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A Mixed-Methods Investigation into the Factors Impacting Middle School Academic Motivation

Paul Ambrose Hammond IV

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A Mixed-Methods Investigation into the Factors Impacting Middle School Academic
Motivation

by

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Dedication

This dissertation is first dedicated to my mother, a woman whose strength and perseverance gave her the patience to support me all these long years.

This dissertation is also unequivocally dedicated to my wife, without whose love and support this would never have been possible. For the countless nights that you shouldered more than your fair share of our daily responsibilities so that I could have the time to chase this dream, thank you.

Acknowledgments

I would like to thank all of those who helped to make this study possible. To my students, thank you for sacrificing your personal time so that I might hear your stories. To my administrators, thank you for showing such unwavering trust in me as I conducted research in my classroom. To my classmates in Cohort M, thank you for pushing me to improve and strive these past 3 years. This has truly been a life changing journey, and I am glad to have gone through it together. Lastly, I would like to thank my advisor Dr. Jeffries for guiding me through the last stages of this process. Without your advice and support, this study would not have been possible.

Abstract

One of the most important tasks of schools is to foster and grow the achievement motivation of students. However, middle school is a time period which frequently sees a downturn in students' levels of engagement. In this action research study, the causes of this downturn in motivation are investigated by drawing out the voices of the students themselves regarding their educational experiences and viewpoints. Using the expectancy-value theory as the primary lens, the researcher employed a mixed-methods approach to investigate the causes of declining academic motivation at his school through the perspectives of three students with exceptionally high levels of achievement motivation, and three students with exceptionally low levels of achievement motivation. By drawing out the voices of these students regarding their experiences and ideal futures, this study aimed to inform and recommend future interventions at the middle school level.

Key Concepts: Action Research, Achievement Motivation, Expectancy-Value Theory, Middle School, Mixed-Methods, Student Engagement

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Chapter 1

Introduction

Introduction

Middle school is a period of great change for students and features many difficulties unique to the setting. Significantly, the middle school years are a time during which students' overall academic achievement motivation and perceived self-efficacy decline across disparate subject areas (Eccles et al., 1989). This change coincides with the increased assessments and feedback students receive as they progress toward their middle school years (Wigfield & Eccles, 2000).

This study explores declining student academic achievement motivation at a small suburban middle school (SMS), where I have worked as a 6-8 science teacher for the last six years. During my time here, inspiring students to invest themselves in their learning and to see education as a pathway towards future success has been difficult for me personally, and for my school at large.

In order to combat this alarming trend, my school has taken myriad steps in order to build up our students' skills. In the last three years, we have implemented a new mathematics curriculum, implemented a school-wide literacy course using the well-regarded Reading Plus program ("Prepare confident," 2021), instituted the 7 Mindsets curriculum ("Social Emotional Learning," 2021) in order to address our students' social and emotional needs, adopted the use of the *I-Ready* diagnostic assessments (i-Ready,

2021), and hired a computer science teacher in order to better familiarize students with the online formatting of modern standardized tests. My school has reinvested in the behavioral program “Positive Behaviors, Interventions and Supports” (PBIS, 2021) which relies on a system of rewarding students for embodying the school’s behavioral and academic expectations, while also training teachers on the tenets of restorative justice (Fronius et al., 2016). Despite all of these efforts, we have consistently experienced reports of older students in middle school showing a general lack of motivation when it comes to learning.

As a teacher who “looped,” with one set of students from 6th to 8th grade, I have personally experienced this trend. Students who were curious and relatively easy to motivate as 6th graders became disillusioned and apathetic by the age of 14, despite a targeted effort by the team of teachers of which I was a part. Accompanying this general trend was a marked decrease in their Smarter Balanced Assessment (SBAC) scores from 6th to 8th grade in both Language Arts (ELA) and Mathematics. As 6th graders, 46% of students scored proficient or higher in ELA, and 32% in Math. By 8th grade, those scores had fallen to 32% for ELA and 17% for Math. This dramatic decrease in scores came despite a relatively unchanged population and, as stated, many interventions designed to inspire and motivate students to approach their learning with passion and effort.

Within a larger school-wide effort to address this change, it is my belief that the voices of students have not been adequately explored and expressed in order to understand what factors have been increasing their motivation, and which factors have had a negative influence. In hindsight, my school’s approach can most aptly be described as a “dart board” approach, where we throw many darts before watching if any stick. This

approach is constant and dizzying for both students and teachers and ends with the unfortunate uncertainty of how much influence was had by any one intervention. My school has been heavily reliant on the voices of the teacher-leadership team in the school, as well as the school's instructional coach, in order to assess the condition of these interventions on the ground. Our district at large also uses a school-wide survey called Panorama to measure student perceptions of individual teachers, as well as of their peers. However, the voices of students have not been brought to bear on what actually *motivates* them to apply themselves academically. This study aims to rectify that deficiency in order to better map out the application or revisions of interventions in the future.

Problem of Practice

The identified Problem of Practice is concerned with declining student performance and motivation of middle school students as they progress through Seaside Middle School (pseudonym). Seaside Middle school (SMS) is a Title 1 school with over 46% of students qualifying for free and reduced lunch and has consistently ranked in the bottom 5% of Vermont middle schools based on the annual administration of the SBAC. This includes a troublesome decline in student scores as they progress from 6th grade to 8th grade— a decline most evident in students who start out proficient in 6th grade. The results from the 8th grade science assessment have if anything produced even more distressing results, with less than 10% of students reaching proficiency in each of the last seven years.

According to a 2004 report by the National Research Council, student engagement drops off sharply as students get older, with upwards of 40% of high school students feeling disengaged from their academics (Usher & Kober, 2012). This general

disengagement from academics has been linked to national drop-out rates, as a 2006 survey found that 70% of high-school dropouts reported feeling unmotivated by school (Usher & Kober, 2012).

Nationally, the country has been making an effort to raise high school graduation rates with a great deal of attention being devoted to understanding why students leave school. A 2006 study of national data reported that nearly one-third of ninth graders did not graduate high school in 4 years (Stout, 2006). In the intervening years, studies have found that a key factor in predicting academic success has been engagement in schools (Fall & Roberts, 2012). Similarly, a separate study found that whether or not students felt ownership and control over their learning was a predictive factor of not only high school graduation, but also of whether a dropout would return to earn their GED (Suh & Suh, 2006).

The age during which many students experience their downturn in academic motivation occurs during their time in middle school (Morgret, 2008). One study has found that student perception of both themselves and education in general become increasingly negative during the transition to middle school (Mullins & Irvin, 2000). Many studies have been conducted in order to ascertain the factors which affect the academic motivation of middle school students, though most studies have focused on the behaviors of the teacher, the structure of the classroom, and/or the involvement of parents (Louick et al., 2016; Morgret, 2008). The results of these studies have consistently shown parent and teacher influences to be particularly strong at shaping a students' sense of self-efficacy and general interests (Chouinard, 2017; Wigfield et al., 2015), but there has been

a lack of research exploring the voices of the students themselves (McMillan & Turner, 2014; Morgret, 2008).

While as an action research study, this inquiry is not designed or intended to be applicable to other schools, this lack of professional research on the expressed motivators of middle aged students heightens the need to conduct a focused inquiry within my own school in order to better understand the acute problem of declining student motivation.

Theoretical Framework

This study hinges on the ways in which students' academic motivation is shaped by their lived experiences, goals, outlook, and social influences. Academic achievement motivation can be defined as the level of effort and persistence students show in an academic setting, and is often expressed through the levels of student engagement (Murray-Harvey, 2010). The theory chosen to frame this study is the expectancy-value theory (Eccles et al., 1983), as it is a broad construct which strives to assess how myriad factors impact a students' achievement motivation.

The expectancy-value theory was originally devised by Atkinson (1957) as a robust cognitive-motivational theory in the cognitivist tradition of Lewin (1935) and Tolman (1955). Up until this point, the dominant motivational theories had been primarily behavioristic, assuming that a person's achievement-related choices could be predicted based on observable and mechanistic processes (Weiner, 1990).

Atkinson (1957) defined a person's motivation to achieve to be based on three factors: a person's motive for success, their expectation of success, and their incentive value for completing a task. In highly controlled lab experiments, Atkinson showed that a person with a motive to achieve success will be most highly motivated when the results

are most uncertain, while a person with a motive to avoid failure will be least likely to attempt a task where the results are uncertain. Atkinson also showed that a person's relative expectation for success depended on their perceptions of past performance.

Atkinson's (1957) expectancy-value theory was significantly expanded in 1983 by Eccles et al. They went beyond the relative simplicity and sterility of Atkinson's formulation by attempting to account for all of the factors that contribute to a person's expectancies for success, as well as their valuation of a given achievement-related task. In the model they created, Eccles et al. (1983) began by identifying those environmental factors which impact a person's perceptions of success or failure, including the cultural milieu and important socializers. Their model then moves to more immediate factors, including a person's memories of events, their perceptions of cultural and social factors, and their image of both their desired present and future self. Lastly, Eccles et al.'s model addresses the two most immediate factors influencing a person's achievement-related decisions, expectancies for success and subjective task value.

Together, these various factors constitute a robust cognitive motivational theory which is ideal for analyzing and interpreting the changes in motivation experienced by adolescents during middle school. Consequently, the expectancy-value theory (Eccles et al., 1983) will help frame this study analyzing which social, cultural, and academic factors most greatly contribute to the changes in expressed achievement motivation of students at SMS.

Research Questions

The purpose of this study is to investigate the causes of declining student motivation at SMS through a case study of 6 exceptionally motivated 8th grade

students—3 students with significantly high levels of achievement motivation, and 3 students with significantly low levels. Student-participants (n=6) were identified through a survey administered to all 8th grade students by me as the teacher-researcher, and they then participated in one semi-structured interview followed by a focus group interview. Student-participants' perceptions of their relative academic motivation in the context of their individual school experience are described in detail in order to provide administrators and instructors at SMS with guidance concerning the implementation of future interventions.

One overarching research question guided the focus of this study. This larger question was then broken into several sub questions which arose from the central theory of motivation framing the study. These questions attempt to understand the factors which have shaped the levels of academic motivation and engagement for the selected students, as well as the cultural factors in the school and community which influence and amplify these various levels.

The research questions aimed to uncover student perceptions concerning their transition to middle school and the perceived benefits of hard work and school. A case study approach was used to thoroughly delve into the stories of the student-participants, and the constant-comparison method was used to interpret the student narratives in light of the below research questions.

- 1) How do exceptionally motivated 8th grade students at SMS perceive the value of middle school in the context of their past elementary school experience and their future goals in high school and beyond?

Within this research question, I narrowed my focus to several sub questions.

- How have past academic experiences contributed to the levels of academic engagement and motivation of certain exceptionally motivated 8th grade students?
- How does the perceived proximity and value of future goals contribute to the levels of academic engagement and motivation of certain exceptionally motivated 8th grade students?
- How is the level of academic engagement and motivation enhanced or suppressed by the social relationships held and perceived by certain exceptionally motivated 8th grade students?

Positionality

During this study, I was investigating the causes of a problem happening both within my classroom as well as in the building of SMS in general. This study qualifies as an insider studying “their own practice or practice setting,” (Herr & Anderson, 2015, p. 41), or a self-study. As a teacher who had taught this group of students for half a year at the onset of the study, I was an insider who could bring a true emic perspective to the state of the school. This perspective also presented the possibility of bias when interpreting and crafting the student narratives. Within the confines of this study, I needed to be mindful of my professional responsibilities as a teacher within this district, as well as careful to respect the power dynamics inherent with me researching my own students.

As a teacher within this school district, I have a professional responsibility to always provide adequate instruction and to build positive relationships with as much of the student body as possible. I also have a professional responsibility towards my colleagues, especially with those I serve as a team. As the study progressed, I needed to communicate continuously with my building's administration, as well as my superintendent, as to the methods I was using and the current status of the investigation. I also needed to seek the cooperation of both the 8th grade teachers with whom I worked and the enrichment teachers throughout the study, as their feedback was vital for completion of the teacher survey administered in Phase 1.

For this study, it was also vital that I recognized and planned for the power dynamics inherent within my framework (Herr & Anderson, 2015). In Phase 1 of my investigation, students were all given an optional survey in order to gauge their various levels of academic motivation. I needed to be clear with students that their results would be completely confidential and that their performance would have no effect on the academic standing in any way. Phase 2 involved selecting 6 of the respondents in order to complete a multiple case study. While I did offer such encouragements as food and drink at each session they attended, I was careful to express that I was in no way judging any of their responses to me, and that their relative amounts of cooperation would again have no impact on their standing in my class.

Methodology

This study was designed and implemented as a two-phase, mixed-methods case study. My selected method is part of the larger research framework "Explanatory Sequential Design" (Creswell & Clark, 2011), though falls under the smaller label of the

“participant-selection variant” (p. 86). Quantitative surveys were first administered to both teachers and students in order to place students along a continuum of academic motivation, which was the characteristic of interest for this study. The hybrid teaching method adopted by my school for the school year 2020-2021 necessitated these forms to be created on Google forms and administered virtually. From this initial phase, the sample population was chosen in the second phase using the method of maximum variation, which involves “identifying and seeking out those who represent the widest possible range of the characteristics of interest,” (Merriam & Tisdell, 2016, p. 98).

Over the course of the study, I co-created a narrative of each student-participant’s story using their own words, which were elicited through a one-hour individual interview and a combined focus group. As the study progressed, I sought answers to the three stated research sub questions through an exploration of the elicited student narratives.

Virtual interviews were recorded, transcribed, and analyzed using the constant-comparison method to look for codes and themes within the students’ responses. This process of inductive reduction allows for themes to emerge from the students’ own words, as opposed to ones created by the researcher (Stillisano et al., 2011). This process was completed simultaneously with data collection, so that each new interview transcription led to another cycle of open coding (Merriam & Tisdell, 2016) followed by a comparison with previously coded interviews. These individual units were then analyzed in order to be grouped into larger codes or themes in a process sometimes called “*axial coding* or *analytical coding*,” (p. 206, emphasis in original).

Research Participants

This case study dealt with 8th grade students attending a specific suburban middle school in Vermont. SMS houses approximately 270 students, with 46% of the population qualifying for free and reduced lunch. The population of SMS is 95% White, 3% mixed-race or other, 1% Native American and 1% Black. Approximately 30% of students currently receive specialized education through an Individual Education Plan (IEP), while another 15% receive 504 services. SMS has consistently ranked within the bottom 5% of schools within Vermont as measured by the annual Smarter Balanced Assessment, with assessed student performance often declining as they progress from 6th to 8th grade.

Due to the pandemic, for the 2020-2021 school year, my school instituted a hybrid approach which would give 8th grade students the choice of whether to attend school in person or virtually. Students who chose to attend school in person were able to attend school physically twice a week. By the time I began my study, 60 students were attending school in person, while 31 had opted for the fully virtual-model.

All 92 8th grade students were included in the first stage of this inquiry, though only 73 completed the administered student-survey. The results from these 73 student surveys were then combined with results from an administered teacher survey in order to place students on a general motivation continuum by the researcher. Phase 2 then saw the researcher choose 6 individuals using the purposive sampling method of maximum variation—three students from either end of the continuum. This purposive sampling method allowed the researcher to also select a sample of participants representative of the 8th grade as a whole, including choosing a mix of boys and girls, and a diverse mix of affluent and disadvantaged students.

Research Instruments

The two surveys used in Phase 1 of the research study consisted of the Student Engagement Instrument (SEI) developed by Appleton et al. in 2004 (Appleton et al., 2006), as well as a teacher-survey I developed. Both instruments are included in the attached appendices. Due to the hybrid approach being employed by my school during my study, each survey was converted into a Google form so that it could be administered electronically.

Surveys were chosen for the first phase of the research due to the innate nature of motivation. “Surveys are useful for investigating unobservable aspects of student engagement, particularly for understanding the emotions students experience or the mental energy or cognitive strategies they apply to learning,” (Henrie et al., 2015, p. 45). The SEI is a 36 item assessment which includes the “affective components of school identification, belonging, and valuing education,” (Henrie et al., 2015, p. 429), as well as such overt factors of engagement as behavior, participation, attitude, and investment. This measure was initially developed in order to help identify those high school students who were potentially at risk for dropping out in order to better determine the level and timing of interventions (Fredricks & McColskey, 2012). This measure has been found to have acceptable Cronbach-Alpha levels, which is a measure of the “internal consistency and validity of the chosen questions,” (Fredricks & McColsky, 2012, p. 775); and unlike many other motivational surveys, it is applicable for multiple grade levels and has “similar factor structure across gender(s),” (Betts et al., 2010, as cited in Fredricks & McColsky, 2012 p. 779).

In addition to this measure of the students' perspectives, a simple survey was designed in order to garner teacher impressions of their 8th grade students. While it is true that "teachers can only assess students' externally observable skills," (Buckley & Krachman, 2016, p. 13), it was important to include teacher perceptions for several reasons. While students have been shown to generally self-report honestly (Brener, Billy, & Grady, 2003; Buckley & Krachman, 2016; Siegen, et al., 1998), it is still possible for students to understate or overstate their traits (Buckley & Krachman, 2016), and to respond in a socially desirable fashion (Korb, 2011). Additionally, teacher surveys of students have been found to "be more strongly related to students' academic and behavioral outcomes," (Buckley & Krachman, 2016, p. 14), and tend to be "slightly more predictive of... objective outcomes," (p. 16). With this being the case, I devised a simple survey which had teachers rate each 8th grader on a five-point sliding Likert Scale for academic engagement. This survey was designed for ease of use in order to better facilitate the help of as many teachers as possible and was piloted with a sample of three teachers in order to ensure clarity regarding the language and purpose in the minds of the teacher-participants.

Significance

This study is intended to generate local knowledge in order to investigate the phenomenon of flagging academic motivation amongst the 8th graders at SMS. This knowledge will be shared by me as a teacher-leader in my school in order to better inform future policy initiatives at SMS in the future.

The data collected from this study will allow me to better understand the exceptionally motivated students within SMS. The use of the constant-comparison

method in conjunction with the creation of student narratives allowed me to identify common themes and elements across and between both highly motivated students and highly disengaged students. The depth of information garnered also allowed for an analysis of the inter-personal and cultural factors which have helped to shape students' various levels of academic motivation. This knowledge, when shared with other teachers and administrators in my school, will facilitate the implementation of more focused interventions at SMS in the future.

While this study is intended to benefit local stakeholders, the results of this study could potentially be useful to other small middle schools with similar demographics who are facing the all too common problem of declining student motivation and engagement in the academic setting. Additionally, the methodological approach employed shows promise in analyzing the levels of motivation for other k-12 settings.

Limitations

At the time I collected data through interviews and focus groups, I had taught these students for almost a full year. While this time together helped to give me a robust understanding of my students, as well as the rare emic perspective necessary to co-create the student narratives, this time together also represents a significant limitation of the study.

This study was concerned with uncovering the voices of the most exceptionally motivated students at SMS, meaning that I had interacted with all of them a great deal in my time as their teacher. I had done my best to push groups often beyond what they themselves would have chosen. This relationship had the potential to give both myself and the student-participants definite biases concerning our relationship. Our participation

in the teacher-student relationship also represented a definite power relationship which needed to be addressed lest the student-participants' participation in the study led to any misapprehension that their participation in this study in any way affected their standing in either my eyes or my class.

