked on a scale of 1-4. The statements were grounded and developed using the previous studies done on intrinsic and extrinsic motivation as outlined in the literature review. Standard deviation was used to determine the variability in responses. Much of the data had low variance, with 15 out of 20 statements answered with a variance of less than 1. However, two questions stood out as having either a high or a low variance in comparison to the other questions asked. The item “Experiencing trauma impacts(ed) my educational success”, had a higher than average standard deviation of 1.25, whereas the item: “Experiencing trauma impacts(ed) my educational success” had a notably low standard deviation of .38. Both of these items are expanded on further in the reliability section of Chapter Four.

Qualitative Synopsis

Qualitative data was collected by asking six open-ended response statements. The items were formatted so that an individual could identify and describe the motivational aspects that stood out as the most impactful to them or were not addressed within the previous Likert scale statements. Additionally, without the strict leading parameters of multiple-choice items participants were able to provide unstructured responses that were

unique to their experience. Both the quantitative and the qualitative data illustrates that students define their educational motivation in terms of both intrinsic and extrinsic motivation. In the following figure the mean and standard deviation is illustrated for the intrinsic items included in the research survey tool. Within the intrinsic motivation survey items is the statement that had the lowest standard deviation and the most notable outlier of the data set. The statement, “The bullying I experienced in school affected my educational success” illustrated potential errors that may occur when having participants self-analyze motivation. Later responses to qualitative survey items indicate a different result.

Figure two shows the mean and standard deviation of responses for survey items describing intrinsic motivation. As the figure illustrates there is not significant variation in the data collected from this collection of responses.

Figure 2

Intrinsic Motivation with Standard Deviation

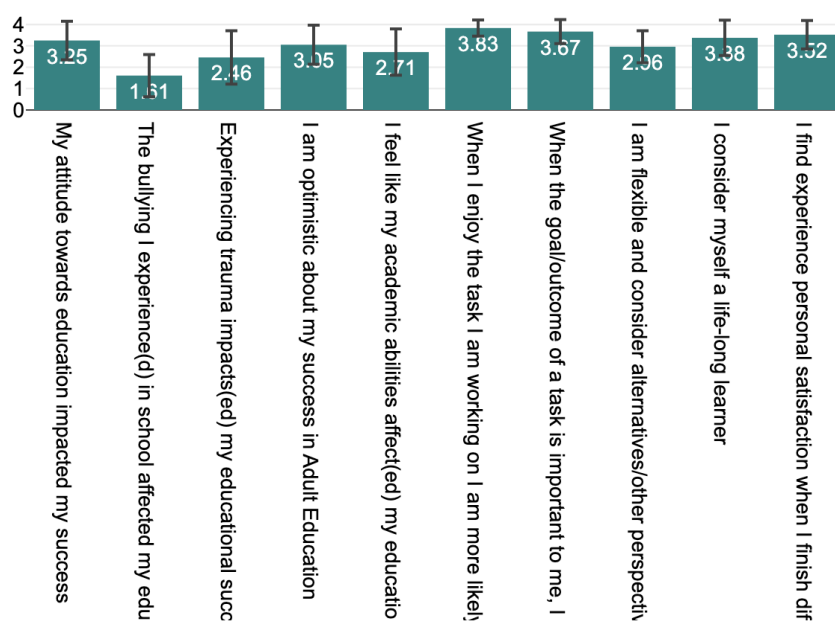


Figure three shows the mean and standard deviation of responses for survey items describing extrinsic motivation. As the figure illustrates there is not significant variation in the data collected from this collection of responses.

Figure 3

Extrinsic Motivation with Standard Deviation



Reliability

To test the reliability of the survey items, standard deviation and Cronbach's Alpha were used. In using standard deviation, results were interpreted based on the general consensus of responses. In the standard deviation section of Chapter Four, greater detail is shared about the range of standard deviation including two notable outliers. Standard deviation focused on the content of the question and how questions related to prior research. Items were not grouped based on criteria such as intrinsic or extrinsic

motivation but rather on how varied participant responses were.

Fifteen of the 20 ranking items asked received responses that had a standard deviation lower than one. Data points lower than one suggest a consensus of responses. Most answers showed a deviation close to or lower than one indicating a low variance and data points close to the mean. This indicates, for our purpose, that the survey gathered consistent and predictable data, leading to the conclusion the responses collected were viable ‘good’ data.

Cronbach’s Alpha was used in this research due to the existence of a latent variable. In this research motivation is the latent variable being measured across all questions. In addition to the overarching scale measuring motivation as a whole, the data was further divided into a subcategory to test reliability across latent variables this time defined respectively as motivation type (intrinsic or extrinsic).

Standard Deviation

Some of the more interesting results came from contradictory responses. Two items attempted to analyze extrinsic motivation specifically the category of reward processing. The first item was one that asked individuals to rank on a 1-4 scale, 1 equaling disagreement and 4 equalling strong agreement, if “The fear of failing makes me work harder to achieve my goal(s)”. The second item relating to reward processing, following the same ranking scale as the previous item, was, “If I am rewarded for succeeding I am more likely to try harder to achieve my goal”. Results varied in participant responses to these two items even though they attempted to gather data on the same topic, extrinsic motivation reward processing. The item that asked individuals to rank agreement in relation to the fear of failing had a relatively high standard deviation of

1.1. Whereas the item that framed the topic through the lens of obtaining a reward rather than punishment had a lower standard deviation of .91.