The hybrid approach adopted by my school for the 2020-2021 school year also presented significant obstacles, as fully 1/3 of the 8th grade students chose to remain virtual from the outset of the year. As a result, each of the surveys were converted into Google forms, and each interview needed to be conducted virtually. Additionally, this meant that I had not forged significant relationships with a sizable portion of the students, thus limiting the quality of the emic perspective I was able to bring in selecting participants. This situation also led to 19 students not taking the student survey in Phase 1 of the study, resulting in a smaller range on the created motivation continuum than I would have seen in a typical school year.

This study concerned the forces that helped shape the academic motivation of 8th grade students at SMS with the intention of applying those results to help shape future school policy. As an action research study, this research may be transferrable to other situations, but was not intended to be applicable to other settings.

Organization

The research will be reported in five sections. Chapter 1 introduces the Problem of Practice, the Research Questions, the chosen methodology, and the most relevant theories pertaining to the study. Chapter 2 dives more deeply into the literature concerning the expectancy-value theory of motivation, as well as the history of research into middle school students' academic engagement. This section provides a thorough

look at those elements presented in the Theoretical Framework and helps justify the need for the study. Chapter 3 elaborates on the research methodology used in the study, including a deeper look at the sample population, data collection procedures, and data analysis methods. Chapter 4 displays the data collected during the study. The quantitative data is organized within tables and charts, while the qualitative data is displayed in narrative form. Chapter 5 discusses the results in light of the chosen research questions, identifying possible conclusions and recommending next steps.

Glossary of Terms

- Case study: an in-depth investigation of a bounded system.
- Constant-Comparison Method: qualitative method for data analysis in which data is analyzed immediately as it is collected and compared with data already collected in each iteration.
- Distal goal: a long-term objective.
- Engagement: the outward manifestation of a person's motivation.
- Expectancy: how likely an individual believes they can complete a given task.
- Extrinsic motivation: when a person is motivated by external rewards or externally-imposed goals.
- Instrumentality: how useful an individual perceives a task to be towards reaching a certain goal.
- Intrinsic motivation: when a person is motivated by internal forces of self-recognition, status-attainment, and/or enjoyment of an activity.
- Member-checks: the process of reviewing findings with participants in order to ensure an accurate representation of their stories.

- Motivation: psychological forces which determine the direction of a person's level of effort in pursuit of objectives and in the face of obstacles.
- Parent involvement: the degree to which parents are active around their child's education
- Proximal goal: a short-term objective
- Student Engagement Instrument (SEI): survey designed by Appleton et al. (2006) to measure student perceptions around their academic motivation and engagement.
- Thick description: a method used in qualitative research defined by the great amount of detail used to describe a setting and participants.
- Valence: the personal value of a given task or goal

Chapter 2

Literature Review

Problem of Practice

The primary objective of this case study featuring a mixed-methods design was to uncover the voices of those students identified as having extraordinarily high or low levels of academic achievement motivation. Information was gathered from 8th grade students in a small suburban middle school (SMS) in Vermont. Students were chosen based on the results of two separate measures—one administered to every student about themselves, the other administered to teachers relating to each of their students—which each generated a score for a student’s academic engagement and motivation. Selected students then completed interviews and engaged in a focus group throughout a 20-week period in the middle of the school year.

Rationale for the Problem of Practice

During the last four years at Seaside Middle School, the middle school at which the current study is being conducted, there has been a consistent decline in student achievement as measured by the annual Smarter Balanced Assessment (SBACS), as well as a noticeable degradation in the level of student achievement-motivation as they progress from 6th to 8th grade as expressed by the building teachers.

In this time, SMS has witnessed multiple new programs and interventions whose collective aim is to raise student academic achievement on these standardized assessments, including a new reading program, math curriculum, SEL curriculum, and computer literacy teacher. Despite these targeted interventions, though, scores have failed to rebound significantly.

This study was aimed at inviting students to share their own input and voices concerning their perceptions of these various interventions, as well as to investigate the causes and beliefs of a student culture which has consistently led to this decline in achievement motivation as students progress through SMS.

Research Questions

The purpose of this study was to investigate the causes of declining student motivation at SMS through a case study of 6 exceptionally motivated 8th grade students. Student-participants (n=6) were identified through a survey administered to all 8th grade students by me as the teacher-researcher, and then participated in one semi-structured interview followed by a focus group. Student-participants' perceptions of their relative academic motivation in the context of their individual school experience are described in detail in order to provide administrators and instructors at SMS with guidance concerning the implementation of future interventions.

One overarching research question guided the focus of this study. This larger question was then broken into several sub questions that arose from the central theory of motivation framing the study. These questions attempt to understand the factors that have shaped the levels of academic motivation and engagement for the selected students, as well as the cultural factors in the school that propagate these various levels.

The research questions aimed to uncover student perceptions concerning their transition to middle school and the perceived benefits of hard work and school. The constant-comparison method was used within a case study framework in order to understand the common themes and factors leading to academic achievement motivation at SMS (Kennedy-Lewis et al., 2016).

- 1) How do exceptionally motivated 8th grade students at SMS perceive the value of middle school in the context of their past elementary school experience and their future experiences in high school?

Within this research question, I narrowed my focus to several sub-questions.

- How have past academic experiences contributed to the levels of academic engagement and motivation of certain exceptionally motivated 8th grade students?
- How does the perceived proximity and value of future goals contribute to the levels of academic engagement and motivation of certain exceptionally motivated 8th grade students?
- How is the level of academic engagement and motivation enhanced or suppressed by the social relationships held by certain exceptionally motivated 8th grade students?

Organization and Purpose of the Chapter

This chapter is meant to provide a foundation for the stated problem of practice, as well as the chosen methodologies. This chapter begins with an overview of the importance of the literature review for any study as well as the methods used in its

completion. The chapter then provides a thorough review of the cognitive motivational theory that comprises this study's Theoretical Framework. The expectancy-value theory (Atkinson, 1957; Eccles et al., 1983) will be examined in terms of its development and empirical support. This discussion will include an examination of the history of how educators and theorists have understood and treated the concept of academic achievement-motivation, and the various ways this understanding differs from traditional school practices. I also discuss the current research surrounding online education in order to better assess the impacts stemming from my school's current hybrid structure. This chapter will then end with a review of related empirical studies with various results, as well as a discussion of how those results help to inform this study's chosen methodology.

The literature review is intended to ground the current study within the context of the existing literature. It is meant to provide a "summary and synthesis of research put forward by others that is pertinent" (Efron & Ravid, 2013, p. 17) relative to a given study, and to "advance a position about the current state of knowledge on a topic" (Machi & McEvoy, 2009, p. 4). This information is then to be used to advance an argument and provide a framework for the study (Machi & McEvoy).

When completing this literature review, I first relied on the Dissertation and Thesis Global database which helped connect me to similar dissertations. From these dissertations, I began building a list of the relevant research studies and books which I would need to eventually read. These studies I was able to primarily find on such databases as ResearchGate, PsycINFO, and ERIC. For many sources, though, I relied on the University of South Carolina's library, which has been invaluable in locating every study I have requested.

Theoretical Framework

Adolescent achievement-motivation is a topic that has garnered increasing attention in recent years. Where researchers used to believe that motivation was a fairly mechanistic process which could be influenced by demonstrably behaviorist means, the field of cognitive motivational theories has made significant gains in its ability to predict and explain the facets of a child's motivational landscape (Weiner, 1990). One of the broadest and most successful of these theories has been the expectancy-value theory, originally formulated by John Atkinson in 1957 before being significantly expanded by Eccles et al. in 1983 (Wigfield et al., 2015).

Atkinson's Expectancy-Value Theory.

The expectancy-value theory was first formulated by J.W. Atkinson in "Motivational Determinants of Risk-Taking Behavior," (1957). This theory built upon the work of Tolman (1955) and Lewin (1935), who first introduced the concepts of expectancies and incentive values, and who were the first proponents of the cognitive motivational theories. This differed from the dominant motivational theories of the time, which were mechanistic and behavioristic in general (Atkinson, 1957).

In his paper, Atkinson (1957) defined three primary variables: motive, expectancy, and incentive. Motive was defined as "a disposition to strive for a certain kind of satisfaction," (p. 360), with the specific motive to achieve success (M_s) and the motive to avoid failure (M_f) being particularly highlighted. Expectancies were defined similarly to the construct presented by Tolman (1955), which was a person's general expectation of success or failure on a given task. Incentive was defined as a person's innate desire to accomplish a task, and as the inverse of a given task's objective

difficulty. In other words, a person was predicted to desire success most strongly on tasks where the outcome was the most uncertain. Atkinson (1957) captured this concept in his construct Probability of Success (P_s), which he defined as the probability that a task could be accomplished given the past performance of other individuals. With these constructs, he defined a person's motivation power with the equation $Motivation = Expectancy \times Incentive Value \times Motive$.

This equation predicts that the motivation of a person will be zero if any of the constructs are zero. Also inherent to the equation is the fact that motivation will be positive for a person who has a driving motive to achieve success, but motivation will have a negative value for those who desire avoiding failure. Additionally, as the incentive value is defined to be the inverse of the task difficulty, a person is hypothesized to desire success the most for tasks where success is least certain, or where there is a 50% chance of failure. For tasks that are perceived to either be harder or easier, the motivation of a person is proposed to go down. This equation consequently predicts the opposite behavior for those who seek the avoidance of failure, as they would presumably have their fear aroused most strongly in situations of greatest uncertainty. The prediction therefore follows that those with a motive to avoid will be most likely to attempt tasks where success is either certain (a probability of success value of 1), or where failure is certain (a probability value of 0).

Eccles et al.'s Expectancy-Value Theory.

In 1983, Eccles et al. presented a large re-working of Atkinson's (1957) original expectancy-value theory (EVT). This formulation attempted to combine many of the elements of Atkinson's original proposal with some of the other leading cognitive

motivational theories of the time in an attempt to better explain gender differences in achievement choices and motivation in the STEM fields. In particular, Eccles et al.'s (1983) work strove to take note of attribution theory (Weiner et al., 1971), goal theory (Nicholls, 1978; 1984), self-efficacy theory (Bandura, 1977), and the broad human values theory (Rokeach, 1973; Feather, 1982).

Attribution theory (Weiner et al., 1971) posits that a person's academic achievement motivation can be understood through the lens of how a person attributes success or failure. In particular, Weiner et al. (1971) identified four different factors that a person could associate with their success or failure: ability (A), effort (E), task difficulty (T), and luck (L).

The origins of goal theory can be found in the work of Nicholls (1984). He proposed that the two primary modes of achievement conceptions are mastery-orientation and ego-orientation. Mastery-oriented individuals are those who are primarily concerned with their own past performance and are concerned with self-attainment through the completion of certain tasks; while ego-oriented individuals are primarily concerned with their performance relative to others. Using these definitions, Nicholls (1984) postulated that academic competition would be good for ego-oriented individuals, but only if they were of a high enough ability to be happy with the results. Mastery-oriented individuals, though, would not benefit from competition regardless of ability level.

The theory of self-efficacy (1977), similar to the expectancy-value theory, places a great deal of importance on the confidence that a person has developed through past experiences. In his theory, Bandura (1977) defined a person's self-efficacy as a belief in their ability to perform certain tasks or overcome certain challenges, and he showed a

person's perceived self-efficacy to be a great predictor of a person's achievement-related successes.

Lastly, Rokeach's (1973) theory of broad human values introduced the concept of values as large overarching constructs that influence all of a person's subsequent decisions. He defined two different levels of values in particular: Instrumental values, such as the desire to be helpful or ambitious, are those "modes of conduct" (Feather, 1982, p. 266) which help a person to become the desired version of themselves; and terminal values, such as freedom or a sense of accomplishment, which are the final end points that all people desire to reach regardless of nationality or cultural differences.

In their attempt to combine Atkinson's (1957) theory with some of the concepts from these preceding motivational theories, Eccles et al. (1983) created a comprehensive model that attempted to explain the various factors which could impact a child's perceived ability and interests, and subsequently their achievement choices. The base of the model includes those factors that influence a child's *perceptions* of their own achievement related beliefs, such as the cultural milieu in which they are enmeshed, as well as the views of such important socializers as their family, friends, and teachers. Moving to the right of Eccles et al.'s model are the factors which have a more direct effect on a person's psyche, such as how children internalize their perceptions, and to which sources they have attributed their past success or failures. These then lead to the important "affective memories" of the child, as well as the self-schema which defines their image of both their present and future selves. Lastly, the most immediate elements of Eccles et al.'s model show the two influences which most directly impact a person's achievement related choices: their expectations for success, which is synonymous with

Bandura's (1977) conception of self-efficacy; and the subjective-task value they ascribe to a given task.

The area of the model which the authors spent the greatest deal of time developing was the concept of subjective task-value (Eccles et al., 1983). They define this construct as being influenced by four separate factors: attainment value, interest/intrinsic value, utility value, and cost. The attainment value of a task is defined to be how much a task can reinforce a person's self-schema or image of themselves. These tasks are predicted to be more attractive to an individual because of their strengthening effect on a person's self-perceptions. Intrinsic value is defined to be the amount of pure enjoyment that a person gains through their completion of a given task and is similar to the concepts of intrinsic motivation proposed by Deci (1975) and the concept of "flow experience" proposed by Csikszentmihalyi (1975). Utility value is how much a task is perceived to help the individual reach a future goal and is similar to the concept of instrumentality proposed by Lewin (1935) and Vroom (1964). Eccles et al. (1983) compared utility value to Deci's (1975) conception of an extrinsic motivator but recognized the mitigating factors involved when a person is choosing their own goals. Lastly, cost was defined to be the time or resources a person must sacrifice in pursuit of success on a given task or towards a certain goal (Eccles et al., 1983).

Historical Perspectives

Middle school is a pivotal time for many of America's youth (Cornell et al, 2016; Lai, 2011; Morgret, 2008; Wigfield et al., 2015). This shift represents the transition from the familiarity of elementary school to a more rigorous and evaluative academic model during the tumultuous and revelatory adolescent years. As such, this time period has been

a focus of researchers for many years, with a great deal of attention being paid to how and why we should invest time and energy into inspiring academic motivation in middle schoolers (Wigfield et al., 2015). Despite this focus, which has only increased in recent years, there is still a great disparity between the idealized academic motivation desired and today's adolescents, especially for those attending schools in the poorest communities (Lai, 2011).

Middle Schools.

Up until the inception of the 20th century, public schools had been divided into elementary school, which included first through 8th grade, and the traditional high schools of grades nine through twelve (Manning, 2000). In 1909, the first junior high was established in order to serve as mini-high schools that could better prepare students for future success. These programs featured the same rigid structure characteristic of the contemporary high schools, and typically quickly divided students into either a college or vocational track (Manning, 2000). However, the idea of the middle school as a place to cater to the developmental needs of adolescents was born in a speech delivered by William Alexander in 1963 (Meyer, 2011). In this speech delivered at Cornell University, Alexander roundly criticized the existing junior high system's lack of developmentally appropriate programming. This speech marked the beginning of the modern conception of middle schools (Meyer, 2011).

Middle schools were conceived of as a space to meet the unique needs of adolescents (Rettig & Canady, 2000), such as the emotional turbulence and growing sense of independence resulting from their going through puberty. While still having similar levels of structure to the typical high school, middle schools also typically offer

greater choices in enrichments, frequently feature team or interdisciplinary teaching, and have advisory programs meant to provide increased emotional support (Rettig & Canady, 2000). Where junior highs used to be the typical school for adolescents to attend in the 1970s, middle schools went on to become the dominant model by the early 1990s (Rettig & Canady).

Theories of achievement motivation.

In the middle of the twentieth century, theories of academic motivation were dominated by behaviorist concepts (Weiner, 1990; Stipek, 1996). Researchers viewed motivation, a word that comes from the Latin root meaning “to move,” as focused on such concepts of drive, instinct, and need (Weiner, 1990). While Tolman (1932) had attempted to separate the concepts of learning and motivation by saying that motivation was the use of what had been acquired through the learning process, the research of the time period was dominated by educational theorists who struggled to separate the concepts (Weiner).

The field experienced a shift in the 1960s away from these mechanistic ideas with the conception of the theory of cognitive motivation (Weiner, 1990). This shift began to recognize the importance of a person’s thought-processes in making achievement-related decisions and led to the creation of increasingly complex theories that attempted to capture the myriad factors which impacted a person’s motivation. The 1970s witnessed a rise in three important realizations concerning middle school motivation: the recognition that rewards could paradoxically lower a person’s motivation, collaboration could often build a student’s drive more so than competitive circumstances, and that there was much

to be gained in studying why different people exhibited different levels of achievement motivation (Weiner).

The 1980s saw a rise in the amount of research being invested into student motivation. This was evidenced by the creation of the Motivation in Education Special Interest Group by the American Education Research Association (Weiner, 1990), as well as several compendiums on motivational research released by Ames and Ames (1984, 1985, 1989). At this point, the topic of which factors influenced a student's achievement strivings began to dominate the landscape of motivational research, spurred on by the fervor found in the aftermath of the publication of *A Nation at Risk* (1983). More recently, motivational research in education has focused on three questions: Can I do this task? Do I want to do this task and why? and What do I have to do to succeed on this task? (Brassard & Garrison, 2004). These questions still serve as the driving force behind much of contemporary motivational research (Wigfield et al., 2015).

Middle School Motivation

The concept of academic motivation has been receiving increased attention in recent years (Lai, 2011; Wigfield et al., 2015). In particular, it has been found to be particularly important to focus on the achievement motivation of adolescents, as this is both a time period that sees a general decline in academic achievement (Eccles et al., 1989; Lai, 2011; Wigfield et al., 1997), and which has a strong predictive power on future achievement (Durik et al., 2006; Wang & Fredricks, 2014).

Recent findings around academic motivation and middle school.

Since the increases in public attention during the 1980s, there have been significant advances made in understanding and utilizing middle school academic

motivation. These findings include the developmental differences in adolescents compared to other age groups, the importance of various aspects of classroom and school climates, and the myriad different factors that impact student achievement motivation.

The transition to middle school has consistently been shown to coincide with a downturn in academic and achievement related motivation in students (Eccles et al., 1989; Lai, 2011; Shim, et al., 2008; Wigfield et al., 2015). This has been contrasted with the relative confidence and optimism displayed by a majority of 5 year-olds, with research showing that the observed downtick in motivation coincides with the increased assessments and critical feedback typical of the transition to middle school (Wigfield & Eccles, 1992). Shim et al. (2008) have also shown that this decrease in motivation usually occurs within the school year as opposed to during summer vacations, lending support to Wigfield and Eccles' (1992) assertion. This decrease in motivation and self-perceived ability level is also found in all domains, as opposed to just the more academic fields (Wigfield, et al., 1998).

Students' expectancy, or their confidence in their ability to do a certain task, has consistently been shown to strongly predict student achievement on classroom and standardized assessments (Eccles & Wigfield, 1995). Researchers have also found interest/intrinsic value to consistently predict which courses a middle school student would choose in the future regardless of their self-perceived ability levels, but that utility value becomes a stronger factor as students age (Eccles, 1984; Eccles & Wigfield, 1995). This means that while younger students are more likely to choose tasks or objectives based on interest, students will increasingly consider the usefulness of a given task towards some future goal or ideal self. Studies have also shown that the value placed

upon learning by a student in fourth grade has significant predictive power concerning their eventual high school course selections (Durik et al., 2006; Simpkins et al., 2006). Lastly, a recent finding indicates that success at a given task will increase a students' perceived value of the task (Wigfield et al., 1997), contrary to the predictions of Atkinson (1957). In other words, a child will more likely build an interest in given subjects through experiencing repeated successes, and thereby developing their expectancies for the task.

School engagement has been found to be one of the primary factors impacting students' perceived learning and belonging at school (Ferreira et al., 2011). Students with stronger senses of school engagement have been found to be less likely to exhibit the downturns in motivation and self-efficacy typical of the middle school transition (Wang & Eccles, 2013). The strongest factors which have been found to help buffer students against this decrease in achievement motivation have been identified as the students' parental and family influences, the social group of the student, the general school climate, and the quality of the teacher (Ruzek et al., 2015; Wang & Eccles, 2013). The greatest deal of time has been spent researching the latter two factors, as these are two most directly under the control of the schools (Lai, 2011).

The majority of studies investigating middle school motivation have focused on the impact of the teachers (McMillan & Turner, 2014). Teachers are able to positively orient the learning environment by stressing collaborative and mastery goals instead of the more harmful practices of competition and normative evaluations (Lai, 2011), as well as by embodying the concept of a "warm demander" (Bondy & Ross, 2008). Over a given year, teachers employing more collaborative and less competitive practices have been shown to significantly limit the degree to which student academic motivation waned

(Ruzek et al., 2015). Additionally, interventions aimed at instilling such practices within classrooms have been shown to increase student confidence and independent learning while also decreasing instances of work avoidance (Guthrie et al., 2000; Miller & Meece, 1997). Research has also shown that authoritative school practices, such as being consistently firm but emotionally supportive with students, has been shown to increase student belonging and engagement (Cornell et al., 2016). This is similar to the concept of a “warm demander,” which is a form of teaching that has steadily become more common (Bondy & Ross, 2008).

Some researchers have also started to focus on the expressed desires of students, although these studies are only now becoming more common (Morgret, 2008). Research conducted by Pearson (Lai, 2011) has shown that greater student autonomy and choice result in greater student achievement motivation, with several other studies also showing the benefits to academic engagement when students are given curricula with greater academic choice (Albrecht, 2012; Guthrie et al., 2000; Miller & Meece, 1997). Despite these findings, there is still a distinct shortage of studies which have sought out the perceptions and voices of students concerning what impacts their own perceived motivation (McMillan & Turner, 2014; Morgret, 2008).

The importance of studying middle school motivation.

Middle school has long been seen as a place catering to an age group with unique strengths and needs (Rettig & Canady, 2000). Furthermore, researchers have also found this to be an informative and critical time in the lives of students (Durik et al., 2006; Eccles et al., 1989; Lai, 2011; Simpkins et al., 2006; Wigfield et al., 2015).

Increasingly, studies have been showing that the beliefs and habits present in middle schoolers are highly predictive of future achievement-related choices. Simpkins et al. (2006) found that the level to which adolescents valued science and math was significantly predictive of the courses they would choose in High School, while Wang and Fredricks (2014) found that the motivation levels of middle school students were highly predictive of future high school dropouts. These findings concerning the importance of middle school students' academic and motivational outlooks have prompted calls for educational reforms for these age levels (Fowler et al., 2014). While reform in this area could undoubtedly benefit all students, nowhere is this reform called for more strongly than in America's poorest schools and communities.

The district under study in this action research investigation suffers from declining high school graduation rates. This district-wide problem is reflected in the middle school through the consistent decline in student achievement motivation over the course of their three years at SMS. Through this study, I aim investigated the primary causal factors driving this declining student achievement motivation in order to focus future interventions undertaken at SMS.

Class Disparities in Achievement Motivation

Socioeconomic class has consistently been found to be one of the biggest predictors of students' academic attainment (Egalite, 2016; Hardie & Seltzer, 2016; Hochschild, 2003). These differences in achievement can easily be linked to differences in the levels of parental support in poorer communities, disparities in educational quality compared to wealthier areas, and enduring differences of culture between students and the schools they attend.

Parental involvement is often seen by teachers as one of the primary determinants of a students' relative levels of achievement motivation (Taylor, 2001). This belief comes with a great deal of support, as the Coleman Report (Coleman et al., 1966) endorsed this conclusion more than fifty years ago. More recently, Egalite (2016) found that the levels of parent income had a moderately strong predictive effect on students' achievement choices, while levels of parent education were highly predictive. She also found there to be highly deleterious effects on academic achievement in single-parent households—a result made even more problematic when considering the significantly higher likelihood of a child growing up in a single parent household when living in a socioeconomically depressed neighborhood (Condron, 2009). In an attempt to understand why children growing up in poorer households typically display lower academic achievement, Hardie and Seltzer (2016) investigated how parenting styles were impacted by social class. They found that parents from lower socioeconomic classes are less likely to give emotional or financial support to their children, less likely to offer educational encouragement or advice, and are more likely to function as single-parent households.

These class disparities are also reflected in the schools that students attend. Schools in poorer neighborhoods are more likely to have inexperienced teachers, as more experienced teachers will typically avoid teaching in such areas (Condron, 2009). Watson (2011) found that many in-service teachers carry bias and trepidation around teaching in urban schools and are more likely to view teaching in such neighborhoods as more difficult. These views have also been seen in the pedagogical choices of practicing teachers. Hochschild (2003) found teachers to often group students based on their socioeconomic status and to hold different expectations for students of different

backgrounds. These various factors all impact the values and self-images held by students and consequently how well students relate to their schools.

Learning to Labor by Paul Willis (1977) stands as a formative study in terms of how socioeconomic status can lead to a strong and healthy culture which is clearly non-academic in nature. Willis (1977) showed there to be significant cultural differences between male adolescents in an English working-class community and the school they attended. These cultural differences manifested themselves as significant behavioral and academic challenges while the boys attended school. The boys frequently self-reported how little school reflected their values and were able to clearly articulate a perceived non-academic future which they felt completely ready to assume.

Horvat (2003) examined the cultural differences found in students from different socioeconomic backgrounds through the lens of the work of Pierre Bourdieu. Through this lens, Horvat (2003) argued that students came with significantly different values depending on their past formative experiences, and that these values helped to prepare students for a certain lifestyle or “field.” He went on to explain that while students from higher income households were more likely to prepare children for the academic field which schools typically represent, lower income children were often unprepared for this particular field and discourse (Gee, 1987), resulting in school initially seeming utterly foreign. When students do not see themselves, their values, or their cultures reflected in their classrooms, research has consistently shown students to turn away from schools they see as irrelevant to their lives (Egalite, 2016; Howard, 2013; Ladson-Billings, 2009; Willis, 1977).

In this study, I investigated the causes of motivational decline at SMS by drawing out the voices of 6 student-participants. In particular, the effects stemming from the students' socioeconomic status were investigated in order to understand the varying values and expectancies that student-participants place on academic achievement.

Achievement Motivation in Online Learning

Online learning as an alternative to traditional face to face teaching has become increasingly common over the past twenty years (Hartnett, 2016). This mode of learning can feature higher levels of self-direction and differing levels of structure as compared to traditional classrooms (Cole et al., 2017). In a study published in 2000, Sang identified three important types of online motivation: motivation to initiate, motivation to persist, and motivation to continue.

Studies have consistently found that an individual's motivation to succeed in online learning is strongly influenced by the perceived relevance of the online learning, along with their expressed confidence and comfort in using the technology (Chen & Jang, 2010; Hartnett et al., 2011; Hong & Hwang, 2017; Kim & Frick, 2011). Additionally, most of the research on online education has found online learners to generally have high levels of intrinsic motivation (Hartnett et al., 2011) compared to students in face to face classrooms. Some studies also suggest that online learning formats typically have relatively small impacts on student achievement compared to other classroom factors (Hartnett et al., 2011), with Hattie (2009) finding online learning formats to have a small effect size compared to other variables.

Despite these findings, there are reasons to believe that this may not be true for students in this current situation, which has seen many students forcibly entered into

virtual learning. Most past studies done on online learning have focused on the college level (Cole et al., 2017; Hartnett, 2016), and involve situations where students have chosen to be there. Online learning has been shown to decrease perceived peer relationships and teacher support (Knowles & Kerkman, 2007), while Hartnett (2016) found online college programs to have significantly higher rates of attrition than traditional face to face programs. His (2016) study found that students who dropped out of online programs frequently cited feelings of loneliness and frustrations with the technology as the primary reasons they left. Cole et al. (2017) also found that without the nuances of human body language, teacher feedback and criticisms seemed much harsher to students, which in turn led to many students preferring face to face instruction.

This study featured a sizeable portion of students who have been engaging in online learning for most of the past year. As the teacher-researcher, I will investigate the perceived factors impacting student academic motivation while also accounting for the inevitable impact that this period of virtual learning has had on my students.

Related Research

There has been a great deal of research done concerning the factors that impact middle school achievement motivation, with some clear important factors emerging as being particularly determinative of student motivation. However, relatively few of these studies have utilized the actual views and perceptions of students to inform their results. The cases in which the researchers have elicited those views have produced highly suggestive findings.

In 2011, Nagengast et al. (2011) conducted a quantitative analysis in order to explore the relationship between middle school students' expectancies and values for

science with their behavioral choices and career aspirations. Analyzing the data from the 2006 Programme for International Student Assessment (PISA), the researchers were able to draw from a population of nearly 400,000 fifteen-year-old students spread across 57 countries. They used four different measures from PISA to represent the expectancy, value, behavioral choices, and career outcomes: perceived ability in science, reported enjoyment of science, after-school choices, and future plans. Using these four categories, the researchers investigated the predictive power of both expectancy and value for science-related achievement choices for this population.

In line with past research (Eccles et al., 1983; Eccles et al., 1989), both expectancy and value for science were found to be predictive for student choices. These two constructs were found to be positively correlated with each other, supporting the notion that students will often value the subjects in which they have found success. The researchers (2011) found that of the two, how much a student enjoyed science (value) was more predictive of whether students engaged in scientific clubs, as well as of whether they intended to pursue a future career in science. This aligns with the findings from Eccles et al.'s (1989) study in which they found expectancies to predict student grades, and interests to predict future class choices.

The 2012 study by Ryan and Shim also took advantage of students' self-reported views in order to analyze two different kinds of help-seeking behavior. With a population of 655 adolescents, Ryan and Shim (2012) administered quantitative surveys at three different points of time during the students' transition to middle school: once at the end of fifth grade, once at the beginning of sixth grade, and once at the end of sixth grade. In particular, the study was concerned with understanding two different forms of help-

seeking behavior: adaptive help-seeking in which the student is concerned with learning the selected material; and expedient help-seeking behavior, which is concerned with getting the answers quickly without increasing knowledge acquisition. At each point of time, the researchers collected four different types of quantitative data: a survey to determine the kinds of help students sought; a survey to determine student views on the kinds of goals their teachers emphasized in the classroom, whether performance or mastery goals; a survey to elicit student views on how caring their teachers were; and the students' grades in Reading, English, Math, Social Studies and Science.

Over the course of the study, Ryan and Shim (2012) found adaptive help-seeking behavior to decrease over time, and that this decline coincided with lower grades. This decrease in achievement was most pronounced for students who reported greater levels of expedient help-seeking. Ryan and Shim (2012) also found the levels of perceived teacher goals and emotional support to be impactful on the kinds of help-seeking students reported. Teachers who emphasized mastery goals were more likely to have students who used adaptive help-seeking, as opposed to teachers encouraging performance goals. Students who reported their teachers as more emotionally supportive were also less likely to report the use of expedient help-seeking behavior, lending credence to past research showing how important a teacher is for student motivation (Lai, 2011; Louick et al., 2014; Morgret, 2008).

Research has also continued to show the relationship between a students' perceived ability and their academic achievement. In one such study, Louick et al. (2016) investigated the relationship between achievement motivation and reading comprehension in 112 struggling middle school readers spread between two different

schools—one suburban, and the other urban. The researchers employed a mixed-methods design that collected three different forms of data: a questionnaire administered to every student concerning their motivation to master reading comprehension; a standardized reading comprehension assessment to measure student ability; and a randomized sample of 44 1-on-1 interviews. Each of the interviews were coded using explanatory analysis methods to reveal students' achievement motivation. The surveys included items on three different forms of motivation: students' self-efficacy regarding reading comprehension; students' intrinsic motivation to read; and students' extrinsic motivation to read.

In line with past research (Eccles et al., 1989; Wang & Eccles, 2013), Louick et al. (2016) found that levels of academic achievement shown in the standardized reading comprehension assessment to strongly correlate with the students' self-reported self-efficacy beliefs. However, the researchers found that levels of student motivation did not align with student achievement on the assessment as expected. Students from the urban school had higher levels of reported motivation, but lower scores on the comprehension assessment compared to students at the suburban middle school. The researchers were able to use these results to conclude that a students' confidence with reading comprehension had a stronger predictive value on demonstrated ability levels than a students' desire or motivation to improve their mastery of reading comprehension.

These recent advances in motivational research continue to show that the degree to which students identify with the academic goals of traditional schools depends on a variety of factors including their academic values, expectancies, and the goal system encouraged by the classroom teachers (Nagengast et al., 2011; Ryan & Shim, 2012). Throughout the course of this study, I utilized this theoretical framework to interpret the

student voices in order to pursue an understanding of the determinative factors impacting declining achievement motivation at SMS.

Conclusion

Chapter 2 reviewed the complicated field of achievement motivation, highlighted by a discussion of the expectancy-value theory developed by Eccles et al. (1983).

Throughout, it was shown that a student's achievement motivation is impacted by an array of factors, including the cultural milieu, socializer beliefs, self-image, personal values, and self-efficacy beliefs.

The chapter also discussed the unique implications involved in motivating middle school students, as this is a time period which frequently witnesses a decline in perceived ability and academic desires for a majority of students (Lai, 2011; Nagengast et al., 2011). Despite these challenges, the importance of motivating these students was highlighted by showing the lasting future implications of students' beliefs and values concerning school (Simpkins et al., 2006; Wang & Fredricks, 2014).

The special challenges of motivating students of lower socioeconomic status were also discussed. Students from poorer neighborhoods are less likely to relate to the schools which they attend (Howard, 2013; Willis, 1977), less likely to receive crucial parental and teacher support (Coleman et al., 1966; Hardie & Seltzer, 2016; Watson, 2011), and significantly more likely to struggle with completing high school (Condrón, 2009). It is imperative that classrooms begin to acknowledge the different cultural values and strengths of their different students so that students can more clearly see the relevancy of education to their lives (Horvat, 2003; Howard, 2013; Ladson-Billings, 2009).

Lastly, the realities of online learning were examined in light of the hybrid learning model being employed by SMS for the 2020-2021 school year. A majority of studies conducted on online learning have highlighted the importance of relevance and technological efficacy in predicting student success in online programs (Hartnett et al., 2011; Kim & Frick, 2011), though some have found students to struggle with the heightened levels of isolation and computer usage (Cole et al., 2017; Hartnett, 2016; Knowles & Kerkman, 2007). While many studies have found that students in online programs tend to have higher levels of intrinsic motivation (Hartnett, 2016; Hong & Hwang, 2017), and that online learning structures tend to have only modest impacts on student achievement (Hattie, 2009), these studies primarily deal with college-level programs in which students have chosen to enroll.

In this action research mixed-methods case study, the views of students displaying exceptional levels of motivation were explored through the lens of the expectancy-value theory in order to better understand the factors most strongly impacting the culture of motivation at SMS, a small middle school in a socioeconomically depressed area of Vermont. In Chapter 3, the steps of this mixed-methods action-research study will be explained.

Chapter 3

Methodology

Introduction

This chapter describes the chosen research methodology in the context of the stated problem of practice and chosen research questions. The methods of data collection and analysis are explained, as well as the methods used to identify and select the chosen sample population, and those used to ensure the reliability and validity of the study.

Overview of Study

Problem of Practice

The primary objective of this case study featuring mixed-methodologies was to uncover the voices of those students who are identified as having extraordinarily high or low levels of motivation. Information was gathered from 8th grade students in a small suburban middle school in Vermont. Students were chosen based on the results of two separate measures—one administered to every student about themselves, the other administered to teachers relating to each of their students—which each generated a score for a student’s academic engagement and motivation. Selected students then completed interviews and engaged in a focus group throughout a twenty week period in the middle of the school year.

Purpose

Teachers within the specific school analyzed in this case study have repeatedly and consistently bemoaned the perceived lack of motivation on the part of students within our school. This has been true both for groups of students who have come to the target school with good reputations for academic engagement, as well as for groups with worse reputations.

This local trend has been supported through national studies which have found that the middle school years typically see a pronounced downturn in academic achievement motivation (Lai, 2011). Additionally, “Recent studies... have indicated an overall decline of academic performance after the transition to middle level schools,” (Morgret, 2008, p. 2). However, there has been little research concerning the actual student voices (McMillan & Turner, 2014).

This study sought to uncover the voices of students displaying remarkable levels of academic motivation concerning their perceptions around their own motivation in the context of their own school and their own community in order to better inform future interventions at SMS.

Research Questions

One overarching research question guided the focus of this study. This larger question was then broken into several sub questions which arose from the central theory of motivation framing the study. These questions attempt to understand the factors which have shaped the levels of academic motivation and engagement for the selected students, as well as the cultural factors in the school that propagate these various levels.

The research questions aimed to uncover student perceptions concerning their transition to middle school, and the perceived benefits of hard work and school. A case study approach was used to thoroughly delve into the stories of the student-participants, and the constant-comparison method was used to interpret the student narratives in light of the below research questions. (Cresswell & Miller, 2000).

- 1) How do exceptionally motivated 8th grade students at SMS perceive the value of middle school in the context of their past elementary school experience and their future experiences in high school?

Within this research question, I narrowed my focus to several sub questions.

- How have past academic experiences contributed to the levels of academic engagement and motivation of certain exceptionally motivated 8th grade students?
- How does the perceived proximity and value of future goals contribute to the levels of academic engagement and motivation of certain exceptionally motivated 8th grade students?
- How is the level of academic engagement and motivation enhanced or suppressed by the social relationships held by certain exceptionally motivated 8th grade students?

Theoretical Framework

This study hinges on the ways in which students' academic motivation is shaped by their lived experiences, goals, future outlook, and social influences. The theory which

was chosen to frame this study is the expectancy-value theory (Eccles et al., 1983) in order to focus the study on discrete factors affecting students' academic motivation.

The expectancy-value theory was originally devised by Atkinson (1957) as a robust cognitive-motivational theory in the tradition of Lewin (1935) and Tolman (1955). Atkinson's (1957) expectancy-value theory was significantly expanded in 1983 by Eccles et al. (1983). They went beyond the relative simplicity and sterility of Atkinson's formulation by attempting to account for all of the factors that contribute to a person's expectancies for success, as well as their valuation of a given achievement-related task. Together, these various factors constitute a robust cognitive motivational theory which is ideal for analyzing and interpreting the changes in motivation experienced by adolescents during middle school. Consequently, the expectancy-value theory (Eccles et al., 1983) helped frame the study of which factors most greatly contribute to the motivation of students at SMS.