Two items stood out as being notably higher or lower in standard deviation. The item that had the highest standard deviation out of all at 1.25 was one that asked about trauma. Conversely, the item that had the lowest standard deviation was one that asked about resilience and task enjoyment. Interestingly, while trauma can have some effect on extrinsic motivation, such as task avoidance, it is categorized in this research as an intrinsic factor as explained in the literature review section, Effect of Trauma on Motivation. Those who avoid stressful situations are found to be less likely to attempt novel situations, advocate for themselves, or graduate on time (Butler et al., 2000).

The item that had the notably lowest standard deviation was also an item categorized as collecting data on intrinsic motivation. With a deviation of .38 individuals who answered the item, "When I enjoy the task I am working on I am more likely to stick with it" had the highest consensus of response with 83.3% of participants indicating they strongly agree, choosing a four on the 1-4 scale.

This dissonance of response, with both items asking participants to describe their intrinsic motivation by ranking their agreement of said items, could lead to difficulty interpreting the data. That being acknowledged, it is important to consider the emerging themes that are described later in this chapter. One of the most prevalent themes that was identified from the data is that participants wanted individualization and personalization in their educational experience. The fact that the most highly ranked, with the highest consensus, is the item that related most to personalization is not surprising. Whereas in reviewing the data, avoiding negative outcomes was not identified as an overarching

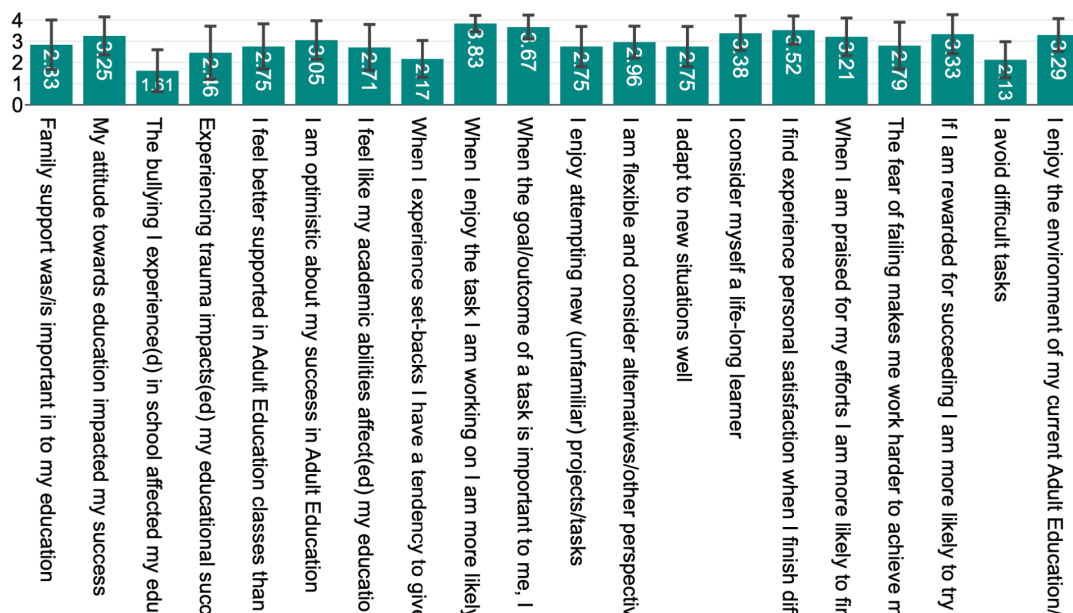
theme to motivation.

Cronbach Alpha

Cronbach's Alpha is a statistical device used to measure latent variables across an instrument. Cronbach's Alpha was used in this research due to the existence of a latent variable: motivation. Motivation was defined in this research as the latent variable, a variable that cannot be observed directly. The data used to observe motivation were based, in this research, on the responses to items grounded in prior motivational studies described in the literature review section of this thesis. In order to interpret results and draw conclusions from the survey data, a tool that measured latent variables was needed. The lack of consensus of motivation factors led to the necessity to validate the survey tool. By using Cronbach's Alpha the survey tool was verified as obtaining valid results and allowed the data to be further interpreted using standard deviation and mean.

Researching latent variables required that for the data to be measurable a scale was needed. The variable in question could not be measured directly so Cronbach's Alpha was used to interpret the results. All 20 of the ranking items were used in scaling the overarching latent variable of motivation. In the subgroup motivation type, 10 of the items were scaled for intrinsic motivation and 10 were scaled for extrinsic motivation. After finding the scale of the data as a whole, the items were divided into an additional subgroup consisting of items designed to describe motivation type.

In the following figure is the mean and standard deviation of all items available on the data collection survey. The figure illustrates the relative consistency of responses to each item as well as numerically and visually presenting any variation of consistency.

Figure 4*Standard Deviation***Defined Themes**

Both the quantitative and the qualitative data illustrates that students define their educational motivation in terms of both intrinsic and extrinsic motivation. Factors beyond the validity of items such as the nature of what's being measured and the context of the study may also be considered. Both the quantitative and qualitative data responses are addressed within this section. The intrinsic and extrinsic-based survey items in all categories (ranking, open-ended, and demographic) were all grounded in previously published research.

The results of the survey indicated general support and consensus of the preceding research on the topic. Because educational motivation as a whole was the latent variable being described in this research, the *defined themes* section does not proceed to divide the sections into intrinsic or extrinsic motivation.