Research Design

Overview

This study was designed and implemented as a 2-phase, mixed-methods case study. My selected method is part of the larger research framework "Explanatory Sequential Design" (Creswell & Clark, 2011), though falls under the smaller label of the "participant-selection variant," (p. 86). Quantitative surveys were administered in the first phase of the research to both teachers and students in order to place students along a continuum of academic motivation, which was the characteristic of interest for this study. From this initial phase, the sample population was chosen using the method of maximum variation, which involves "identifying and seeking out those who represent the widest

possible range of the characteristics of interest for the study,” (Merriam & Tisdell, 2016, p. 98). Data was then collected in the second phase of the study through both semi-structured interviews and focus groups and analyzed through a student centered-lens aimed at understanding the students’ perspectives (Creswell & Miller, 2000).

After the first quarter of the year was complete, all eligible 8th grade students were given the Student Engagement Instrument (SEI) in order to self-report their motivation. These same students were also included in a short survey administered to 8th grade teachers regarding the relative levels of perceived academic motivation of their students. The results of the two initial quantitative surveys were then used to select 6 sample students to participate in one semi-structured interview, as well as one focus group. At this point, an informational letter, as well as an opt-out form, were sent home to the 6 selected students. Students who did not bring back a signed opt-out form were then eligible to become participants in Phase 2 of the study. The researcher asked for and received approval from both his local superintendent and the IRB of the University of South Carolina in order to use human participants as subjects.

Participants

This case study dealt with 8th grade students attending a specific suburban middle school in Vermont. Seaside Middle School houses approximately 270 students, with 46% of the population qualifying for free and reduced lunch. The population of SMS is comprised of 95% White, 3% mixed-race or other, 1% Native American and 1% Black. Approximately 30% of students currently receive specialized education through an Individual Education Plan (IEP), while another 15% receive 504 services. SMS has consistently ranked within the bottom 5% of schools within Vermont as measured by the

annual Smarter Balance Assessment, with assessed student achievement declining as they progress from 6th to 8th grade.

SMS is located in Riverdale (pseudonym), a small urban town in Vermont. Riverdale's population is primarily either school aged children or adults above the age of 25, as only 6.7% of the population is between 15 and 25 (World Population Review, 2019). This speaks to the tendency of successful students to leave town upon graduating high school. Additionally, of the remaining residents, only 24% have received any level of college degree, with 10% never graduating high school (World Population Review). Out of a relatively modest population, approximately 25% currently live under the poverty limit (World Population Review). It is within this social setting that the students of SMS find themselves situated.

For the 2020-2021 school year, my school instituted a hybrid approach which would give 8th grade students the choice of whether to attend school in person or virtually. Students who chose to attend school in person were able to attend school physically twice a week and be virtual the other three days. Regardless of the learning model chosen, all students attended the same class sessions through Google meets. By the time I began my study, 60 students were attending school in person, while 31 had opted for the fully virtual-model.

All 8th grade students were included in the first stage of this inquiry, in which all students who completed a Student Engagement Instrument (SEI) were placed on a general motivation continuum by the researcher. During the second phase, the researcher selected 6 individuals using the purposive sampling method of maximum variation—three students from either end of the continuum. This purposive sampling method

allowed the researcher to also select students representative of the 8th grade as a whole, including an even mix of boys and girls, and a diverse mix of affluent and disadvantaged students (Merriam & Tisdell, 2016). A letter of invitation was created by me as the teacher-researcher and was sent home with each of the chosen participants. The attendance of the participants at subsequent interviews and focus groups was thus taken as their consent to the terms detailed in the letter of invitation. This letter is included in Appendix D.

Data Collection Instruments

The two surveys used in Phase 1 of the research study consisted of the Student Engagement Instrument (SEI) developed by Appleton et al. in 2004 (Appleton et al., 2006), as well as a teacher-survey I developed. Each of the surveys were converted into a Google form so as to be accessible through my school's virtual format. The SEI can be found in Appendix A, while a sample of questions from the teacher survey can be found in Appendix C.

Surveys were chosen for the first phase of the research due to the innate nature of motivation. "Surveys are useful for investigating unobservable aspects of student engagement, particularly for understanding the emotions students experience or the mental energy or cognitive strategies they apply to learning," (Henrie et al., 2015, p. 45). The SEI is a 36 item assessment which includes the "affective components of school identification, belonging, and valuing education," (p. 429), as well as such overt factors of engagement as behavior, participation, attitude, and investment. This measure has been found to have acceptable levels on Cronbach-Alpha tests, which are a measure of the internal consistency and validity of the chosen questions (Fredricks & McColsky, 2012);

and unlike many other motivational surveys, the SEI is applicable for multiple grade levels, and has “similar factor structure across gender and grade-level,” (Betts et al., 2010, as cited in Fredricks & McColsky, p. 779).

The Student Engagement Instrument was initially developed in order to help identify those high school students who were potentially at risk for dropping out, so as to better determine the level and timing of interventions (Fredricks & McColskey, 2012). This quantitative survey assesses students on 6 different areas which contribute to academic engagement: Teacher-Supportive Relationships (TSR); Peer Support at School (PSS); Family Support for Learning (FSL); Control and Relevance of School Work (CRSW); Future Aspirations and Goals (FG); and Intrinsic Motivation (IM). The results of these 6 measures are then summed in order to find the “SEI Total,” which is a measure of the student’s academic engagement (Appleton et al., 2006).

In addition to this measure of the students’ perspectives, a brief survey was designed by me in order to garner teacher impressions of their 8th grade students. While it is true that “teachers can only assess students’ externally observable skills,” (Buckley & Krachman, 2016, p. 13), it was important to include other teacher perceptions for several reasons. While students have been shown to generally self-report honestly (Brener et al., 2003; Buckley & Krachman, 2016; Siegen et al., 1998), it is still possible for students to understate or overstate their traits (Buckley & Krachman, 2016) and to respond in a “socially desirable fashion,” (Korb, 2011). Additionally, teacher surveys of students have been found to “be more strongly related to students’ academic and behavioral outcomes,” (Buckley & Krachman, p. 14), and tend to be “slightly more predictive of... objective outcomes,” (p. 16).

With this being the case, I devised a brief survey which had teachers rate each 8th grade student on academic engagement. The survey consisted of a 5-point Likert scale that included the names of each eligible student which that particular teacher taught. This form first listed the definition of motivation as “a person’s level of effort, and a person’s level of perseverance in the face of obstacles,” (Kanfer, 1990, as cited in Robbins, 2000, p. 11). This form then asked the teachers to rate each student’s academic engagement on a sliding 5-point Likert Scale, with 1 indicating a student who is “highly motivated,” and 5 indicating a student who is “highly unmotivated.” Before administering the survey to each of the teacher-participants, the survey was piloted with a sample group of three teachers. Each of the teachers in this group were given this survey in advance along with prepared guided questions. The goal of this pilot was to ensure the reliability and validity of the survey through checking to make sure that each teacher interpreted the language and purpose of the survey in the same way. This teacher-survey was revised based on the feedback received from this sub-group before being fully administered. Sample questions from the final teacher-survey can be found in Appendix C.

In Phase 2 of the study, I sought answers to the three stated research sub questions through an exploration of the student narratives elicited through the 1-on-1 interviews, as well as the two focus groups. The same prepared pacing guide was used for each participant’s semi-structured interviews, which was created to be responsive to both my chosen research questions and my theoretical foundation. The results from these 1-on-1 interviews led to a new pacing guide employed in the two focus groups. The pacing guide for the 1-on-1 interviews can be found in Appendix E, while the focus group pacing guide is in Appendix F. However, during both the interviews and the focus groups, I

relied on myself as the primary method of data collection to ask additional, follow-up, clarifying, and/or re-stated questions throughout the interview process (Merriam & Tisdell, 2016).

Data Collection Methods

Phase 1 resulted in two sets of data: the scores students received on the SEI, which could fall between 1 and 4 when the different components were averaged; and the survey results from the teachers, which when compiled and averaged produced scores between 1 and 5.

The SEI was administered to all 8th grade students currently in the school at the end of Quarter 1. I carefully explained to students that while the results were not anonymous, they would have no bearing on their grade or general standing in my class. I explained that I was studying student motivation as part of my own continuing education, that the information I gained through this study was to be used to improve conditions for students at this school, and that their participation was both voluntary and highly appreciated. Students were instructed to complete the surveys individually, and care was taken to ensure that students did not discuss the survey during its administration. Of the 92 8th grade students, 73 turned in a completed survey.

The teacher-survey developed by me was presented to my team of teachers during one of our daily designated team meeting times. I explained the study I was currently conducting, my hopes for how the generated information could lead to more focused interventions in the future, and how greatly I would appreciate their time. This survey was likewise presented at the weekly team meeting of the enrichment teachers. I left the Google form open for one week following these meetings before closing the survey to

any additional responses. In total, nine teachers completed this survey which included the names of all 92 students. However, teachers were instructed to only complete the survey for students who they had taught in the past, meaning that not every student was rated by each teacher.

Phase 2 of the research consisted of a case study of the 6 selected individuals, and entailed one semi-structured interview with each participant, as well as two focus groups: one comprised of the three selected boys, and one for the three selected girls. This phase of the research study was completed through the lens of the expectancy-value paradigm, as the questions aimed at uncovering the disparate factors impacting each participant's level of perceived academic motivation.

“A *case study* is an in-depth description and analysis of a bounded system,” (Merriam & Tisdell, 2016, p. 37, emphasis in original). My investigation focused on only the exceptionally motivated students at SMS, which represents the limited data sets which can be “fenced in,” (p. 38), and are thus the purview of case studies. My study used the multiple case study design because the “more cases included in a study, and the greater variation across cases, the more compelling an interpretation is likely to be,” (Merriam, 2009, as cited in Shaffer, 2015, p. 69). In a multiple case study, “each case must be carefully selected so that it either (a) predicts similar results (a *literal replication*), or (b) predicts contrasting results for anticipatable reasons (a *theoretical replication*),” (Yin, 2014, as cited in Shaffer, 2015, p. 69). By purposefully choosing groups of three students consisting of a literal replication, I was able to “determine which motivational factors were strongest and which factors were not important among the participants,” (Shaffer, 2015, p. 69). By having two groups consisting of theoretical

sampling, I was then able to triangulate data by comparing the themes arising from the two disparate groups (Creswell & Miller, 2000).

Interview pacing guides were formulated in reference to the stated research questions, as well as the social and motivational theories laid out in the Theoretical Framework. During the interviews, I acted as co-creator of knowledge through an active dialogue with participants in which I used my discretion to ask follow-up questions or otherwise seek additional information. This is consistent with the stated goal of having the researcher be the primary instrument of data collection within a qualitative study (Merriam & Tisdell, 2016). These interviews were recorded and then transcribed by the researcher in order to accurately represent the voices of the student-participants.

After participants had each taken part in the semi-structured interviews, two focus groups of approximately 1.5 hours were conducted—one for the three selected boys, the other for the three selected girls. “The focus group presents a more natural environment than that of an individual interview because peers are influencing and influenced by others—just as they are in life,” (Kruger & Casey, 2009, as cited in Shaffer, 2015, p. 81). These focus groups generated an “interactive discussion through which data are generated, which leads to a different type of data not accessible through interviews,” (Merriam & Tisdell, 2016, p. 114). Focus groups are particularly useful at drawing out stories from reticent students, as “first stories” of participants will often draw out similar “second stories,” (Taylor, 2016). The decision was made to group the students by gender because the cohesiveness of student groupings lend to their feelings of safety in a focus group-setting (Onwuegbuzie et al., 2009). By organizing the focus groups by gender, I

was able to “provide the supportive peer structures that contribute to openness and willingness to answer the researcher’s questions,” (Ennis & Chen, 2012).

Together with the information gained through the surveys administered during Phase 1 of the study, along with transcribed semi-structured interviews, the focus groups also allowed for me to triangulate methods in order to better ensure the perceived validity of my study when sharing my results within my local educational community (Creswell & Miller, 2000,).

Data Analysis Methods

In the first phase of the research study, I collected survey information from both teachers and students concerning individual academic student motivation. The student-completed SEI generated average scores for each student between 1 and 4, with 1 indicating extremely high achievement motivation. The teacher-completed motivation inventory created average scores between 1 and 5 for each student, with 1 again indicating high perceived levels of achievement motivation. While there was a teacher score for each of the 92 8th grade students, only 73 students completed the SEI. These 73 students were then placed on an academic-motivation inventory by combining the teacher and student ratings into a single measure.

In order to generate a single composite score for student motivation, it was necessary to combine the ratings obtained from the student SEI and those from the teacher survey. As the goal of this research was to elevate and uncover the student voices regarding those aspects of their school and community which shape their perceived academic motivation, the two scores were combined in such a way so that the SEI scores had twice the weight of the teacher ratings. This was done by first multiplying the

average teacher rating by a factor of .4, and then summing the resulting values with those generated from the completed SEIs. This was done for all 73 students who had turned in a completed SEI.

I used these combined scores to distribute students along a normative continuum of academic engagement and motivation before purposively choosing 6 sample participants to be interviewed. In order for students to be selected to possibly participate in Phase 2, they needed to either place in the top 15% of the generated continuum, or the bottom 15%. These 6 students were chosen from either end of the motivation scale in order to represent a maximum variation within the target characteristic of motivation (Merriam & Tisdell, 2016). The researcher also purposely chose a population which included a mix of boys and girls, a selection of affluent and disadvantaged students, and a mix of students both with and without specialized education services. In this way, the selected group comprised a representative sample of 8th graders at SMS (Merriam & Tisdell, 2016). Lastly, students were chosen based on exploratory conversations initiated by me in order to gauge the presence of a strong interviewer-interviewee relationship (Shaffer, 2015).

In Phase 2 of the case study, the researcher used the constant comparison method in order to inductively analyze student narratives developed by me as the teacher-researcher. The interviews and focus groups were recorded and transcribed and were then used to create in-depth narratives representing each participant's story. These stories were analyzed using the constant-comparison method to look for codes and themes within the students' responses. This process of inductive reduction allows for themes to emerge from the students' own words, as opposed to ones created by the researcher (Stillisano et

al., 2011). This process was completed simultaneously with data collection, so that each new interview transcription led to another cycle of open coding (Merriam & Tisdell, 2016) followed by a comparison with previously coded narratives. These individual units were then analyzed in order to be grouped into larger codes or themes in a process sometimes called “*axial coding* or *analytical coding*,” (Merriam & Tisdell, 2016, p. 206, emphasis in original). During this process, I continuously referred back to my stated research questions to ensure that my codes were “responsive” to the purposes of my study (Merriam & Tisdell, 2016, p. 204). After these larger codes were created through the process of axial coding, two phases of comparison took place: comparison within sets, in which student narratives within the same motivational grouping, or literal replication, were compared with each other in order to inductively group codes together into more robust themes (Shaffer, 2015); and a comparison between sets, a theoretical replication where themes were combined or altered based on how codes either matched or refuted the expected outcomes (Shaffer).

After the process of building discrete themes responsive to my stated research questions was complete, I then went back through the transcriptions and narratives looking for “disconfirming or negative evidence,” (Miles & Huberman, 1994, as cited by Creswell & Miller, 2000, p. 127). In this process, one goes through data looking for information which runs counter to assumed outcomes or created themes (Creswell & Miller, 2000). By re-examining the documents in order to look for data which contradicted my findings, I helped to validate the credibility of my interpretation.

Both before and after the conducted focus groups, I engaged in member checks with the student-participants. Member checks “involve presenting a copy of an interview

to the participant asking the person to correct and comment,” (Shaffer, 2015, p. 78), and have been described as “the most crucial technique for establishing credibility,” (Creswell & Miller, 2000, p. 127). These checks helped me to avoid misrepresenting the stories of the student-participants while also helping to build the participants’ sense of trust concerning my representation of their various perspectives.

Conclusion

In Chapter 3, I reviewed the overarching framework of the study, including pertinent information about the student-participants, details about the two data collection instruments, and an explanation for the methods used to analyze the data collected in both phases of the study. These collectively represent a robust investigation into the factors which impact the expressed academic achievement motivation of 6 exceptionally motivated SMS students, and lay out the methods used to ensure the validity and reliability of the presented study. In Chapter 4, I will present the data collected in both phases of the study. The quantitative data collected in Phase 1 will be discussed before summarizing the key qualitative findings from Phase 2.

Chapter 4

Presentation of Data

Introduction

This chapter revisits the data collection methods used in this study and presents the results that were obtained. The quantitative data from Phase 1 is first presented, with an explanation for how the disparate surveys were compiled into a single motivation construct. The 6 selected participants are then introduced with a portrayal of who they were as students at the time of the study. Lastly, the emergent qualitative themes from the interviews and focus groups will be discussed in light of the participants' own words.

Overview of Study

Problem of Practice

The primary objective of this case study featuring mixed-methodologies was to uncover the voices of students identified as having extraordinarily high or low levels of motivation. Information was gathered from 8th grade students at Seaside Middle School (SMS), a small suburban middle school in Vermont. The 6 participants were selected based on the results of two separate measures—a self-report measure administered to each student, and a rating scale given to teachers pertaining to the motivation of each of their students—which each generated a score for a student's academic engagement and motivation. The results of these two measures were compiled into a single measure of motivation, which was then used to place students on a continuum of academic motivation. Participants were chosen based on their location on the continuum, as well as the researchers goal of choosing a sample representative of the 8th grade as a whole.

Selected students then completed interviews and engaged in a focus group throughout a twenty week period in the middle of the school year.

Purpose

Teachers within the school featured in this case study have repeatedly and consistently bemoaned the perceived lack of motivation on the part of students within our school, along with the noticeable decline in the academic motivation of students during their time in SMS. This has been true for students regardless of how long they have been in the district or what reputation a particular group of students had upon entering SMS.

This local trend has been supported through national studies which have found that the middle school years typically see a pronounced downturn in academic achievement motivation (Lai, 2011; McMillan & Turner, 2014; Wigfield et al., 2015). Additionally, “recent studies... have indicated an overall decline of academic performance after the transition to middle level schools,” (Morgret, 2008, p. 2). However, there has been a lack of research into exploring the students’ own voices (McMillan & Turner, 2014).

This study sought to uncover the voices of students displaying remarkable levels of academic motivation concerning their perceptions around their own motivation in the context of their school and community in order to better inform future interventions at SMS.

Research Questions

One overarching research question guided the focus of this study. This larger question was then broken into several sub questions which arose from the expectancy-value theory of motivation, which was the central theory framing the study. These questions attempt to

uncover the factors which have shaped the levels of academic motivation and engagement for the selected students, as well as the cultural factors in the school that could strengthen or alter these perceived levels.

- 1) How do exceptionally motivated 8th grade students at SMS perceive the value of middle school in the context of their past elementary school experience and their future experiences in high school?

Within this research question, the focus was narrowed to several sub questions.

- How have past academic experiences contributed to the levels of academic engagement and motivation of certain exceptionally motivated 8th grade students?
- How does the perceived proximity and value of future goals contribute to the levels of academic engagement and motivation of certain exceptionally motivated 8th grade students?
- How is the level of academic engagement and motivation enhanced or suppressed by the social relationships held by certain exceptionally motivated 8th grade students?

Research Design

This study featured a mixed-methods case study design in order to investigate the factors impacting student motivation in a small middle school in Vermont. Phase 1 was a quantitative investigation in order to select student-participants based on academic motivation, which was the chosen characteristic of interest for this study. Phase 2 was then a qualitative case study of the 6 student-participants in order to reveal the factors

which have impacted their academic motivation leading up to this moment in their school careers.