The following sub-themes fall under a larger umbrella theme of *personalization*, which is defined in this study as the desire of an individual to have their educational coursework reflect their goals and learning styles. The theme of *personalization* is further divided into the three additional sub-themes. The first sub-theme of is *grounding*, defined in this research as coursework that is based on student goals and is provided by knowledgeable instructors or ideally industry professionals. The second sub-theme of *support* is defined as instructor involvement and being treated as a unique individual whose goals and motivations are supported. The third sub-theme is *access*, which is defined in this research as barriers to educational access or preferences of access as defined by participants such as timing, financial difficulties, or location affecting their motivation.

Additional themes identified, but not falling under the umbrella theme of *personalization* are *money* and *other themes*. The theme *money* is defined in this research as the desire to pursue education in order to advance monetarily or advance in a career. The *other themes* section contains noteworthy observations about either unexpected or discrepant responses to the survey items and a brief discussion of the data implications.

Personalization

The first theme discussed here in the *defined themes* section is personalization. This theme is further broken into three additional sub themes *grounding*, *support*, and *access*. While the themes are separated in the following analysis, they have many similarities and overlaps. Personalization, while mentioned by proxy in many responses, can be generally summed up by one respondent suggesting that educators should “not [assume] prior knowledge”. The concept that the individual needs to be met where they

are is further illuminated by the upcoming themes sections. In 16 of the qualitative responses, 18%, participants mentioned the desire to have their education reflect their educational functioning level, goals, and desired outcomes such as certifications or degrees. As mentioned in the literature review, courses that do not account for personal goals will be less effective in achieving outcomes (Gangé & Deci, 2005).

Grounding

A common theme in my qualitative data was the desire to have job-focused courses taught by industry professionals. Thirty-nine percent of participants' comments in the qualitative data mentioned pursuing education in order to obtain a promotion or higher paying career. For example, a participant obtaining a nursing certificate that was taught in part by a registered nurse noted, "[I enjoy] less lecture, more activity-based learning". Ironically this sentiment was almost identically submitted by another participant, who agreed they would prefer "less lecture more engaging activity based curriculum". Not only did individuals want hands-on learning taught by industry professionals but they also specifically wanted those courses to align with their career and future goals. Participants in this study indicated they would describe their persistence in learning as motivated by having access to courses that explored their desired content area such as specific job skills. Supported in my data is the theme that students who are able to have input and influence on their educational path are more likely to continue to pursue their goals. My analyzed data proved similar to Gable and Poole's (2012) research, which found that students who enjoyed their curriculum had higher content acquisition and achievements.

While 39% of participants of my survey indicated that goal-focused curriculum

was important, it is also pertinent to note here that although the potential positive effects of high-approach motivation can ensure an individual accomplishes the task they set out to do, it can nonetheless have negative side effects such as a lower subject acquisition, as explored in the literature review. One participant suggested that courses should “streamline what you need to know to enter the workforce and spend less time wasting people’s time for classes and subjects that don’t apply to their goals”. My data found that individuals wanted career-focused or goal-focused curriculum and described their educational persistence as being motivated by goal attainment. This result was unsurprising and has potential connections to the prior research done on high-approach-motivation. More than anything, participants of my capstone research survey identified a desire to be “seen” by their instructors, to be treated as a unique individual whose goals and motivations are supported. One participant eloquently described what it feels like to not be seen as a unique individual as “[...] the sense of being lost in the sea of participating in classes that didn’t factor into where I wanted to be in life”.

Participants in this survey indicated a desire to have their curriculum focus on gaining career skills. This aligns with findings from Gangé and Deci (2005), which showed the positive motivational effect of increasing both intrinsic and extrinsic motivational factors, such as personalized career-based goals. By increasing the size and scope of tasks, Gangé and Deci found that intrinsic motivation was also increased. Additionally, by increasing the extrinsic rewards such as compensation, those researchers had found that extrinsic motivation was increased. Structuring an environment to combine and leverage individual intrinsic and extrinsic motivation factors encourages an

increase in effective and positive performance.

Support

Under the same umbrella of *personalization* is the defined theme of *support*. In the open-ended responses 16 participants, 18%, mentioned the importance of support or lack of support from family, trusted advisors, or educators. When asked what factors impacted the decision to continue education in the open-ended items, one participant shared that they are “[...] surrounded by people who value education and encourage my success. Many of them offer me assistance, either through books, articles, checking my homework, brainstorming assignments or just offering emotional support”.

When asked what their current education did to support their motivation, another individual responded that “[My instructors] gave me thoughtful explanations, and clarifications for my questions given to me in ways that I appreciate”. As further explored in the literature review, extrinsic motivation viewed through the lens of reward-based motivation suggests that external expectations are a high predictor of academic success (Yan & Lin, 2005). This previous study generally aligns with my capstone findings showing the impact of positive support on long term achievement of goals, and tenacity of persistence in education.

My capstone research results show the ways in which participants described their motivation as being highly influenced by the support, praise, expectations, and feedback they receive from peers, family, and instructors. While this capstone was a small-scale survey of motivational factors on adult learners' persistence in pursuing education, the findings aligned with many previous research studies conducted on learner motivation. Data from my survey identified trends of approach motivation, self-determination, and

optimism as important factors in goal attainment. Similar findings from previous studies on approach motivation have been found to affect perception, perspectives, attention span, flexibility in thinking patterns and ideation, solution generation, self-determination, and adaptation (Claro et al., 2016). This has led previous researchers to view an interrelatedness between self-determination, or the ability of a student to guide and determine their desired outcome, and intrinsic motivation. In my capstone data, survey participants noted a similar impact of having a positive view of education and the effect their abilities have on outcomes. One individual shared that, “[a positive impact on my education was] the teachers and educators that took the time to show me I am capable of completing hard things”

Additionally, the data in my study identified that support was an impactful motivational factor amongst adult learners, similar to previous larger scale studies related to approach motivation, self-determination, and optimism. The usefulness of identifying and highlighting my data trend of optimism on adult motivation, lies in the fact that if optimism could be encouraged and fostered, it would result in more effective interventions and potentially lead to a shift away from avoidance motivation or a reactive approach method towards a high-approach-motivation tendency. My capstone research outlined similar findings to Li et al., (2009) that state if a student is optimistic about their abilities, they are better able to leverage their intrinsic motivation and overcome the folly of avoidance.

Support proved to be a factor identified by several participants in my research. While the previous individuals shared positive impacts made by their support system, other individuals identified the lack of support as having a noted impact on their

motivation to continue pursuing education. One survey respondent shared, “[my experience in education was] negative, teachers dismissed you because you’re a slow learner”. My participants identified the negative motivational impacts the lack of support had on their motivation to pursue education, which is similar to the findings of larger scale studies done on the development of negative motivation. For example, McGregor et al. (2009) showed as one internalizes negative comments or reviews of their effort, not only does it lead to personal uncertainty, but it is also linked to the development of negative intrinsic motivation. As one continues to have negative experiences, the desire to experience any unfamiliar situation or skill is lessened, resulting in concrete world views. Negative perceptions of worldviews and personal convictions are heightened through threats, causing one to cling to their beliefs as a coping mechanism. For example, a student may believe they aren’t smart enough to get good grades, that they will never live up to familial expectations, that school is an unsafe and unwelcome experience, etc. Through this perception, the subject’s opinions begin to form concrete worldviews (McGregor et al., 2009).

The previous participant from my study was not the only one to mention the potential motivationally damaging effects of poor support. Another noted that, “some of my professors would disregard my knowledge on how the education system currently works and would try to imply that my experience as a student with a learning disability and an educator with a learning disability has caused my opinion or view to be pessimistic or narrow-minded.” While Gangé and Deci (2005) suggest that students with learning disabilities will achieve better outcomes if they leverage their strengths and take advantage of available supports, Butler et al. (2000) and Vega et al. (2015) set forth the

implication that if a student has parental or mentor involvement or support, they are more likely to achieve their goals and desired outcomes. Noted in the same Vega et al. (2015) study, the most common barriers to academic achievement were identified as relationships with teachers and peers.

Another participant in my study noted that their motivation was impacted less by their lack of educational support and more by their lack of familial support stating that, “homelife was tough with poverty issues and alcoholism, which made education less of a priority and made me focus on doing the bare minimum to graduate”. This response shows the individual developed a reluctance to attempt skills or experiences out of apathy towards the pursuit of education. My findings on the impact of lack of family support on motivation align with those outlined in the Literature Review as factors impacting adult learner motivation. Findings outlined in Chapter Two, specifically a study done by McGregor et al. (2009), suggest that developing personal uncertainty can result in one developing a negative motivational intensity, or a reluctance to even approach, pursue, or complete goals resulting in concrete world-views. Students instilled with negative concrete world-views in regard to academic achievement will achieve lower than those who do not hold such values (McGregor et al., 2009).

Access

Of the 35 responses, 39%, mentioned experiencing setbacks when accessing education. Many noted timing, financial difficulties, or location affecting their motivation. Eight of those responses (4.4%) indicated they found success in or needed the option of online accessible courses. A notable result from my survey data is that students want personalized options for their education and career goals. Having programming that

is interesting, relevant, and accessible is highly motivating. Similar to my findings, Roke (2014) noted that by creating invigorating and replenishing opportunities, avoidance motivation can be lessened therefore reducing often observed negative consequences of avoidance motivation. Many of those negative consequences display as decreased performance, depleted resources, and reduced well-being. In my research data, the high internal consistency of quantitative responses paired with 20% of participants struggling to access education courses indicate a need for flexible programming such as online options that allow for varying class hours, and accommodations for preference, which would help alleviate certain financial, and transportation barriers.

Money

Twenty-six responses, 29%, explicitly mentioned income or career advancement being motivating factors impacting the decision to pursue continuing education. Nearly 15% of participants noted promotion, income, or financial burdens as the reason they stopped out or decided to pursue education as an adult. Some participants indicated that employment was why they withdrew from school the first time, as one individual shared that they “need[ed] to be in the workforce to support [my] family and desires, [reach] a higher income level, and [...] felt listless with no way out of the service industry without college education.”

Experiencing stress has been observed to have negative effects on motivation. As previously mentioned the qualitative data indicated that financial insecurity was one of the most common motivation factors that led participants to pursue education. One such participant stated that

the biggest negative impact on my education has been the financial burden.

Paying for [school] originally was difficult to begin with and when I flunked out after my depression diagnosis finding the funds to [continue] was difficult. [...].

Debt is an issue and my pay in an undervalued, underfunded career also affects my ability to save money for let alone return to [school]. The only reason I'm back in school is through the scholarship program that is paying for my tuition with the understanding that I would work for the district as repayment.

Data analyzed and presented in my capstone study confirmed, similar to Roskes et al.'s (2014) study, that stress has a negative impact on motivation and that stressor avoidance and avoidance motivation have been proven to negatively affect the goals and outcomes of individuals. Additionally, those experiencing stress indicated a correlation with the Butler et al. (2000) study that suggested those who avoid threatening situations will be less likely to attempt novel situations, advocate for themselves, or graduate on time.

Other Themes

The data collected and analyzed in my research capstone proved to align with previous studies on adult learner motivation. Additional findings are included in this *other themes* section of Chapter Four.