The first phase of this study involved collecting qualitative survey data from both students and teachers. Each 8th grade student was asked to complete the Student Engagement Instrument (SEI) developed by Appleton et al. in 2004 (Appleton et al., 2006) in order to gauge a student's engagement and investment in school. Teachers were then asked to complete a motivational rating scale for each student which was developed by me as the teacher-researcher. This scale was first field tested with a subset of 8th grade teachers for cohesion and reliability before being given to a larger group of nine teachers. The scores for each of these two measures were then combined into a single measure of motivation which was subsequently used to select the 6 student participants. Out of the 92 8th graders, only 73 turned in a completed SEI. It was from within this group of students that the 6 participants were found.

In Phase 2, the 6 student-participants each engaged in a semi-structured interview with the teacher-researcher, as well as in a small focus group. The 6 participants were split by gender into two groups for the purpose of the focus groups. The resulting interviews were recorded and transcribed within a few days for each. The resulting transcriptions were coded and analyzed in order to identify consistent themes responsive to the stated research questions.

In order to analyze the information gained from the interviews and focus groups, the method of constant-comparison analysis was utilized. The method involves coding each transcript as it is created, and then comparing the created codes to those interviews already transcribed (Merriam & Tisdell, 2016). For each round of coding, I first identified

important words or concepts using open-coding. I would then again read through the transcription in order to group the myriad open-codes into more abstract axial codes (Creswell & Miller, 2000). These iterative cycles of first coding each transcription before comparing the created codes with those interviews previously coded allowed me to identify robust themes that connected each of the participants, and which were responsive to the stated research questions.

Phase 1 Data

At the beginning of Quarter 2, I administered the Student Engagement Instrument (SEI) to every 8th grade student. This quantitative survey assesses students on 6 different areas which contribute to academic engagement: Teacher-Supportive Relationships (TSR); Peer Support at School (PSS); Family Support for Learning (FSL); Control and Relevance of School Work (CRSW); Future Aspirations and Goals (FG); and Intrinsic Motivation (IM). The results of these 6 measures are then summed in order to find the “SEI Total,” which is a measure of the student’s academic engagement (Appleton, et al., 2006). Due to the virtual learning environment that was in place at SMS at the time of Phase 1, the SEI was converted into a Google form for students to take virtually. Of the 92 8th graders given access to the SEI, 73 turned in a completed form.

Additionally, the 8th grade and enrichment teachers were given a rating-scale devised by me as the teacher-researcher. This scale asked the teachers to rate the academic motivation of each student they had taught using a 5-point Likert scale. 1 signified a student who was “highly motivated,” while 5 represented a student who was “very unmotivated.” Similarly to the SEI, this rating scale was converted into a Google form due to the current logistical issues of handling paper copies. This rating scale

included all 92 8th graders. However, only the results for those 73 students who completed the SEI were included on the final data table.

Once the results were obtained from both survey instruments, the data was combined into a single data table. I multiplied the average teacher ratings—which could be between 1 and 5—by a factor of .4 in order for the student surveys to have twice as much weight, or importance, when rating each students’ academic motivation. This weighting was chosen in order to elevate the voices of the students in light of relative lack of student perspectives in motivational literature (McMillan & Turner, 2014; Morgret, 2008), and because academic motivation is one of the “unobservable aspects of student engagement,” (Henrie et al., 2015, p. 45). The average SEI score and adjusted teacher rating were then added together for each student in order to find one unifying measure of student motivation. The table was organized so that students with the highest aggregate levels of academic motivation were at the top of the table, with levels of perceived academic motivation falling further down the table. This table is shown below.

	TSR	PSS	FSL	CRSW	FG	IM		SEI Tot		Teach Tot	Teach Adjusted	Composite Score
Student 1		1	1	1	1	1	1	1		1.25	0.5	1.5
Student 2		1.2	1.2	1	1	1	1	1.09		1.29	0.516	1.606
Student 3		1.1	1.2	1	1.1	1	1	1.09		1.33	0.532	1.622
Student 4		1.1	1.7	2	1.7	1.4	2	1.43		1	0.4	1.83
Student 5		1.3	2	1	1.2	1	1.5	1.29		1.5	0.6	1.89
Student 6		1.2	1.5	1.3	1.2	1.2	2	1.31		1.71	0.684	1.994
Student 7		2.7	1.5	1.3	1.4	1.6	2	1.6		1.17	0.468	2.068
Student 8		1.4	2	1.3	1.7	1.8	1.5	1.63		1.29	0.516	2.146
Student 9		1.8	2.3	1.5	1.9	1.4	1.5	1.8		1	0.4	2.2
Student 10		1.9	2.2	2	1.4	1.2	2	1.8		1	0.4	2.2
Student 11		2	2	1	1.9	1.2	2	1.74		1.2	0.48	2.22
Student 12		1.4	2.2	1.3	1.7	1.2	1	1.54		1.7	0.68	2.22
Student 13		1.3	2	1.3	2	1.8	2	1.74		1.5	0.6	2.34
Student 14		2.1	2	2	2.1	1	2.5	1.94		1	0.4	2.34
Student 15		1.9	2	2	1.9	1.2	1	1.71		1.67	0.668	2.378
Student 16		1.7	1.7	2	1.9	1.8	1	1.74		1.75	0.7	2.44
Student 17		1.8	1.8	1.8	1.9	1.6	2	1.8		1.75	0.7	2.5
Student 18		1.6	1.8	1	1.9	2	1	1.66		2.14	0.856	2.516
Student 19		2.1	2	2	2.1	2	1	2		1.33	0.532	2.532
Student 20		1.6	2	2	2.2	2	1	1.89		1.67	0.668	2.558
Student 21		2.4	1.7	1.8	1.8	1.8	2	1.94		1.67	0.668	2.608
Student 22		2	2.2	1.75	1.3	1.2	1	1.66		2.5	1	2.66
Student 23		2	2	1.8	2.1	2	1	1.94		1.83	0.732	2.672
Student 24		2	2	1.8	2	2	2	1.97		1.8	0.72	2.69
Student 25		1.3	1.7	2	1.9	1.8	1	1.66		2.6	1.04	2.7
Student 26		1.9	2.2	1.8	2.1	1.2	2.5	1.91		2	0.8	2.71
Student 27		2	2.2	1.5	2.2	1.8	2	2		1.86	0.744	2.744
Student 28		2.3	1.8	2.3	2.2	2	2	2.14		1.67	0.668	2.808
Student 29		2.2	2.3	1.8	2.3	2.2	2	2.2		1.57	0.628	2.828
Student 30		2	2	2	2	2	3	2.06		2.25	0.9	2.96
Student 31		2.4	2.8	2.5	2.7	2.4	2	2.54		1.2	0.48	3.02
Student 32		2.2	2.7	2	2.4	2.4	2	2.34		1.75	0.7	3.04
Student 33		2	1.7	1	1.2	1.4	2	1.54		3.8	1.52	3.06
student 34		2	2.2	2	2.1	2	2	2.06		2.5	1	3.06
Student 35		2.1	2	1	2.6	2.4	2	2.11		2.4	0.96	3.07
Student 36		2.1	1.8	1.5	1.9	1.2	2	1.8		3.2	1.28	3.08
Student 37		2.2	2.7	1.5	2.2	2	2	2.17		2.43	0.972	3.142
Student 38		2.4	2.2	2	2.9	2.2	2	2.4		2	0.8	3.2
Student 39		2.3	2.7	2.8	1.3	1.2	1	1.94		3.17	1.268	3.208
Student 40		2.7	2.5	1.3	1.2	2.8	1.5	2.31		2.29	0.916	3.226
Student 41		2	2.8	2	2.4	2.2	2	2.29		2.4	0.96	3.25
Student 42		2.7	2.3	1.8	3	1.8	1.5	2.4		2.2	0.88	3.28
Student 43		1.6	1.8	1.8	2	2	2.5	1.86		3.57	1.428	3.288
Student 44		2.3	2.3	2.8	2.4	2.4	2	2.4		2.4	0.96	3.36
Student 45		2	2	2	2.3	1.8	2	2.06		3.25	1.3	3.36
Student 46		2.6	2.8	2.3	3	2.4	2	2.63		1.86	0.744	3.374
Student 47		2.1	1.7	1.8	2.2	2	2	2		3.57	1.428	3.428
Student 48		2.1	2.7	2	2.1	2	2	2.17		3.17	1.268	3.438
Student 49		2.8	1.7	2.5	2.4	1.2	1.5	2.14		3.25	1.3	3.44
Student 50		1.9	1.8	1.5	2	1.8	2	1.86		4	1.6	3.46
Student 51		2.2	2	2.5	2.8	2	2.5	2.34		2.86	1.144	3.484
Student 52		2	2	1.8	2.1	2	2.5	2.03		3.67	1.468	3.498
Student 53		2	1.8	1.3	2.1	1.8	1	1.83		4.17	1.668	3.498
Student 54		2.2	2	2	2	1.8	2.5	2.06		3.63	1.452	3.512
Student 55		2.1	2	2	2.1	2	2	2.06		3.8	1.52	3.58
Student 56		2	2.2	2	2.1	2.2	2	2.09		3.8	1.52	3.61
Student 57		2.1	2.7	1.5	1.9	1.4	1	1.91		4.33	1.732	3.642
Student 58		2.1	2.5	2.3	2.2	2.4	3	2.31		3.4	1.36	3.67
Student 59		2	1.8	2	2	1.6	2	1.91		4.43	1.772	3.682
Student 60		3	2	2	1.7	1.8	1.5	2.11		4	1.6	3.71
Student 61		2.8	2.3	2.3	3.2	1.8	3	2.63		3	1.2	3.83
Student 62		2.4	1.7	1.3	2.6	2.6	2	2.2		4.13	1.652	3.852
Student 63		2.8	3.3	1	2.3	2.2	3.5	2.51		3.57	1.428	3.938
Student 64		2.1	3	2.5	2.4	3	2	2.51		3.7	1.48	3.99
Student 65		2.7	3.2	2.5	3.4	3.2	2	2.94		2.67	1.068	4.008
Student 66		3.2	3.2	2	3.1	3.2	2.5	3		3	1.2	4.2
Student 67		2.3	2.5	2	2.9	2.8	2	2.51		4.25	1.7	4.21
Student 68		2.6	2.5	2.3	3	2.4	2.5	2.6		4.25	1.7	4.3
Student 69		2.4	2.7	2	2.8	1.6	2	2.51		4.6	1.84	4.35
Student 70		2.6	3	2.5	3	3	2.5	2.8		4	1.6	4.4
Student 71		3.3	2.3	1.5	3.1	2.2	1.5	2.63		4.5	1.8	4.43
Student 72		3.4	3.7	2.8	3.2	3.4	2.5	3.29		3.43	1.372	4.662
Student 73		2.8	3.7	3.3	3.1	2.4	1.5	2.94		4.43	1.772	4.712

Figure 4.1: Continuum of 8th Grade Motivation

Figure 4.1 shows the data collected for 73 8th grade students. These are the 8th graders who returned a completed SEI. The third through eighth columns show the student scores for the 6 subsections of the SEI. The column titled “SEI_Tot” gives the average SEI score for each student. The “Teach_Tot” column shows the average rating for each student based on returned teacher surveys, while the “Teach_Adjusted” column shows the new results obtained by multiplying the teacher results by a factor of .4. The last column, “Composite Score,” shows the final motivational measure which was created by combining the SEI_Tot and Teach_Adjusted columns. Both the SEI_Tot and Teach_Tot columns have a color gradient from white to red, with increased redness signifying lower perceived academic motivation. The Composite Score column has a color gradient of white to blue for contrast, with bluer coloration representing lower levels of total perceived academic motivation.

In order to select the 6 student-participants for Phase 2 of the study, I considered students in the top 15% of the continuum and those in the bottom 15%. I also used purposive sampling (Creswell & Clark, 2011) in order to select a sample representative of the 8th grade at large. This sample accounted for the general makeup of the 8th grade, including the racial and socioeconomic diversity of the students. Additionally, an even mix of boys and girls were chosen to reflect the grade at large, as well as a mixture of students with and without individual learning plans. Lastly, I relied on my emic perspective in order to select students with whom there would be a strong interviewer-interviewee relationship.

The collected quantitative data for the 6 selected student-participants are shown below. Pseudonyms are used in place of all names to protect the confidentiality of the students.

	TSR	PSS	FSL	CRSW	FG	IM		SEI_Tot		Teach_Tot	Teach_Adjusted	Composite Score
David	1.1	1.7	2	1.7	1.4	2		1.43		1	0.4	1.83
Katherine	1.2	1.5	1.3	1.2	1.2	2		1.31		1.71	0.684	1.994
Lucy	1.8	2.3	1.5	1.9	1.4	1.5		1.8		1	0.4	2.2
Kieth	2.8	3.3	1	2.3	2.2	3.5		2.51		3.57	1.428	3.938
Ethan	2.7	3.2	2.5	3.4	3.2	2		2.94		2.67	1.068	4.008
Jade	2.8	3.7	3.3	3.1	2.4	1.5		2.94		4.43	1.772	4.712

Figure 4.2: *The Student-Participant Data*

The Six Student-Participants

David

David is a confident and academically capable student who is extremely well regarded by his teachers. David has been attending the school as part of the current hybrid model and has often expressed his preference for days he is at school. He had a perfect teacher-rating score from 6 different teachers and had the fourth lowest composite score out of the 73 students who turned in the completed form.

David is a high-performing athlete who strongly values the social aspects of school. This was seen in both the Teacher Support and Peer Support categories of the SEI. Additionally, his grades have improved each year he has attended SMS. The grades at SMS are on a 1-4 scale, with 1 representing “beginning,” 2 representing “emerging,” 3 representing “proficient” or grade level, and 4 representing “advanced.” In 6th grade, 79% of all his grades were at a 3 (proficient) or higher. This percentage rose to 80% in 7th

grade, and 92% in 8th grade. He has also kept the vast majority of his grades above a 2, with only one such mark in 7th grade, and one so far this year. These years have also seen David's attendance continually improve, as he has gone from nine absences in 6th grade down to only one so far this year. David has never had any behavioral incidents in his two and a half years at SMS.

Katherine

Katherine is an outgoing and optimistic student who moved into the district only this year, and who qualifies for free or reduced lunch. She has been attending school as part of the hybrid model since it was first offered in November, and often expresses her preference for the days she can attend school. She received an average teacher rating of 1.71 from seven different teachers, which speaks to the strong impression she quickly made upon entering the school, and had the sixth lowest composite score out of the 73 students who turned in a completed form.

Katherine is an extremely social student who strongly values the time she spends with her newly-made friends. Katherine was put on an IEP when she was in 4th grade with a Specific Learning Disability in Math reasoning, though she excels in written expression. In her previous school last year, she earned a 3 or higher in 82% of her standards, though her scores decreased as the year progressed. So far this year, she has earned at least a 3 on 64% of her standards, with all of them being above a 2. She had no reported behavioral incidents from either 7th or 8th grade.

Lucy

Lucy is an academically driven student who continuously strives to improve. Lucy has been attending school virtually since the beginning of the year, as she chose to

remain virtual when the school started offering the hybrid model. Similarly to David, Lucy had a perfect average rating from the teachers who completed the rating-scale for her; and she had the ninth lowest composite score of the students who turned in a completed form.

Lucy is demonstrably capable academically and is highly focused on her future goals. She moved to the United States from her birthplace in Southeast Asia when she was very young and was in an ESL program to start elementary school. However, she graduated from the program before transitioning to middle school. In her 3 years at SMS, she has never missed a day of school, nor has she ever had a behavioral incident. Additionally, she has never had a grade in middle school that fell below a 3.

Keith

Keith is an extremely social student who does his best to have fun while in school. He has been attending school in the hybrid model since it was first offered in November and has often expressed his preference for the days he is at school. Keith's final composite score was heavily influenced by the average teacher-rating given to him by seven different teachers, showing a disconnect between how motivated he feels himself to be and how his teachers perceive him. His total composite score was the eleventh highest out of the 73 students who turned in a completed form.

Keith is a lively and competitive student who is prone to getting in trouble during class. He has a 504 for both ADHD and anxiety and excels with hands-on learning. Keith started off strong upon entering SMS, with only 15 absences and two reported behavioral incidents. This jumped in 7th grade to 26 absences and seven reported incidents, though this jump correlated strongly with the move to virtual learning last March. So far this

year, he is on pace for sixteen absences, as well as twelve behavioral incidents. This general trend can be seen in his grades, as at least 86% of his grades were at a 3 or higher before moving to virtual learning last March. Since then, only 50% of his grades have been above a 3, with a far higher proportion falling below a level 2.

Ethan

Ethan is an independent student who excels with hands-on learning, and who qualifies for free or reduced lunch. He has been attending school in the hybrid-model since November and has frequently expressed his preference for the days he is at school. Ethan's score was heavily influenced by his self-reported score on the SEI, as he had the third highest rating out of the 73 total students. This showed a disconnect between how he presents to teachers and how connected to school he actually feels. His composite score of 4.008 was the ninth highest out of the total population of participating students.

Ethan is a student who can participate well and often in school, though does not feel that school aligns with his future goals. He is kept motivated primarily from the support and pressure he receives from his family, though his performance has decreased steadily during his time in middle school. He had 1 absence and 0 behavioral incidents in 6th grade, and 0 absences and 1 behavioral incident in 7th grade. So far this year, he has already had 5 absences, though he again has no reported incidents. His grades have also gone down with each year: 86% of his grades were at a 3 or higher in 6th grade, 69% in 7th grade, and 50% in 8th grade.

Jade

Jade is an independent and artistic student who struggles to complete her work while in class, and who qualifies for free or reduced lunch. She has been attending school

in the hybrid model since November and has often expressed her preference for the days she is able to attend school in person. Jade's ratings were consistent between the self-reported SEI and the teacher-ratings, and her composite score of 4.712 was the highest out of any of the 73 students who turned in the completed form.

Jade is a talented artist who is fiercely protective of her friends. She was given an IEP for Emotional Disturbance and ADHD upon entering 6th grade and has shown no evidence of progress on her goals since then. In each of her years at SMS, Jade has had average attendance but with a tendency towards refusing to attend classes in which she feels unsafe. This saw her miss Math sixty-four times in 6th grade despite having only eleven official absences. This trend was reflected in twenty-seven reported behavioral incidents in 7th grade, most of which were for work refusal or leaving class without permission. She has had around 16% of her grades at a 3 or higher each year at SMS, though the percentage below a 2 has jumped from 16% in 6th grade up to 77% in 8th grade.

Phase 2 Data

Data for Phase 2 was collected during a 10-week period in the middle of the year. I first approached each of the 6 students in order to gauge their interest in participating in this study. Each student-participant then engaged in a 1-on-1 semi-structured interview with me which lasted approximately one hour. Each interview took place virtually in Google hangouts after school hours and was recorded in order to facilitate the subsequent transcriptions. After 6 interviews had been completed, the students then participated in a focus group: one focus group featuring all three of the female students, and the other focus group consisting of the three male students. Each focus group again occurred

virtually and was recorded for the sake of accuracy. The questions for both the individual interviews and the focus groups were designed to be responsive to both my stated research questions and to the expectancy-value theory of motivation, which was the motivational theory framing this study.

While these interviews were being conducted, I simultaneously analyzed the collected transcriptions using the constant-comparison method. Each new interview gave a new set of codes and possible themes which could then be compared to those which emerged from past interviews. This process naturally led to a growing crystallization of major themes as the interviews were conducted. The emergent themes could then be triangulated using the quantitative information from the Phase 1 surveys, along with the transcriptions produced by the two focus groups.