Other notable findings included in this results chapter were the encouragingly positive outlook of many participants. While many individuals returned to school out of a sense of necessity of circumstance, with 39% of participants mentioning pursuing education due to financial constraints, qualitative data responses provided by participants shared markedly positive motivations for pursuing their education (16%). One participant shared that by attending class they felt motivated by discovering they had “the ability to

[accomplish goals] and [by finding out] there is always room to learn more”. While the previously noted participant was intrinsically motivated by the satisfaction they felt when learning, growing, and advancing, the next qualitative point shared shows a participant who was motivated extrinsically. This individual stated they, “would like to continue [their] education and help others that were in [their] shoes at one time”.

In terms of unexpected findings, there are three items that surprised me. First off, while the capstone is robust in data analysis, there was a more vague answer to the research question than anticipated, secondly, the positivity towards pursuing education as illustrated in the above paragraph, and thirdly, the finding that rigid thinking and negative coping methods were less of a factor than expected.

In analyzing the three scales designed to measure latent variables, motivation, extrinsic motivation, and intrinsic motivation, the unexpected conclusion of my research was that the internal consistency, when broken into two groups, was less reliable than when measured as a whole, it indicated that motivation is interrelated and not divided cleanly between intrinsic and extrinsic motivation categories. The reason this finding was surprising was due mostly to its vague nature. This research capstone was designed with the goal of identifying the most impactful or most common motivational impact(s).

The concept of rigid thinking and concrete worldviews was explained and synthesized in the literature review of Chapter Two. Rokes (2014) explained how developing avoidance motivation has the potential to display as task rigidity which makes novel or fluid creative tasks difficult and threatening. Additionally, the tendency to develop persistent avoidance in response to negative stimuli grows, in this case, the desire to avoid novel tasks. Due to this avoidance negative outcomes such as decreased

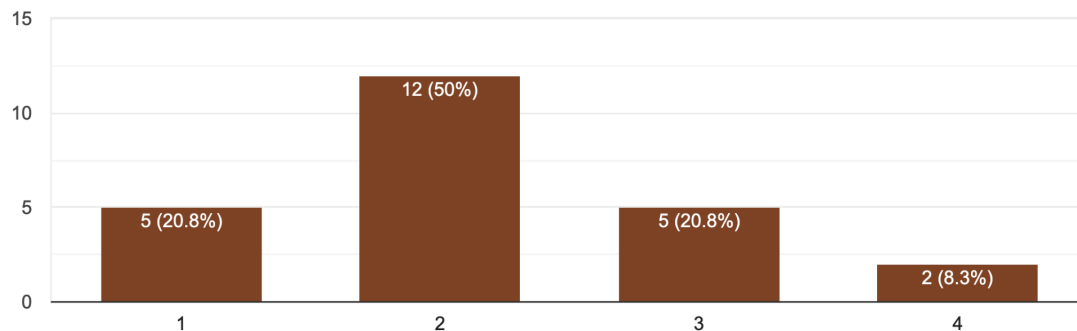
performance and well-being along with reduced energy levels, and negative consequences such as anger, fear, and anxiety may develop (Rokes, 2014). McGregor et.al. (2009) would agree with Rokes's conclusion adding that their own research found connections between the effects anxiety has on the desire of an individual to attempt a novel situation or stimuli.

This method tends to encourage avoidance of negative situations and to seek out positive ones. The items in my research survey were designed to determine whether an individual has concrete world views, stressors, and negative coping strategies such as avoidance scored with high internal consistency. The outcome, however, unexpectedly illustrated that my participants did not describe their motivation in these categories. It is relevant to note here the potential inaccuracy of self-reported survey responses or insightful accuracy. The below figure shows a bar graph of the responses to the survey item, “When I experience set-backs I have a tendency to give up”. This response showed that individuals did not describe their motivation as being highly affected by negative outcomes. However, later data shared below indicates this result to be incongruous with resulting data from qualitative survey item responses.

Figure 5*Avoidance Motivation - Concrete World Views - Negative Coping*

When I experience set-backs I have a tendency to give up

24 responses



Further explored in the literature is the suggestion that concrete world views develop in individuals who experience stressors consistently; those individuals in turn become less likely to attempt or find success in novel experiences (Beacham, 2003; Claro, 2016; Crabtree, 1999; McGregor et al., 2009; Richman, 2013). While data analyzed in my research identified that trauma and bullying were ranked notably low on how individuals described motivation factors in the quantitative data (see Figure 2, above), such factors were referenced with relatively notable frequency in the open-ended qualitative data. Sixteen unique responses indicated past experiences and stressors negatively affected their motivation. The correlation between the items "Experiencing trauma impacts(ed) my educational success and I adapt to new situations well" was not statistically significant ($r(22) = 0.25$, $p = .241$). This data point was contentious as the quantitative data indicated that participants were not motivated by previous trauma while the qualitative data suggests otherwise. Prior research conducted by Claro noted that

individuals who experience high levels of anxiety are more prone to developing a negative and reactive approach method, meaning that if an individual experienced past trauma they are less likely to pursue difficult goals in the future. This suggests that participants in my study do not describe their motivational factors in alignment with previously conducted research.

Summary

Summarizing this data leads to the conclusion that there is not a definitive description of motivation that would allow for an exact reactive change to curriculum. The research question posed was how do adult students describe their motivation, and the data indicates such an overlap in motivational concepts; the resulting answer to the research question is that motivation is interrelated and not divided cleanly between intrinsic and extrinsic motivation categories. The three scales created to measure the latent variables, motivation, extrinsic motivation and intrinsic motivation, found a less reliable internal consistency than when measured as a whole. This resulting answer indicates that the way in which participants in this study describe their motivation to pursue education is interrelated and overlapping. If I had to provide a more concise answer to the research question, I would suggest that the data indicates the need for individualization in programming content, methodology, and support. It leads one to believe that while there is no overarching fix, it would benefit programs to survey each student when entering a program to determine how they describe their specific needs and motivation style and motivation to pursue education.

By first analyzing and collecting a description of motivation provided by adult students actively pursuing education this research was able to set a foundation for

continued study. Chapter Five will go into greater detail on the potential applications and continuation of this research. Chapter Five will share learnings from the capstone process, revisit significant pieces of the literature review, draw conclusions based on prior research and findings of this study, describe possible implications, share limitations of the study, and impart future directions for research and of the findings illustrated in Chapter Four and Five.

CHAPTER FIVE

Conclusion

Introduction

The purpose of this research project was to determine *how do adults described their educational motivation?* Understanding the factors that most impacted participants' decision to continue pursuing education curriculum and academic practices can be reactive and supportive to the needs and preferences of each learner. Through the use of a survey tool, data was gathered regarding leading causes of withdrawal from k12 systems, decisions to enroll in adult education, future plans, education functioning level, learning disabilities, trauma, learning style, educational trauma, ACES, self-advocacy, resilience, attitudes, instructional preferences, and mental health. It is correct to perceive that list as a long and ambitious number of data points; however, through collecting data on how adults describe their educational motivation it became clear that it is not a cut-and-dry set of repeatable factors. Rather, a myriad and interconnected web of perceptions led each participant to pursue continuing education.

The research presented in this study is but a first step in a continuing process to understand and better support adult learners. The data collected through this research project was the initial step in developing a student-guided understanding of motivation. By first analyzing and collecting a description of motivation provided by adult students actively pursuing education this research was able to set a foundation for continued study. Chapter Five will go into greater detail on the potential applications and continuation of this research.

Chapter Five will share learnings from the capstone process, revisit significant

pieces of the literature review, draw conclusions based on prior research and findings of this study, describe possible implications, share limitations of the study, and impart future directions for research and of the findings illustrated in Chapter Four and Five.

Learnings

As a researcher, writer, and learner throughout this capstone process, I have learned that this particular task is not as straightforward as I had expected it to be. In many aspects of our lives, projects have a linear progression: first, middle, last. In developing this capstone research I found that many parts of the project occurred either simultaneously or in a reverse order than expected. For example, in order to write Chapter One, a chapter dedicated to describing the research process in its entirety, one has to imagine a final product before even creating the literature review. It made me question the trajectory many times, and revise my research question innumerable times, and often I was forced to reimagine what the research could even describe. I struggled with the lack of direction, both inherently existing in this type of research and also with my own experiences up to this point as a student.

Coming from a background of previous credentials in history and political science I did not expect to struggle to develop the content this capstone requires. However, upon reflection writing history research articles is inherently linear and progresses naturally as opposed to the consistent revisions and simultaneous documentation that this capstone project required. As a learner, I am most familiar with a straightforward assignment with clear steps to completion. I was unprepared for a project that expected that I was not only to write the research paper but also to design the study, the purpose, and the timeline independently.

To touch on the unexpected learnings of the research data and conclusion, a surprising aspect was that my findings led to a more nuanced understanding and answer to the research question than I expected. To begin this discussion, I will note that the data collection period was more trying than anticipated. I was able to secure a large pool of potential participants and expected I was low-balling the estimated 20 needed to run the data collections. I struggled greatly with encouraging enough participants. Additionally, one of the sites that I was surveying had rural programming that spanned around 75 miles of central Minnesota. At the other site, the urban site, I was given explicit instructions that the survey would be shared anonymously, and in order to ensure anonymity it was encouraged that I not be there in person. Collecting data solely by sharing an online survey proved ineffective in garnering the level of responses I was hoping for and anticipated for data analysis. Additionally, had the course been structured differently I may have been able to survey earlier in the year but found myself also against time constraints of the semester end and adult classes being on hiatus for the summer. As it stands I was able to move forward with 24 participants.

Literature Review Revisit

The part of the literature review that proved most important to my capstone work was the prior research done on reward motivation, approach motivation, and the effect of stress or trauma on motivation. The data collected through this capstone project does support the findings of the items synthesized in the literature review, with one notable additional finding. The literature review, with the exception of a few particular resources, put the concepts of motivation into defined categories. While this does make sense to articulate individual concepts, it does fail to acknowledge that motivational factors are

not isolated incidents but in fact a complex network of experiences and preferences.

Reward Motivation Revisit

Reward motivation illustrates the idea that individuals can be motivated by external achievements such as obtaining a degree or diploma, or something as simple as praise. There are many studies that dive further into the effectiveness of reward cycles; however, for this capstone, the concept of reward motivation was generalized into two opposing theories of the positive and negative effects of reward-based motivation.

To briefly summarize both approaches, one can describe the positive effects of reward-based motivation as an individual being motivated by the possibility of either a negative or positive external outcome (Claro et al., 2016), whereas the negative effect of reward-based motivation may present as creating obstacles in developing satisfaction of personal needs, conceptual learning, creativity, and self-regulation (Hidi 2016).