Through this process, three themes gradually emerged. These themes represented foundational elements for how students perceive their school experiences.

- a) Students' academic confidence influences and is influenced by their response to school feedback.
- b) Students all perceive various reasons for why they should work to achieve good grades.
- c) School is a distinctly social environment where students actively pursue personal validation.

I. *Students' academic confidence influences and is influenced by their response to school feedback.*

Throughout the interviews and focus group, student responses painted a clear picture of the overriding importance of academic confidence or expectancy. This

academic confidence impacted which classes they currently enjoyed, which ones they were more likely to give their full effort, and which classes they intended to take in the future. This confidence consistently showed itself in how students responded to present and past academic feedback and was in turn influenced by the patterns of academic feedback they had received throughout their student careers.

Current levels of confidence

There was a clear divide in the levels of academic confidence between the two groups of student-participants, with the highly motivated group consistently showing higher levels of academic self-efficacy. Katherine summed up the viewpoint of the highly motivated students when she said that “I like all my classes. They seem pretty easy.” Each of them had grown confident in their ability to achieve high academic grades through their successful past experiences. As David put it, “I’ve never really had a point in my life where I had really bad grades.”

The three student-participants identified as having exceptionally low levels of academic motivation all showed a much lower level of confidence. Jade epitomized this view when she said that “99% of the time when I try, I always get frustrated and then kind of just give up,” while Keith has found that “every year, [academic success] comes a little harder.” Ethan shared similar concerns, especially in classes which lacked hands-on experiences: “I just don’t think they... they cover all the stuff that I really like. Then I have to work harder for, um, the stuff that they’re teaching us, and I don’t understand some of the stuff.” For each of the students, there was a clear connection from their past academic feedback to the current levels of confidence.

Past academic experiences

Each of the students had a vivid memory of the teacher feedback they received in elementary school, whether it was positive or negative. Out of the 6 participants, David and Keith stood out as the only two who had never had to deal with academic adversity while in elementary school. According to Keith, “It wasn’t really hard back then because it’s kind of easier for me because the work was way more hands-on,” while David simply recalled that he’d “always gotten good grades.”

The other four participants had all dealt with academic adversity throughout their younger years. For Ethan and Jade, this feedback strongly informed their views of themselves as students. Jade shared that her kindergarten teacher’s feedback “made me think I was the worst student in the school, and it didn’t really help my attitude towards some teachers,” and that by 4th grade, “I think I had the worst grades in the whole class.” According to Ethan, “I don’t think I was that good of a student in elementary school,” which led to his fear of being transferred to a private school if he was not able to maintain his grades.

Lucy and Katherine each responded to this negative feedback differently, with Lucy saying, “When I was young, for my English grade, it was always going to be a 2 or 3, and I always like, felt bad that I’m not working very hard.” Lucy would use this negative feedback as motivation to improve herself: “I noticed my problems or my flaws, and I took them, and I tried to make them better.” Katherine initially was very resentful of adults who told her “you need to go this class because you’re not a fast learner or whatever, and stuff like that,” and that there were times she did not like elementary

school because “it was also kind of hard because I did not understand what I was doing for the learning.”

For all of the student-participants, their arrival in middle school served to test their perceived academic confidence. David, Katherine and Lucy all emerged from that trial with increased levels of confidence. Katherine’s self-image was strengthened by the feedback teachers gave her for her written work, saying “I’m usually like ‘Whoa, I can’t believe I just did that’... From there on, I was like, I mean, I was a different kid. Like, I was different from everyone else, but I was still a pretty good student.” Lucy noticed that middle school was much harder and more serious than elementary school, which she expressed by saying “So if you want like, good grades... you want to work harder. And when you work harder, you realize you can get, you can get good.” This shared blossoming of confidence was most purely stated by David:

Everyone says, you know, I’m just a great student. And then they, you know, I get student of the month awards and stuff, and that really gives me the motivation to keep going because teachers are recognizing me for what I’m doing, and they’re giving me a reward for that. And I think that’s great.

For Ethan, Jade and Keith, the transition to middle school negatively impacted each of their perceived levels of academic efficacy. Ethan noticed that “we have more work now than I had then. And back then, it was kinda all easy stuff...and now we have more responsibilities, and we have to figure things out on our own.” Keith struggled with how much harder the work was in middle school compared to elementary school: “Sometimes I think I can do it on my own when I really can’t. But then it’s like, ‘this

should come pretty easy to me,' or 'I should be able to get this.' But I really can't." Jade expressed frustration with all her grades once she moved to middle school, though especially with her Math grade: "No matter how hard I tried... [the math teacher] made me fail all her classes." She gradually became convinced that she could not succeed, saying "99% of the time my ADHD attacks my brain," if she tries to focus on her schoolwork.

Academic confidence's impact on present and future perceptions

For each of the students, they were significantly more likely to enjoy a class if they felt academically confident. According to Katherine, "I think Math is my favorite subject, my best subject, because... I could be a fast thinker when it comes to Math. Also, because I feel I am one of the greatest students in that class." Ethan picked his favorite teacher "because he does a lot of... lots of hands-on learning." David, when asked about which class he finds to be most important, said, "I've found that all of the subjects, you know, are pretty important."

When asked about classes they liked less, the student-participants all thought of those classes in which they had the least confidence. In talking about why he disliked the English teacher, Keith shared that he did not like writing because he said "sometimes I feel like my writing isn't that good, or something that I write won't be perfect or really good. I think it'd be low, bad, or it won't be very good. So I don't really like writing." Lucy shared that in her least favorite class, "we had to do reading logs that I really hate," because they made her feel unsuccessful. For Jade, it became apparent that she would come to dislike the teacher of any class she struggled in, saying of one "I just don't like her. Like how judgmental she is. Makes me feel like I can't do anything right, which

doesn't help anything or anyone." Even when discussing her favorite class, she said "I like Art, but I don't like the stuff the art teacher has us draw. Mainly because it's humans and I can't draw humans."

These expressed levels of academic confidence also had a strong impact on the courses they intended to take when they transitioned to high school next year. Ethan and Jade each expressed their intentions to take enrichment and tech classes as often as possible, with Jade singling out "Culinary arts...uh, and then one for actual drawing." Keith and Katherine each focused on those classes which would most directly impact their idealized future careers, with Keith highlighting courses which taught business and money management, and Katherine discussing her intention of going into the field of childcare. David and Lucy, though, each displayed a desire to take as many different classes as possible, with David saying "I'm going to approach high school in a way of kind of curiosity... I want to try a bunch of different things, see what I really like." Lucy went a step further, saying "I want to get into engineering and culinary... cause I'm not the best in them. I want to try them."

II. *Students all perceive various reasons for why they should work to achieve good grades.*

As the interviews and focus groups were conducted, a consistent message to come from every student-participant was their desire to achieve good grades while in school. For some, it was based on achieving rewards or recognition here in middle school which subsequently helped to reinforce the self-images they had developed. Other students were strongly motivated by their ideal future selves and the careers they hoped to one day

achieve. Lastly, the support and consequences which could come from family served as a strong incentive for many of the participants.

Academic rewards, recognition, and emerging self-images

For some of the student-participants, academic rewards were frequently mentioned as a reason to attain higher grades while in school. This was especially true for the low-motive students. Jade shared that in 2nd grade, “that teacher and I got along really well, mainly because she gave me buddy stars,” while Ethan recalled “I had a speech class in [elementary school] and they gave me rewards... I think that drove me to wanting to do better.” Playing sports was a clear motivator for both Ethan and Keith, as they needed to maintain a certain grade in order to be eligible. Talking about why students need good grades in middle school, Keith said “You have to get good grades to pass, and if you don’t have good grades, sometimes if you’re an athlete, you’ll have to have good grades, or you can’t play.” Ethan seconded this sentiment when talking about wrestling being canceled due to the pandemic, saying “I don’t really have anything to get good grades for [now].”

Many of the participants were also driven by the recognition they could earn through getting good grades in school. Katherine showed this while recounting one of her favorite school memories: “Once I moved on to 5th, I felt very proud of myself because when my teacher asked me to do something like summarizing a book or something, and she’s like ‘Wow great job!’” This led to her realization that “I need to try to keep my grades up, I need to do this.” Jade similarly related the details of one of her favorite academic memories: “One time we were making putty and I got it all over my hands. So the teacher that’s looking after us took a picture, printed it out, and put it up on the wall

with ‘Best Student.’” David perfectly expressed this desire for recognition when talking about his appreciation for middle school: “I started winning awards like student of the month and school honors and stuff like that every year... you know, I earned that. I felt like I earned that, that wasn’t just given to me.”

Achieving good grades was also crucial for the self-image of some of the students, especially for those in the high motive group. Keith shared that “I feel good when I get a good grade and I think, I’m like, I usually think I’m good at something when I do it correctly the first time,” and explained that he tends to not try on those assignments which don’t come as easily. David explained that for him, “I try my best all the time. I try to get what’s assigned done, almost like a pet peeve of mine. Like, I *need* to get everything done.” Lucy shared that when she doesn’t score at least a 3 on her assessments, “I always, like, feel bad that I’m not working very hard,” while Katherine says that she is much happier now than in elementary school because she feels smarter.

Attaining their ideal future selves

For most of the student-participants, they had a clear long-term goal which they were working towards. For some, this goal involved a career they hoped to one day achieve after college, while others were focusing on the more immediate needs of high school.

One common thought amongst the participants was that performing well in middle school was necessary in order to succeed in high school. Keith pointed this out by saying that “middle school is prepping you for high school... so if you don’t really try now for middle school, it’s going to be harder for you in high school,” while Katherine said she needed to get good grades “in order to get to high school and get to college.”

Lucy was especially concerned with being able to take all of the classes she wanted to, explaining that “as long as I get good grades in any subject, then it’ll show to the teacher that I’m capable of doing any classes they suggest to me.”

The idea of a future career was even more prevalent amongst the participants. Lucy shared that “after high school, I want to get into college or university and get like a degree or something... to be in cinematography or animation.” Katherine echoed this sentiment while speaking of her desire to get into the high school’s human services program. Ethan explained that he needed to pass high school because “you have to get good grades to, um, to be in the army,” and Keith frequently said that “when I get older, I want to start my own business.” Jade expressed this desire the most clearly, though, when she shared “I want to get a degree in animation and like, I wanna, I want to be able to go places and see different countries.”

Parent support and consequences

For each of the participants, their desire to get good grades could be traced to their desire to live up to an identified role model. Ethan is driven to join the army in order to be like his father, while Jade said “I mean, I want to be a chef for my main job. Like my dad.” This was also expressed by Keith when talking about why he was interested in business, saying, “My dad actually owns his own business. He thinks maybe during high school, I can learn about making business... and help him with his.” Katherine’s desire to go into childcare was attributed to the fact that her mother also works in that field “which is awesome,” while Lucy looked up to several adults in her family because “they’re a sign for me that I can be who I want to be or whatever.” David expressed this idea poignantly when he discussed his goals for the future:

I know my dad, uh, would def, that he definitely cares about my future and he's always telling me his story... And you know, him just telling me those stories has set really high standards, because I'm coming up on 15 and 16. So sometimes I worry, you know, I got to get the money, I gotta get a job because he did all these things when he was 15 and 16. And I feel like I'm not living up to that potential that I could be.

While these familial influences helped to serve as strong motivation for most of the participants, some participants were even more motivated by the possible consequences they could face from not achieving in middle school. Lucy shared that her parents get very stressed when she does not do well in her classes, which encourages her to do as well as possible. Jade's motivations were similar, as she badly wants to earn the recognition of her step-mother but fears that bringing home bad grades only makes the relationship worse. Keith shared that "[my mom] talks to my teachers all the time about how I'm doing," and that she looks over all his work if his grades start to slip. Of all the student-participants, though, Ethan showed the strongest aversion to bringing home grades lower than a 2. If he does not try on writing assignments, "my parents make me write it again," and shared the insight that "now I have a phone, I have to have good grades to keep it."

III. *School is a distinctly social environment where students actively pursue personal validation.*

A constant element between each of the 6 student-participants was their pursuit of social acceptance. This pursuit was social by nature and highlighted the myriad social aspects prevalent within their shared middle school experiences. Whether it was from

their teachers, their peers, or from the general culture of school, each student sought some level of approval and acceptance for who they were and who they wanted to become.

Teacher approval and acceptance

For each participant, a common theme was their need to be heard and seen by their teachers, and to feel that they were valued. This could be seen in which teacher they remembered most fondly, or the ones from whom they were willing to ask for help, or in which classes they were most likely to give up.

When students felt valued by a teacher, they were significantly more likely to speak positively about the class. Lucy shared that “out of all the classes this year and during the pandemic, I actually like science more, probably because the teacher,” a sentiment shared by Ethan when he said that “science is probably my favorite topic, including the teachers. The teachers are nice.” Jade recounted that when she was younger “I couldn’t really spell, so like, I had to have the teacher help me. Our teacher also really liked owls, so that kind of got me into loving owls.” For her favorite teacher this year, Jade said “I get along really well with him, because he actually cares about his students.”

For each of the students, they identified similar teacher qualities as important. David shared that he liked all his teachers this year because they “are very nice and I like to work with all of them... I just joke around with them kind of like they're real people, not like, not like I'm learning from a robot.” Katherine expressed a similar sentiment about her teachers, saying, “They’re more outgoing, I get along with them better. Um, I’m not really shy to say anything to them because I feel that I know them.” Above all though, the participants showed that they wanted teachers to value who they were. Katherine shared that she liked teachers “if they’re a person who’s like, agreeing with

everything you do and not making a big worry about how you learn and stuff.” This desire to be accepted without judgment was most clearly expressed by Keith:

My favorite teacher ever would probably be my 5th grade teacher. Because that year, it was then that I started kind of being a jokester, I’d be like funny in class. And like I, I’d joke around a lot and she’d let me do that. But at the same time I’d still be getting my work done and having a lot of fun.

This basic desire of students to be accepted was also seen when discussing their least favorite teachers. Ethan shared that in his worst class, “[the teacher], I mean, she just doesn’t talk, and uh, it’s really hard for me,” which was then echoed when David compared his least favorite teacher to his other teachers: “If I say, you know, a joke in science class, [the teacher] laughs, he interacts with me, he knows it’s there. She doesn’t seem to do that. I don’t even see her face when we’re talking.” For Jade, Katherine and Lucy, each one identified a teacher who they felt was overly “judgmental” or critical. Lucy shared that she was afraid to ask for help from one teacher because “I just don’t want to, like, get in her business... because of some of the things I’ve heard about her,” a sentiment shared by each of the other two female students.

Peer approval and acceptance

A consistent message coming from the student-participants revolved around their desire to interact with their peers as much as possible. For them, socializing with their peers made them enjoy their classes more, and helped them feel more engaged with what they were learning. These interactions often provided crucial academic support for the participants and could give them a sense of safety in an otherwise intimidating

environment. As more and more of the interviews were conducted, though, it also became obvious that the student-participants were looking towards their peers for validation for their likes and for who they were.

For the student-participants, the overwhelming message was that working with their friends improved the classroom experience. As David put it, “I think friends really make me engage more in class because, you know, we would talk and I would kind of be in a better mood.” Katherine echoed this sentiment when she said, “If there’s friends in my class, I feel I will be more outgoing, like, wanting to get help or something.” This idea of enjoying class more because of friends was frequently discussed by Keith, who explained, “I usually like having friends in my class because... I could talk to my friends while I was doing the work so I didn’t have to be quiet the whole time,” or “be lonely.” Ethan was one of the few participants who felt he did not have many friends in his classes but spoke of how he would enjoy doing projects much more if his friend could work with him.

For the 3 female participants, the idea of friends as safety was often discussed. Katherine shared that she would be less likely to ask the teacher for help if she did not have friends in classes with her, which Lucy echoed by saying “If I’m around people I can depend on, then I could ask for help more easily.” Lucy also shared that her friends acted as a buffer against some of the other less accepting peers in her grade: “[Her peers] usually distract me because I’m dedicated to doing my work, and they just want to distract me to get a reaction out of me.” Jade embodied this need to have friends with her in order to feel safe, sharing that “[In elementary school] I was still with my friends at the time, I was doing good. But then [in middle school], my friends, kind of just not having

classes, the same classes as me, really scared me.” She went on to say that in one of her classes, “When I sit in the back, I kind of just have my head down and look like I don’t want to talk to anybody. Mainly because, like, I’m scared.”

For many of the student-participants, friends were also a key group from whom they looked for validation and affirmation. David explained that he first started playing basketball because two of his friends already played and he “just kind of wanted to fit in with them.” Ethan shared that he greatly respected two of his 8th grade peers because “they’re really close together... and they like some things that I like.” Katherine described her best friend as someone who was “The kind of person who can be social and can be a person who likes to stay out of drama and has a lot of things in common that I would do,” which David echoed when describing his most respected friend: “Me and him have a lot of similarities, but also a lot of differences. But focusing on the similarities part, I think I just, I respect him for that.” Jade shared that when she would get in trouble in elementary school, her friends would make her feel better by doing the same things as her. She explained that without friends, “You wouldn’t exist anymore.”

Seeking validation from the school culture

Each of the student-participants came into the interviews with a clear view of how they preferred to learn, and the amount of independence they felt they needed. They all were able to speak to the extent that school was able to meet those preferences, and the impact on their learning when the school could not. As the interviews were conducted, it also became clear that the participants each had a certain image of themselves and were keenly aware of how accepting school was of that image.

A common theme between the participants was their desire for hands-on learning. As Keith put it, “I do best in [hands on classes] because they’re more entertaining for me to do them, so I feel more motivated to do them.” Lucy related that all her favorite teachers “would give us more hands-on learning, which made it more fun,” an idea expressed clearly by Ethan when he said “I, well, I love hands-on learning, um, I’m kind of an outdoorsy person,” and that when he struggles in classes, “I just don’t feel they, they cover all the stuff I like.” This idea of doing poorly in classes which did not cater to their preferred learning was brought up multiple times, with Jade sharing that our current virtual learning model was difficult because “it’s just, I can’t focus. Especially now since we can’t do hands-on projects.” Keith shared that he disliked a certain class because “we’re not doing that much fun stuff,” like “engineering, making stuff, figuring out problems, or how to make stuff.” Katherine expressed this idea purely when she said, “I feel that if I’m not interested in [a class], I will feel I’m not going to try my best because of my inner self.”

Another universal desire amongst the student-participants was their desire to have independence and agency over their learning. Keith fully summed up the views of the participants when he said “I usually won’t, like, ask for help. I’ll try to figure it out by myself.” For Katherine, she avoided asking for help “because I feel that I got this,” a sentiment shared by several of the others. As Lucy put it, “I’m getting older and usually people, when they’re teenagers, they try to keep things to themselves.”

In addition to this preference for independence, the male participants especially showed a clear preference for having control over their learning. Keith shared that “I like middle school because I have more, like, choices to do what I want for enrichments and

stuff,” which Ethan echoed by saying, “I just want to take the tech programs, um, cause they’re more hands-on, and that’s what I like.” David nicely encapsulated the views of the group when he discussed why virtual learning had been difficult for him:

I guess I'm more interested in [tech classes] cause that's more of what I'm interested in, and I'm more of a hands-on person... And I feel like I'm more interested in that class because when I'm at the end of it, I have something that I worked on all quarter that I built, that I can hold in my hand and show my family... But [now], especially with, uh, in COVID, you know, it's all on a computer. So you don't really get that same experience. You don't have as much to show for what you learned.