Approach Motivation Revisit

Approach motivation is a less polarized concept, but not without its own theories on the positive or negative effects of prioritizing the approach. For example, if the goal or outcome is too highly stressed, individuals will focus only on goal completion rather than subject retention (Gable & Harmon-Jones, 2008). Conversely, approach motivation as a whole can be leveraged in positive ways. Supported by the data produced in this capstone project is the identified theme of personalization. Many participants indicated they wanted the subject to be relevant, fit their goals, and be appropriate for their educational functioning level. Gable and Poole's (2012) study on approach motivation and time perception found that students who enjoyed their curriculum reported a shortened perception of time and higher content acquisition and achievement. Qualitative data

collected with the capstone survey indicated agreement with prior research on the effects of approach motivation. Many individuals indicated they wanted programming that aligned with their goals and wanted focused task-centered activities to develop mastery.

Basing survey items on prior research done on approach motivation allowed for the grounded development of items on the final survey, designed to obtain data from participants on how they described their educational motivation. In regards not only to approach motivation, there were several other themes identified in the literature review that illustrated that motivational factors could have both positive or negative effects on mastery and tenacity. Originally I considered these opposing effects to be polarized in nature but found through this research, and in comparing it to my prior understanding, that an individual can display both the positive and negative traits of a singular motivational style.

Stressors Revisit

Individuals who have high self-determination traits are more likely to achieve their goals, attempt new skills, and retain information more readily (Claro et al., 2016). Self-determination develops in individuals in response to stimuli. If one has developed the skill of self-determination they are more likely to respond to stimuli with higher levels of motivational intensity and ideation flexibility and are less likely to develop coping strategies, reactive approaches, or negative intrinsic motivation (Weller et al., 1994). Self-determination can be fostered through effective programmatic supports. The results of this research capstone on how adults describe their motivation indicates that programmatic supports should be personalized to each individual. This can be done through surveying each learner in order to better understand their previous experiences in

education, their preferences, and their motivational styles. The resulting information can inform interactions, curriculum, and support of learner goals.

Identified in the data collected in this capstone research is the theme of support. Participants who noted positive involvement of mentors, teachers, and family members stated they were motivated to achieve their goals. An additional concept mentioned in the literature review is ideation flexibility, the idea that if an individual has experienced either negative or positive stimuli in the past they are more or less likely to be comfortable seeking out novel situations or attempt difficult tasks. With a high internal consistency of quantitative responses and sixteen qualitative short answers noting the effects of personalization, its importance is supported by the previously presented research data. Individuals who have self-determination skills and ideation flexibility are more likely to be able to adapt to situations and determine and guide their own desired outcomes, a skill integral to success (Elliot & Covington, 2001).

Connections

The survey data collected for my capstone research thesis generally supports the previous findings outlined in the Chapter Two literature review section. Notable new connections and understandings include defining the complex web of motivational factors as well as the data supporting emerging practices implemented in adult education such as differentiation, and college and career readiness standards (CCRS). CCRS and differentiation practices address many of the defined themes in Chapter Four such as career and educational development, career advancement and grounding (relevant in general career and life skills). Differentiation is also supported in the defined themes section such as access, *support* and again aspects of *grounding*. The connections here to

differentiation are varied class times, methods of participation such as hybrid, online, or in person courses, and relevant to the particular learner.

Implications

Collecting data from students about their external factors in relation to their educational goals and decisions and pairing that with data regarding intrinsic and extrinsic motivation of students has the ability to inform programmatic decisions. This could be done with an alternate or accompanying survey tool to the one designed to collect motivational data. The most effective way to use the information gathered in my capstone study would be to develop a survey to use with each participant, that way each student could be uniquely identified as having certain motivation characteristics.

Describing students' educational motivation would allow for the development of curriculum that aligns with self-regulated learning supporting adult students through the use of authentic curriculum choices. This research begins a process by which additional research should be done to determine the effects of leveraging motivation understanding in a classroom setting to measure the rate of achievement of motivationally supported students.

Limitations and Suggestions for Future Research

This section will visit a few pronounced limitations of the study while referencing the potential accompanying future studies that would contribute to the research goal.

Limitations were identified in the Research Paradigm and Methods sections. These limitations guided some of the identified study gaps that could be filled with additional research. Some sections of this capstone have already referenced aspects of the limitations experienced and connected this study to previous research considering future

studies.

While there is no definitive description of motivation that would allow for an exact reactive change to curriculum, the data indicates such an overlap in concepts with high stress put on the personalization of curriculum. One of the most limiting aspects of this survey is the variation of response data. No specific type or method of motivation emerged as the most impactful or most common. If that had been the case and one or more items stood apart from the rest it would be more straightforward to prescribe programmatic and andragogy changes to adult education curricula. Limitations in the methodology of the study lay in the lack of follow-up with participants. Originally the study was designed as a longitudinal study but eventually it was decided that a cross-sectional design was most appropriate for the time and participant constraints. This limitation proved impactful as data was collected and analyzed. Some participants were vague in their responses or had contradictory input such as selecting that they strongly disagree that previous stressors had affected their motivation, but then in the open-ended answers indicating that financial, familial, or other trauma had a large impact on their motivation to pursue education.

Discrepancies such as this, would have been useful to revisit with certain participants. Another notable aspect that would have been better addressed with follow-up would have been the answers that were vague such as “needed to get degree”. When attempting to synthesize an answer such as this, the question became why did they need to get their degree? If the ability existed to contact participants for clarity those responses could have been more useful or robust. When faced with vague answers occasionally reasonable conjectures were made based on other responses an individual

provided. To stay with this same example, if the individual indicated they needed their degree and later on stated a degree was necessary for career advancement it was assumed that the individual was referring to extrinsic motivation or reward-based motivation. While some answers needed an amount of interpretation the majority proved clear and straightforward with enough consistency to be useful for qualitative analysis. Any truly unclear or unavailable, skipped, items were winnowed from the data.

Based on the limitations and findings of this research the recommendations for future studies would be to build in enough data collection time as possible to allow for follow-up. Taking that one step further would be to ask participants if they would be available to respond to additional survey items or clarification responses. As mentioned earlier in this chapter, additional limitation analysis indicated that future studies where motivation is manipulated to determine the effects it has on academic achievement would provide useful information to this field of research.

Communicating Results

What this research does is reinforce the idea of having a one-to-one conversation with the learners in adult education programs perhaps at intake or early on to understand why they quit, why they are pursuing education, what their goal is, long-term or short-term, and what affected their timing. Collecting data from students about their motivational factors in reference to their educational goals and decisions and pairing that with data regarding the intrinsic and extrinsic motivation of students will inform programmatic decisions; by providing motivation intake surveys to new learners joining a program, asking a question about what their current goal and or what their maybe five-year goal or current ultimate goal is and what influenced past education decisions,

instructors can better understand their students' trauma, stress, learning disabilities, learning preferences, reasons for withdrawing from k12 systems.

Considering the next steps and usefulness of the results of this research capstone thesis, I would desire to see additional studies undertaken to better understand how impactful supporting motivational styles of learners is in goal achievement. To start utilizing the outcome of this research communicating these findings to the field of adult education would be the priority. The results of this survey will be made available to educators working with adult students. By sharing these findings and fine-tuning the data survey based on the internal consistency of responses, other learners could benefit from a personalized motivation-focused curriculum.

Conclusion

The question this research sought to answer is, *how do adult learners describe their motivation to pursue education?* The answer to that question is somewhat vague. The conclusion of this research thesis data analysis indicates there is no overarching motivational factor affecting adults' decision to pursue education. At first, interpreting the data was frustrating as it did not indicate an easily identifiable fixable aspect of motivation that could be supported. Upon further consideration of my experience in working with adult learners, my many conversations about this research project with colleagues in the adult education field led me to the reflection that while the conclusion felt unprecise, anyone who has worked with adult learners could tell you that one size does not fit all. Each participant comes to pursue their education with a different experience, backstory, and desired outcome. It comes as no surprise to adult educators that differentiation, attention to personal relationships, and goal oriented coursework is

most effective and desirable to adult learners. The ways in which this research can support this conclusion is to begin the process of developing a tool that allows learners to share their preferences, experiences, and desired outcomes, their motivation per se, with their program in order to be an active participant in their outcomes.

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Appendix A

Cronbach's Alpha

Scaled Motivation

To determine whether the whole set of ranking items were highly correlated Cronbach's Alpha was applied. The scale, or group of items, consisted of 20 out of 35 of the total items posed to participants. The 15 items that were removed from this sample were demographic items such as age or work status plus the six open-ended answer items. All items evaluated in this scale were metric values. The test was administered to determine if the responses and therefore items held high internal consistency. The measure of the internal consistency of this scale is .84 which means they are likely reliable for measuring the same concept or aspect, which in this case is educational motivation. The high internal consistency supports the conclusion that the research-grounded survey items were appropriate for measuring participants' educational motivation. A rating between 0.8 and < 0.9 indicates the data has good internal consistency (DATAtab Team, 2024). To view the consideration of other factors that impacted the data, see sections *standard deviation* and *themes*.

Considering the good internal consistency of the survey items the determination is that each item holds validity in describing adult educational motivation. Given that the Cronbach's Alpha rating is not higher than 0.9, a critical rating, the features vary enough that no item needs to be removed from the sample for accurate measurement.

Scaled Motivation Type

The latent variable being measured in the previous section *scaled motivation* measured the latent variable of motivation. In this section of *scaled motivation type*, the

scale separated and measured both intrinsic and extrinsic motivation. The 20 nominal survey items were divided in half, identifying 10 items that existed in each item set. The first set measured with Cronbach's Alpha were items that described extrinsic motivation. The resulting scale of those ten items yielded a result of 0.7. This result is notably less correlated than the scale that contained all items measuring motivation. A Cronbach's alpha of 0.7 indicates an acceptable internal consistency. When the data was measured as a whole a high internal consistency was recorded. This result may be lower than when measured as a whole but is still within acceptable range. Based on the acceptable rating score no individual item was determined to negatively affect the reliability of the group of items. Therefore no item was removed from the scale measuring extrinsic motivation. A results summary finds the consistency is not as strong as it could be. In future studies, it would be worth potentially revising items or adding additional items in order to find a higher internal consistency.

As with the preceding section, in this section of *scaled motivation type*, the scale remained divided in order to measure either intrinsic or extrinsic motivation. The results of comparing the second ten items of the original twenty-item scale were relatively comparable to the first set of ten presented. In the second scale, the ten items were selected to measure intrinsic motivation. The resulting Cronbach's Alpha yields a result of 0.72 internal consistency. Again after dividing the twenty-item set the internal consistency was less highly correlated than when considering all items together. The latent variable of intrinsic motivation produced an acceptable amount of reliability. The consistency is not as good as it could be indicating that alternate items might be considered or some existing items removed to achieve a better reliability of responses. At

this time no item was considered for removal from the survey.

The internal consistency of measuring the latent variable of motivation was considered good at a .84 Cronbach's Alpha. Dividing the items into groupings of either intrinsic or extrinsic motivation resulted in respectively lower reliability scores of 0.74 and 0.7. The conclusion this data illustrates is that the way in which participants describe their educational motivation has consistency. Additionally, the data indicates that extrinsic and intrinsic motivation overlaps in its effect on individuals' pursuit of education.