In addition to independence and learning style, the student-participants also had a sense of what they wanted in life, and who they wanted to be. For the three highly motivated students, the fact emerged that school did a good job of supporting these desires. David frequently went back to the fact that he strongly valued the recognition his efforts brought him: “Like I said before, the recognition from the teachers. The student of the month award, the cosmopolitan award, you know, the big signed papers from the principal and stuff. That’s borderline professional.” Katherine loved how much writing she needed to do because “I used to love writing,” and it makes her feel “much smarter now” than when she was in elementary school. For Lucy, she realized that she really liked being at school despite the way some of her peers made her feel, saying that she prefers school to home “because it’s just, I’m interested in some things, or teachers I like, or, um, work I want to finish at school.” She went on to say that she values the people at

school “like my friends and teachers,” because there is “this kind of supporting thing I have where at least there’s, there’s people that know I can do something.”

The 3 student-participants who identified as exceptionally unmotivated all found a different experience in middle school. Ethan frequently discussed his preference for nature and the outdoors, and that for most his classes, he does not “feel they, they cover all the stuff I like.” He also spoke of his strong intention of joining the army after high school, and of how most aspects of his educational experience were not useful for that goal. For Jade, she was confronted with school’s disapproval very early in her school career. She spoke of getting in trouble frequently in kindergarten for some of the words she would use, explaining:

The bad words I said weren’t, like, bad bad... I would say ‘heck’ and ‘crap,’ stuff like that. And [the teacher] would get mad at me even though it wasn’t my fault I said bad words, it was my dad’s influence.

This tension between who they were and who school wanted them to be was frequently referenced by Keith. He spoke of how his favorite teacher was one who was willing to accept his desire to be a “jokester,” and who would help him anyway. Keith again confronted this tension when thinking about which of his friends he respected the most, explaining that, “He isn’t, he’ll get in trouble, but he won’t get in trouble a lot, he can control it. And he’s very smart. So he somehow... he fits in with us, but he’s also very smart at the same time.”

Conclusion

In Chapter 4, I presented the data that was collected throughout the study. This included the student and teacher survey information from the quantitative first Phase of

the study, a description of the 6 participants chosen using the data from Phase 1, and a discussion of the 3 themes identified in Phase 2. These help to show the step by step process that was used to arrive at these conclusions and help to provide the “thick description” (Merriam & Tisdell, 2016, p. 256) necessary to ensure the validity of this study. In Chapter 5, I will review how these emergent themes help to answer my stated research questions and will address the resulting implications for future initiatives at SMS. I will also discuss the limitations of the presented research study in order to recommend significant areas for future research.

Chapter 5

Discussion

Introduction

This chapter restates the themes identified in the data analysis phase of the study in order to generate conclusions and recommended next steps. I revisit the stated research question and the three identified sub questions in order to analyze the degree to which the generated themes answer each one. I then discuss the implications of the research findings for SMS and my local district at large. Lastly, the limitations of the study are presented, along with recommendations for future research.

Overview of Study

Problem of Practice

The primary objective of this case study featuring mixed-methodologies was to uncover the voices of students identified as having extraordinarily high or low levels of motivation. Information was gathered from 8th grade students at SMS, a small suburban middle school in Vermont. The 6 participants were selected based on the results of two separate measures—a self-report measure administered to each student, and a rating scale given to teachers pertaining to the motivation of each of their students—which each generated a score for a student’s academic engagement and motivation. The results of these two measures were compiled into a single measure of motivation, which was then

used to place students on a continuum of academic motivation. Participants were chosen based on their location on the continuum, as well as the researchers goal of choosing sample representative of the 8th grade as a whole. Selected students then completed individual interviews and engaged in a focus group session throughout a 20 week period in the middle of the school year.

Purpose

Teachers within the school featured in this case study have repeatedly and consistently bemoaned the perceived lack of motivation on the part of students within our school, along with the noticeable decline in the academic motivation of students during their time in SMS. This has been true for students regardless of how long they have been in the district, or what reputation a particular group of students had upon entering SMS.

This local trend has been supported through national studies which have found that the middle school years typically see a pronounced downturn in academic achievement motivation (Lai, 2011). Additionally, “recent studies... have indicated an overall decline of academic performance after the transition to middle level schools,” (Morgret, 2008, p. 2). However, there has been a lack of research into exploring the students’ own voices (McMillan & Turner, 2014).

This study sought to uncover the voices of students displaying remarkable levels of academic motivation concerning their perceptions around their own motivation in the context of their school and community in order to better inform interventions at SMS.

Research Design

This study featured a mixed-methods case study design in order to investigate the factors impacting student motivation in a small middle school in Vermont. Phase 1 was a

quantitative investigation in order to select student-participants based on academic motivation, which was the selected characteristic of interest for this study. Phase 2 was a qualitative case study of the 6 student-participants in order to reveal the school and community factors which have impacted their academic motivation leading up to this moment in their school careers.

The first phase of this study involved collecting qualitative survey data from both students and teachers. Each 8th grade student was asked to complete the Student Engagement Instrument (SEI) developed by Appleton et al. in 2004 (Appleton, et al., 2006) in order to gauge a student's engagement and investment in school. Teachers were then asked to complete a motivational rating scale for each student which was developed by the teacher-researcher. The scores for each of these two measures were then combined into a single measure of motivation which was then used to select the 6 student participants.

In Phase 2, the 6 student-participants each engaged in a semi-structured interview with the teacher-researcher, as well as in a small focus group. The resulting interviews were recorded and transcribed by the researcher within a few days for each. The resulting transcriptions were coded and analyzed in order to identify consistent themes responsive to the stated research questions.

Examining the chosen research questions in light of the collected data

This study was framed by one central research question:

- How do exceptionally motivated 8th grade students at SMS perceive the value of middle school in the context of their past elementary school experience and their future experiences in high school?

This larger question was then broken down into three sub-questions. Through analyzing the data collected over the course of the study, these questions can now be answered for these particular students in this specific context.

- i) How have past academic experiences contributed to the levels of academic engagement and motivation of certain exceptionally motivated 8th grade students?*

In analyzing the data collected over the course of the study, one of the central themes to emerge was that “students’ academic confidence influences and is influenced by their response to school feedback.” This was seen in the way that the student-participants vividly recounted past experiences in school, whether they were positive or negative. These past experiences directly led to the students’ current levels of academic confidence, as well as to the way they viewed themselves in the context of school.

For the highly motivated students, they all gained an increased sense of self-confidence through their past interactions with school. Lucy gained confidence in her ability to correct her perceived flaws, saying “I noticed my problems or my flaws, and I took them and tried to make them better.” David’s academic confidence continued to grow upon entering middle school as he won a succession of school awards, and Katherine began to engage much more in school when teachers complimented her on her writing instead of telling her that she was not “a fast learner.”

For the three unmotivated students, there was an opposite relationship between their past academic experiences and their current levels of academic confidence. Each of them had come to lack faith in their ability to complete various academic tasks and was

discouraged by past academic events or feedback. Ethan learned to doubt his academic ability based on his struggles in elementary school, while Keith struggled with the “more serious” work of middle school. Jade learned to feel like “the worst student in the school,” while in kindergarten, which was reinforced through repeated bouts of negative academic feedback as she went through elementary school.

These findings were consistent with the predictions made by Eccles et al. (1983) which posited that students would lose confidence through continued interactions with negative school feedback. In the case of Lucy and Katherine, their confidence was able to rebound when further feedback showed improvement and growth. For Jade and Keith, though, the increased frequency of feedback in middle school led to a steep decline in their perceived academic efficacy.

ii) How does the perceived proximity and value of future goals contribute to the levels of academic engagement and motivation of certain exceptionally motivated 8th grade students?

The evidence collected for this research question was decidedly mixed. Unlike the data collected for the other two questions, there was no clear pattern differentiating the motivated from the unmotivated students, though there were some interesting differences related to how students thought about high school.

Going into these interviews, I expected to find that the highly motivated students had clearer and more distinct future goals, while the unmotivated students would struggle to picture their lives after high school. This presupposition was partially grounded in the expectancy-value theory (Eccles et al., 1983), and partially based on my own experiences

teaching. However, this was not the case when analyzing the collected transcripts. The unmotivated students were just as likely to have distal or long-term goals, showcased by Ethan's vision of a career in the army, Jade's goal of going to college for animation, and Keith's dream of owning his own business in the model of his father. If anything, these goals were *more* specific than those of the highly motivated group, as David had no clear conception of what his life after high school might be.

One interesting finding from the collected data was that David and Lucy, the two most highly motivated students in the study, were the two students with very vague plans for high school. Each of them intended to take a variety of classes, with David explaining that he's "going to approach high school in a way of kind of curiosity... I want to try a bunch of different things, see what I really like." This comfort with uncertainty was seen only in these two highly motivated students and is predicted by Atkinson's (1957) formulation of the expectancy-value theory.

iii) How is the level of academic engagement and motivation enhanced or suppressed by the social relationships held by certain exceptionally motivated 8th grade students?

Unsurprisingly, social relationships were consistently found to be large factors for each of the 6 student-participants. What I did find to be a little surprising, though, was that school was almost universally *enhanced* by the students' perceived social relationships.

For each of the selected participants, friends were frequently discussed as necessary for their enjoyment and confidence while in classes. David shared that friends

made it easier for him to concentrate because they put him “in a better mood,” which Keith echoed when saying he found classes without his friends to be distractingly “lonely.” For each of the three female students, friends provided a sense of safety while in class, with Katherine saying that having friends make her “more outgoing, like, wanting to get help or something.” While several expressed the thought that having too many friends in class might hurt their academics, none of the student-participants enjoyed the thought of a class where they were not able to interact with any of their friend group.

In addition to their friends, teachers were found to be a large influence on a students’ perceived academic motivation. Each of the student-participants shared that they were motivated in classes where they got along well with their teachers, with each of them being most comfortable with “nice” and “outgoing” teachers who would accept them for who they were. Conversely, the classes which the student-participants enjoyed least were universally ones in which they did not feel comfortable with their teacher. The student-participants all preferred “nice” and engaging teachers. They all singled out the “judgmental” or a-social teachers as their least favorite and as the biggest reason why they disliked certain classes.

In addition to friends and teachers, parents were also found to have a largely positive impact on the students’ academic motivation. While there were differences with how much pressure the parents put on each of the student-participants, there was no pattern between the highly motivated or unmotivated students—Lucy received a high amount of parental pressure to bring home strong grades, while David was wholly unconcerned about his parents being disappointed in his grades; and Ethan faced severe consequences at home for poor grades, while Jade did not. The clearest pattern to emerge

was that each student-participant liked the idea of getting good grades in order to improve or maintain the relationships they had with their parents.

These findings were encapsulated in the third identified theme: “School is a distinctly social environment where students actively pursue personal validation.” Students actively sought out approval for their talents and values, whether it was from their friends, teachers, or from their parents. The highly motivated students were likely to find this approval from each of those groups, while the unmotivated students were not.

Implications of Research Findings

Through a mixed-methods analysis of the collected data, three themes were identified and formulated. These themes were constructed through triangulating information from the collected teacher and student surveys, the individual interviews, and the two focus groups. Each of the three themes are responsive to the chosen research questions and are truthful expressions of the students’ own words. In this section, I discuss the three identified themes in light of the existing research on middle school motivation and will consider the subsequent educational implications.

I. Students’ academic confidence influences and is influenced by their response to school feedback.

In analyzing the collected data, one of the most consistent ideas to arise was the importance of academic confidence. The students’ confidence consistently impacted the classes they enjoyed the most, the ones in which they found the most success, the teachers they got along best with, and the classes they intended to take in high school.

These findings are in line with current research regarding the motivation of middle school students.

Research has consistently shown the motivation and confidence of students to decline both while transitioning to middle school and in their time there as students (Lai, 2011; Wigfield et al., 1998). This downturn in academic motivation has been shown to occur during the school year (Shim et al., 2008), and has been linked to the increased frequency and severity of assessments in middle school compared to elementary school (Wigfield & Eccles, 1992). This is consistent with Lucy's assessment of middle school as more serious than elementary school, and with Keith's opinion that middle school is less fun than elementary school was.

This decrease in academic motivation while in middle school has then been shown to lead to severe drops in their academic confidence. Students have been shown to lose confidence in every subject area while in middle school (Wigfield et al., 1998). Furthermore, academic confidence has been shown to take on greater importance during the middle school years, as Louick et al. (2016) showed that academic confidence was a stronger predictor of achievement than either interest or motivation. Students have also been shown to have increased interest and motivation for a subject when they develop that academic confidence (Nagengast et al., 2011). Without exception, this difference in academic confidence was the single largest differentiating factor between the three highly motivation student-participants and the three highly-unmotivated student participants.

This difference showed itself in the student-participants' discussion of which classes they would take in high school. Jade, the least confident of the students, could only think of art and cooking as classes she would take. She seemed unable to think of

what other classes there might be and expressed fear at the idea of trying. This was striking when compared to the answers of Lucy and David, the two most highly confident student-participants. Each of them expressed the desire to take as many new classes as possible, with Lucy specifically choosing classes in which she knew she lacked experience. This is consistent with Atkinson's (1957) original formulation of the expectancy-value theory, where he differentiated between those with a motive to achieve and those with a motive to avoid. In his theory, confident individuals with a motive to achieve would be most motivated by tasks where they were least certain of success. Those with a strong motive to avoid, though, would be most frightened by that perceived uncertainty, and would instead prefer tasks where they were assured of either success or failure (Atkinson).

In light of this research, it is clear that interventions aimed at building and maintaining the academic confidence of students and their consequent motives to achieve (Atkinson, 1957) will be vital in raising the achievement of students at Seaside Middle School. Research has shown that building that academic confidence in students requires providing them with carefully constructed learning experiences where they might find success in a safe, collaborative environment (Britner & Pajares, 2006; Mann et al., 2015). In particular, fun and collaborative environments can help to make students feel safe to share their thoughts and abilities with others, and consequently helps to build their sense of academic confidence and self-efficacy (Mann et al., 2015).

II. Students all perceive various reasons for why they should work to achieve good grades.

Going into this study, I expected to find that those unmotivated students had learned to not care about their grades as they went through school. I was surprised to find, then, that the unmotivated group of student-participants were able to clearly express just as many reasons to get good grades as the highly motivated student-participants. While the given reasons were various and not always connected to the actions of the school, there were reasons to see this as a success of SMS overall.

In their model of the expectancy-value theory, Eccles et al. (1983) explained that task-value was composed of four disparate components: attainment value, intrinsic value, utility value, and cost. Research has shown that as children go through adolescence, they become more attuned to the value of the work they are doing, particularly the utility value and cost (Eccles, 1984; Eccles & Wigfield, 1995). The data which emerged from this study showed that each of the students had a clear definition for the utility of good grades, as well as distinct ideas concerning the costs they would face for not achieving them.

There has been significant research recently exploring the ways to increase the motivation of middle school students (Lai, 2011). This has included explorations of how introducing students to possible career and college pathways impacts students' perceived motivation (Rogers-Chapman & Darling-Hammond, 2013). This research has found that bringing in more information and activities regarding possible future opportunities for students can have positive effects on student engagement while in school (Balfanz, 2009; Glessner et al., 2017; Kerka, 2000).

Vermont in particular has been making a concerted effort of bringing these kinds of opportunities into middle schools through the Vermont Student Assistance Corporation (VSAC) (“About the Vermont,” 2021). VSAC has partnered with my school through the efforts of my school’s guidance counselor. This partnership has led to college visits and career fairs for both 7th and 8th grade students at SMS in an effort to help students connect their present educational opportunities with their future aspirations. Based on the clarity held by each of the 6 student-participants regarding their long-term plans, these efforts should be seen as successful.

III. School is a distinctly social environment where students actively pursue personal validation.

Throughout the data collection process, one of the largest themes to emerge was the importance the students-participants placed on the social interactions they had while at school. As the interviews continued, it became clear that the students used these interactions in order to seek approval for who they were: their ability levels, their interests, even their appearances. This finding is predicted by Eccles et al.’s (1983) construct of attainment value, as well as by the myriad studies showing the importance of social interactions for middle school students (Higgins, 2007; Lai, 2011; Pianta & Allen, 2009; Ruzek et al., 2015).

Attainment value is defined as the degree to which the completion of a given achievement task will help to reinforce an individual’s values or self-image (Eccles et al., 1983; Wigfield et al., 2015). Throughout the interviews and focus groups, the students showed that they were greatly impacted by the degree to which they saw school as

reinforcing their perceived values. This could be seen in Lucy's desire to stay at school in order to interact more with the teachers who respected her, and in the degree to which Ethan struggled in classes that lacked hands-on or outdoor learning.

These findings are reminiscent of Willis (1977), who studied the degree to which boys in an economically depressed town disconnected from their school's culture, as well as those of more recent studies examining the role of class on student achievement (Egalite, 2016; Hardie & Seltzer, 2016). Significantly, when asked how relevant their current learning was to the rest of their lives, each of the 6 student-participants expressed how little most of the content they were currently learning would matter to their eventual futures.

This desire of the student-participants to seek validation impacted each of their described social interactions while at school. This is consistent with current research showing that middle school students become increasingly concerned with their social relationships (Lai, 2011; Meyer, 2011; Ruzek et al., 2015; Wigfield et al., 2015). Also, in line with the opinions expressed by the student-participants, research has shown that allowing students to engage in those social relationships while in class helps to build the academic motivation of middle school students (Pianta & Allen, 2009).

Moving forward, these findings suggest definite directions that SMS can move in order to build and maintain student motivation during their time in middle school. Our school can build in more collaborative practices leveraging students' innate motivation to spend time with their peers (Ruzek et al., 2015). SMS can also stress pedagogical methods which afford the students greater choice and agency in their learning so that they are better able to perceive the relevance of the work they do while in school (Lai, 2011).

Lastly, SMS can train teachers to be firm but emotionally supportive and engaging, as those attributes have been shown to positively predict student engagement while in school (Bondy & Ross, 2008; Cornell et al., 2016).

Limitations and Suggestions for Future Research

This study was an action research study concerned with uncovering the voices of students regarding their particular motivation to engage in school. As an action research study, the results are not intended to be generalizable to other contexts (Herr & Anderson, 2015). These results are specific to Seaside Middle School, and are intended to benefit the specific stakeholders there. Additionally, while this study was a mixed-methods explanatory sequential design (Cresswell & Clark, 2011), the primary data collection methods utilized were qualitative. This further limits the extent to which these findings should be generalized to other contexts, as the 6 student-participants represent a small sample size and a relative lack of diversity. With that said, this study shows a promising method for analyzing the levels of motivation in a k-12 setting, as well as the factors impacting those levels. This method is transferrable to other settings, and will undoubtedly prove useful again in the future.

This study was also conducted in the middle of the Covid-19 pandemic. In addition to the obvious impacts this may have had on perceived and expressed student engagement, there were additional complications stemming from SMS's safety guidelines which impacted the student sample from which I was able to pull. As stated, of the 92 students who were in 8th grade this year, only 73 returned a completed SEI instrument. This limited the diversity of the student population that I was able to choose from for the second phase of the study. Additionally, given that many of the students who did not

return the completed SEI were students who struggled with chronic absenteeism throughout the year, it is reasonable to conclude that their inclusion would have changed the composition of the three highly unmotivated students chosen for this study. Jade would certainly have been chosen anyway, as she had the lowest composite score for motivation of any of the 73 students comprising the total population. However, Ethan and Keith would most likely have no longer been in the bottom 15% had the missing 19 students turned in their SEI, and thus they would not have been included in the study.

The findings of this study suggest several areas for additional research. As stated, this study was intended to uncover the voices of students at SMS concerning their particular perspectives around school and motivation, and thus help to add to the relative lack of studies addressing the viewpoints of the students themselves (McMillan & Turner, 2014; Morgret, 2008). Future research should continue to seek out the voices of students concerning their educational experiences.

The selected sample of student-participants for this study was limited to only 6 due to time constraints. Future studies should expand the sample size in order to better represent the views of the general population. Additionally, while the school featured in this study is economically diverse and features around 50% of students receiving free or reduced lunch, the student population of this school is 95% white, thus limiting the racial diversity represented in the chosen student-participants. Future studies should examine the emergent causes of student motivation with other demographics in order to verify or expand upon my findings. Particularly, my study found that the two most important determinants for student motivation at SMS were their sense of academic confidence and

their perception of the school's values juxtaposed with their own. These results should be expanded upon in order to increase the extent to which they can be generalized.

My findings also suggest that schools utilizing demonstrably active learning (Edwards, 2015) should have generally higher student engagement and motivation. In order to explore that suggestion, future studies should examine the motivation of students in schools employing verifiably different pedagogical methodologies in order to ascertain the difference in expressed motivation of the students in those schools. Studies have long stressed the importance of teachers on the motivation of their students (Lai, 2011), but have seldom looked at the pedagogical methods employed.

Action Plan

The first step of my proposed action plan is to communicate the results with the key stakeholders in my school and district at large. The results will be shared with my superintendent and will be presented to my school's staff during one of our periodic staff meetings. Subsequently, these results should be used to help guide our decisions regarding which of our myriad interventions and programs should be kept moving forward, and which should not.

The results of my study suggest that students are already very aware of the reasons to achieve good grades, and that many at least have clear visions of what their futures can hold. This indicates that efforts of my school's counselor to work with VSAC (About the Vermont," 2021) have been successful at introducing students to their future opportunities and should be maintained at the current levels. Additionally, my school currently employs the 7 Mindsets Curriculum ("Social Emotional Learning," 2021) in

order to help build students' collaborative skills and grit. Given the importance of having students work together, these are essential skills moving forward which should be kept.

The results of my study also indicate some areas which can be changed in order to increase the motivation of our students, as well as the general efficiency of our efforts. One of the main findings from my study was the prominence of confidence for the full spectrum of my 8th grade students. SMS should thus focus our efforts on choosing those programs which best help to build students' academic efficacy in the core subjects. We currently employ three separate systems to this end: Reading Plus ("Prepare Confident," 2021) is used to provide targeted remediation for struggling readers; Freckle Math ("Freckle Math," 2021) is used to provide remediation in Math; and the I-Ready Assessment ("i-Ready," 2021) is used as a diagnostic assessment for both Math and English. Moving forward, the school should consolidate those efforts into a single program in order to provide consistency for students and clarity for staff. Research indicates that the i-Ready instructional tools is effective at building students' confidence and motivation (Dvorak & Randall, 2019b; Hall, 2019; Marple et al., 2019), which indicates that this may be the best direction for our building to move.

The second major factor found to impact the perceived motivation of 8th grade students at SMS was their expressed connection with the values of the school at large. This included their relationships with the teachers, their resonance with the subjects being taught, the relevance they perceived in that subject matter, and how much autonomy they had over the way they learned. Based on the expressed preferences of the 6 student-participants in this study, the tenets of Active Learning (National Middle School Association, 2010) suggest a direction to move. Active learning involves allowing

students to co-construct their knowledge with teachers in a collaborative and inquiry-based environment (Edwards, 2015; Rule, 2006). In order to find a more specific recommendation, the state of Vermont itself provides an answer.

As of 2021, Vermont officially endorsed Project-Based Learning (“Project-Based Learning,” 2021) as a key pedagogical approach that teachers should be employing in their classrooms. As of 2013, Vermont officially mandated that schools make learning as individual and active as possible (“Flexible Pathways,” 2021), and personal learning has made significant headway since then (Bishop et al., 2017). Their adoption of Project-Based Learning is a natural extension of that policy.

Project-Based Learning (PBL) is a pedagogical approach which involves having students work collaboratively on authentic problems, and often involves granting significantly more autonomy and choice to the students (Wurdinger et al., 2007). These projects are often inquiry or service based and involve significantly more activity than traditional teaching (Condliffe et al., 2017). Significantly, these attributes closely align with the instructional methods advocated for by each of the 6 student-participants. Current evidence strongly suggests that PBL increases student motivation and engagement (Wurdinger et al., 2007), and increasingly supports the idea that PBL can increase student achievement as well (Condliffe et al., 2017).

Additionally, the school should make a concerted effort to increase the relevance of our instruction for the students’ own goals. Our district currently has a very successful Tech Center attached to the high school. Evidence suggests that building connections between SMS and that tech center would allow students to engage in classwork that they perceived as significantly relevant to their futures (Kerka, 2000; Rogers-Chapman &

Darling-Hammond, 2013). Bringing more technical and work-based programs into middle schools has been shown to increase engagement for all students in general, and for economically disadvantaged students in particular (Condliffe et al., 2017; Darling-Hammond, 2013). As the majority of students at SMS come from such backgrounds, SMS should explore this avenue as a way to better serve the needs and preferences for the majority of our students in order to best prepare them for their futures.

Lastly, our school currently employs two different behavior management systems. Our primary program is Positive Behaviors Interventions and Supports, or PBIS for short (PBIS, 2021), while we have also slowly been incorporating elements of Restorative Justice (Fronius et al., 2016). PBIS relies on demonstrably rewarding students for positive behaviors while Restorative Justice stresses community and dialogue. Research is mixed concerning the efficacy of rewarding students (Lai, 2011), and there has not been a great deal of research concerning how Restorative Justice impacts the academic achievement of students (Evans & Lester, 2013; Fronius et al., 2016). Consequently, our school should keep both for now, but should start investigating the efficacy of each approach so that we may be able to choose a single framework in the future.

From a personal standpoint, this experience has helped me to see the impact that I can have for not only my students but for the district as a whole. I have learned how to effectively employ research methodologies in pursuit of discovering new information or testing promising pedagogies. I have gained comfort in disseminating my findings with my administrators and colleagues and am confident in my ability to lead organizational change going forward. I will continue to apply these skills in order to help my school settle on a new direction following the upheaval we have all experienced these last two

years. In addition to these new competencies, I have also gained a better understanding of who my students are and how to best motivate them.

Within my classroom, I will strive to apply what I have learned regarding the impact of student confidence and personalized learning. I will employ collaborative methods that facilitate students working together, and which will help students enjoy their time more while in class while also giving them additional confidence on the given assignments. Units will be redesigned to become more project-based in order to build in greater levels of student choice and autonomy. While these changes will never be able to reach all of my students, they will help combat the observed trend of our students losing academic motivation as they progress through middle school.

Conclusion

This study was concerned with uncovering the voices of 8th grade students concerning the factors in their educational experiences which had helped to lead to their present levels of achievement motivation. This study arose from the perceived decline in motivation of students as they progressed through SMS.

Using an explanatory sequential research design (Cresswell & Clark, 2011), I first identified 6 students who had either extraordinarily high or extraordinarily low levels of academic motivation. I then engaged in interviews and focus groups with the 6 selected student-participants and used the constant-comparison method to analyze the collected data in order to generate three emergent themes. These themes were then used in order to first answer my initial research questions, and then plan for how SMS can best proceed in the future.

From the data collected in both phases of the study, three themes emerged: that students' confidence largely impacted their perceptions of school work and was simultaneously built through those interactions; that students all desired earning good grades for various reasons; and that students used their time in school to engage in social interactions which they used to seek personal validation. These findings suggest that SMS should focus their efforts on choosing an effective and efficient program to help build students' academic confidence while in school. They also suggest that the school should move towards such active learning models as Project-Based Learning in order to add increased amounts of collaboration, autonomy, physicality, choice, and relevance for students. By doing so, we will be better able to motivate our students while they are here at SMS, and better able to prepare them for what comes next.

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Appendix A

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Student Engagement Instrument

MARKING INSTRUCTIONS

- Use a No. 2 pencil or a blue or black ink pen only.
- Do not use pens with ink that soaks through the paper.
- Make solid marks that fill the response completely.
- Make no stray marks on this form.

CORRECT: ● **INCORRECT:** ☑ ☒ ☓ ☔

		Strongly Disagree	Disagree	Agree	Strongly Agree
1. My family/guardian(s) are there for me when I need them.	1	2	3	4	
2. After finishing my schoolwork I check it over to see if it's correct.	1	2	3	4	
3. My teachers are there for me when I need them.	1	2	3	4	
4. Other students here like me the way I am.	1	2	3	4	
5. Adults at my school listen to the students.	1	2	3	4	
6. Other students at school care about me.	1	2	3	4	
7. Students at my school are there for me when I need them.	1	2	3	4	
8. My education will create many future opportunities for me.	1	2	3	4	
9. Most of what is important to know you learn in school.	1	2	3	4	
10. The school rules are fair.	1	2	3	4	
11. Going to school after high school is important.	1	2	3	4	
12. When something good happens at school, my family/guardian(s) want to know about it.	1	2	3	4	
13. Most teachers at my school are interested in me as a person, not just as a student.	1	2	3	4	
14. Students here respect what I have to say.	1	2	3	4	
15. When I do schoolwork I check to see whether I understand what I'm doing.	1	2	3	4	
16. Overall, my teachers are open and honest with me.	1	2	3	4	
17. I plan to continue my education following high school.	1	2	3	4	
18. I'll learn, but only if the teacher gives me a reward.	1	2	3	4	
19. School is important for achieving my future goals.	1	2	3	4	
20. When I have problems at school my family/guardian(s) are willing to help me.	1	2	3	4	

Please Turn Over

Figure A.1. Student Engagement Instrument

Appendix B

Scoring Procedures

Within each clear box, write the number that corresponds with the rating identified by the student. Use either five or four options depending on the version of the SEI Scale you are using.

5-point scale: Strongly Disagree (1), Disagree (2), Neither Agree Nor Disagree (3), Agree (4), Strongly Agree (5)

4-point scale: Strongly Disagree (1), Disagree (2), Agree (3), Strongly Agree (4)

Item	TSR	PSS	FSL	CRSW	FG	IM*
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34						
35						
Total						

*Intrinsic Motivation (IM) is the only domain where the item responses are reversed.

Student responses should be re-coded as follows before entering the value in the clear box:

5-point scale:

- Strongly Agree (5) = 1
- Agree (4) = 2
- Disagree (2) = 4
- Strongly Disagree (1) = 5

4-point scale:

- Strongly Agree (4) = 1
- Agree (3) = 2
- Disagree (2) = 3
- Strongly Disagree (1) = 4

Affective

Cognitive

SEI Total =	
(Sum all items if at least 15 Affective and 12 Cognitive Items Completed)	

Write each column total in the box next to the column title.
Then divide by the **number of items answered**¹ to calculate a column average.

AFFECTIVE (PSYCHOLOGICAL) ENGAGEMENT:

Teacher-Student Relationships (TSR) / 9 (or 8 or 7 if fewer answered)
Peer Support at School (PSS) / 6 (or 5 if fewer answered)
Family Support for Learning (FSL) / 4 (or 3 if fewer answered)

COGNITIVE ENGAGEMENT:

Control and Relevance of School Work (CRSW) / 9 (or 8 or 7 if fewer answered)
Future Aspirations and Goals (FG) / 5 (or 4 if fewer answered)
Intrinsic Motivation (IM) / 2

SEI Total (SEI_Tot) / 35 (use number answered)

¹ Domain (and SEI) totals should only be calculated if students have answered at least 75% of the items.

Figure B.1. *Student Engagement Instrument Scoring Sheet*

Appendix C

8th Grade Motivation Survey

In the form below, please rate the academic motivation for each of the students you teach. I kindly ask you to skip any students who you have not had in any classes.

Note: This survey was designed in order to gain teacher insights into which 8th grade students either excel or struggle with academic motivation. Your participation in this survey is completely optional, and all results will be kept strictly confidential. Thank you, and please reach out to me with any questions or concerns.

For the purposes of this survey, academic motivation is defined to be a person's level of effort and/or their persistence in the face of obstacles. With that definition in mind, please rate each 8th grade student you have taught on their level of academic motivation (motivation on academic tasks) from 1-5 compared to their peers. These results are normative—I am looking for their motivation compared to other current 8th graders.

1. How motivated do you find this student to be?

Mark only one oval per row.

	Very unmotivated	Unmotivated	Average motivation	Motivated	Highly Motivated
Student 1	<input type="radio"/>				

2. How motivated do you find this student to be?

Mark only one oval per row.

	Very unmotivated	Unmotivated	Average motivation	Motivated	Highly Motivated
Student 2	<input type="radio"/>				

3. How motivated do you find this student to be?

Mark only one oval per row.

	Very unmotivated	Unmotivated	Average motivation	Motivated	Highly Motivated
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Figure C.1. Sample Questions from Teacher Survey

Appendix D

Phase 2 Letter of Invitation

My name is Paul Hammond, and I am a doctoral candidate in the Education Department at the University of South Carolina. I am conducting a research study as part of the requirements of my degree in Curriculum and Instruction, and I would like to invite _____ to participate.

I am studying the factors impacting academic motivation amongst middle school students here in Springfield, VT. If they decide to participate, they will be asked to meet with me for an interview about their experiences and thoughts about school, as well as to participate in a group discussion around the same topics.

In particular, they will be asked questions about their experiences in elementary and middle school, their thoughts about High School, and their beliefs about school in general. They will not have to answer any questions that they do not wish to answer. We will meet for a total of two hours of interviewing, which can be broken into smaller sessions as necessary. These interviews will occur at Riverside at times convenient to your family. Your child will also be asked to attend a one-hour focus group, where they will answer similar questions in a small group of their peers. The interviews will be audio recorded so that I can accurately transcribe what is discussed. The tapes will only be reviewed by me and will be destroyed upon completion of the study.

Participation is confidential. Study information will be kept in a secure location at the University of South Carolina. The results of the study may be published or presented at professional meetings, but no identities will be revealed.

It is important to note that during the Focus Group session, others in the group will hear what your child says, and it is possible that they could tell someone else. Because we will be talking in a group, we cannot promise that what is said will remain completely private, but we will ask all group members to respect the privacy of everyone in the group.

Your child will receive food and drink for participating in the study.

I will be happy to answer any questions you have about the study at any time. You may contact me at 802-376-9062 or at phammond@ssdvt.org.

If your child is available to participate in this study, no further action is necessary. They can simply arrange with me a convenient time for any and all interviews. Thank you for your consideration, and please contact me at the number listed if you any other questions about participating.

With kind regards,

Paul Hammond
8th Grade Science Teacher
phammond@ssdvt.org

Appendix E

1 on 1 Semi-Structured Interview Protocol

Research Questions:

- 1) How do exceptionally motivated 8th grade students at SMS perceive the value of middle school in the context of their past elementary school experience and their future goals in high school and beyond?
 - a) How have past academic experiences contributed to the levels of academic engagement and motivation of certain exceptionally motivated 8th grade students?
 - b) How does the perceived proximity and value of future goals contribute to the levels of academic engagement and motivation of certain exceptionally motivated 8th grade students?
 - c) How is the level of academic engagement and motivation enhanced or suppressed by the social relationships held and perceived by certain exceptionally motivated 8th grade students?

Thank you for sitting down with me here. My goal for these conversations is to let you tell your story—what motivates you and why—in order to improve SMS in the future. I have some questions I have prepared, but will always be flexible in allowing you to bring up other stories or factors which you have found to be important. I will be recording this interview with my computer to make sure I accurately capture everything you have to say, but I want to remind you that this is all completely confidential—no one besides me will ever hear that recording.

I also want to remind you that this is completely optional. You do not need to answer any questions you are uncomfortable with. Also, this will not impact your grade in class in any way, nor will I ever share this information with anyone else.

Period	Topics
Present Views <i>Expectancies of success</i> <i>Value of school</i>	<ul style="list-style-type: none"> ● Favorite classes ● Best classes ● Present level of effort ● Factors impacting level of effort
Past Educational Experiences	<ul style="list-style-type: none"> ● First feelings about school ● How those feelings have changed ● Factors which changed those feelings
Future Goals	<ul style="list-style-type: none"> ● High school thoughts ● Goals for high school ● Ability to picture a future after high school

	<ul style="list-style-type: none"> • Connections between school and future
Socializer Influences	<ul style="list-style-type: none"> • Friends here at school • Those friends and motivation • Favorite teachers, revisited • Schoolwork at home • Parental support
Ending	<ul style="list-style-type: none"> • Thoughts on motivational trends

Thank you so much for participating in this interview with me. My next step will be to transcribe this interview (have it written down word for word), after which I will show you to make sure you feel I have accurately captured what you said. In the future we will get together to review any conclusions I gain from this study thanks to you.

Figure E.1. 1-on-1 Semi-Structured Interview Protocol

Appendix F

Semi-Structured Focus Group Protocol

Research Questions:

- 1) How do exceptionally motivated 8th grade students at SMS perceive the value of middle school in the context of their past elementary school experience and their future goals in high school and beyond?
 - a) How have past academic experiences contributed to the levels of academic engagement and motivation of certain exceptionally motivated 8th grade students?
 - b) How does the perceived proximity and value of future goals contribute to the levels of academic engagement and motivation of certain exceptionally motivated 8th grade students?
 - c) How is the level of academic engagement and motivation enhanced or suppressed by the social relationships held and perceived by certain exceptionally motivated 8th grade students?

Thank you for sitting down with me here. My goal for these conversations is to let you tell your story—what motivates you and why—in order to improve SMS in the future. I have some questions I have prepared, but will always be flexible in allowing you to bring up other stories or factors which you have found to be important. I will be recording this interview with my computer to make sure I accurately capture everything you have to say. Because this is a focus group, please be aware that your answers will not be confidential, as I have no power to stop any of you from repeating what you have heard. With that said, I urge you to respect each other’s privacy, and to have the mentality of “what is said here stays here.”

Period	Topics
Present Views <i>Expectancies of success</i> <i>Value of school</i>	Were you excited to come back to school? Why or why not? Who is your least favorite teacher, and why? At the end of the day, are you excited to go home? If you’re bored or unhappy in a class, what sort of things might you do to make yourself feel better? What sort of things//activities make you feel good about yourself? You are given an assignment, and find it very difficult. How do you think you would handle that situation?
Past Educational Experiences	What kind of student were you in elementary school? Try to remember a moment where you started to feel differently about school (either positively or negatively). What was the transition to middle school like?

Future Goals	<p>What are the benefits of getting good grades here in middle school?</p> <p>Which classes in middle school are the most useful for what you want to do in the future?</p> <p>How many high school courses do you already know you want to take?</p> <p>Do you feel like school supports the things you care about?</p>
Socializer Influences	<p>Most respected peers in your grade?</p> <p>Favorite teacher ever?</p> <p>If something bad happens at school, how do you usually handle it?</p> <p>How much do you feel your time at home is impacted by how well you do in school?</p>