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College Students' Perceptions Regarding High School Influences on Academic Buoyancy

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This is to certify that the doctoral study by

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Walden University
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Abstract

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MEd, University of Phoenix, 2005

BS, Wayne State University, 1999

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

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Abstract

The problem addressed by this study is the lack of student input in the development of resources to support academic buoyancy, leading to a gap in educational practices. Academic buoyancy is the ability to successfully deal with academic setbacks and challenges that are typical of the ordinary course of school life. The purpose of this study was to investigate the perceptions of recent high school students regarding the common academic setbacks and challenges they experienced in high school and how high schools could support students experiencing these challenges. Research questions examined participants' perspective of the common academic setbacks and challenges they experienced in high school, the strategies they used to manage setbacks and challenges, and how high schools could support students experiencing these challenges. The conceptual framework for this study was based upon the work of Martin and Marsh who established academic buoyancy as a distinct and researchable construct. This study was of a basic qualitative design. Nine participants were drawn from a small college and were interviewed; each had attended high school within 5 years prior to the interview. Data were analyzed using a thematic coding process. One of the main findings of this study was that participants believe establishing and maintaining meaningful relationships between staff and students is central to developing academic buoyancy. This study may contribute to positive social change by providing information specific to what school leaders can do to support academic buoyancy in students, thereby improving students' academic experience and performance.

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Dedication

This work is dedicated to all the people who choose to do the right thing, especially when it is not the easy thing.

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Thank you, Dr. Kiriakidis, for highlighting the very important need to distill and explain the differences between buoyancy and resilience.

Thank you, Dr. Moskowitz for your consistent inspiration, support, insight, and assistance in focusing my efforts.

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And most of all, thank you to my family, especially my wife, for considerable patience and support while I tried to juggle being a good husband and father along with the duties of my employment and my studies.

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Chapter 1: Introduction to the Study

The subject of this study is academic buoyancy, which is defined as "students' ability to successfully deal with academic setbacks and challenges that are typical of the ordinary course of school life (e.g., poor grades, competing deadlines, exam pressure, difficult schoolwork)" (Martin & Marsh, 2008a, p. 54). Academic buoyancy is a new area of study formally identified as a construct in 2008 (Martin & Marsh, 2008a). The present study addresses a gap in practice of how schools can help support the development of academic buoyancy, specifically based on students' perspectives. The present research study provides opportunity for positive social change because the findings may improve the circumstances of high school students who are struggling due to low academic buoyancy.

Chapter 1 provides an in-depth introduction to the present study. The background briefly summarizes related literature, describes the gap in practice to be addressed, and establishes the need for study. The problem statement clarifies the research problem, provides evidence that the problem is valid, and identifies how the study will address a meaningful gap in practice. The research question is clearly identified and a conceptual framework for the study is provided. The design of the study is explained, and key concepts are identified and defined. Assumptions, scope, and limitations of the study are acknowledged and described. Finally, this chapter ends with the significance of the study by identifying potential contributions to policy, practice, or positive social change as well as a summary of the chapter.

Background

The fundamental construct I explored in this study was academic buoyancy, which was first introduced in 2008 and defined as "students' ability to successfully deal with academic setbacks and challenges that are typical of the ordinary course of school life (e.g., poor grades, competing deadlines, exam pressure, difficult schoolwork)" (Martin & Marsh, 2008a, p. 54). Since its appearance in the literature, several researchers have explored how the construct of academic buoyancy is or is not related to similar concepts such as adaptive coping (Putwain et al., 2012), motivation (Martin et al., 2010), growth mindset (Cassidy, 2015), resilience (Martin, 2013; Martin & Marsh, 2009), grit (Fong & Kim, 2019), and psychological risk (Martin, Ginns, Brackett, et al., 2013). Researchers have shown a relationship between students' academic buoyancy and academic performance (Martin, Ginns, Papworth, et al., 2013; Miller et al., 2013; Putwain & Daly, 2013). Putwain and colleagues (2015, 2016) found that academically buoyant students have less worry-based test anxiety and perform better on high stakes testing. Martin et al. (2010) found there is also a relationship between academic buoyancy and other characteristics that are beneficial in the academic environment.

Academic buoyancy is correlated with several adaptive characteristics including confidence, planning, and persistence (Comerford et al., 2015). Miller et al. (2013) found that academic buoyancy has a positive impact on achievement. Martin et al. (2013) found that academic buoyancy and psychological risk have a reciprocal relationship in high school students. Academic buoyancy can have a mediating effect on psychological risk factors (e.g., academic anxiety, failure avoidance, uncertain control) and psychological

risk factors can, in turn, affect students' academic buoyancy. The authors identified that interventions in either space (academic buoyancy or psychological risk) can be valuable. High school students' academic performance on high stakes tests was better on average among students who rated high on academic buoyancy compared to students who rated low on academic buoyancy (Putwain & Daly, 2013).

Miller et al. (2013) found that academic buoyancy does not have a significant relationship with gender or socioeconomic status; therefore, a universal approach to promoting wellbeing may be useful for improving educational achievement. Martin et al. (2010) suggested that interventions involving five specific elements (confidence, coordination, commitment, composure, and control) may be particularly effective at improving academic buoyancy. Students' experience of adversity is closely related to levels of academic support (Collie et al., 2017) and teachers can influence the development of academic buoyancy in students through the ways in which they approach assessment feedback (Shafi et al., 2018). Additionally, self-directed learning has a positive correlation with academic buoyancy (Sadeghi & Khalili Geshnigani, 2016). Perhaps schools and teachers could spend time focusing on including or improving intervention efforts, academic support, assessment feedback, and self-directed learning as a ways of improving students' academic buoyancy.

As of the writing of this document, the concept of academic buoyancy is new, having been introduced to the academic literature in the early 2000's. As the subject is relatively new, it is likely that more research will be conducted, and more articles published in the future. As the body of literature stands today, there is a noticeable gap

specific to students' perspectives on how schools can support the development of students' academic buoyancy. The lack of student perspective is a glaring omission that hinders the ability of institutional leaders to fully understand the problem and effectively devise and deploy supports to develop academic buoyancy. This represents a gap in practice and this study was needed to address that gap. The evidence of the gap and further explanation of the purpose of this study are provided below.

Problem Statement

The construct of academic buoyancy is relatively new to the body of academic literature; therefore, the extant research regarding academic buoyancy is predominantly focused on establishing the construct's existence, identifying how academic buoyancy is or is not related to other similar concepts, and exploring academic buoyancy's effects on students' performance. The problem I addressed in this study is the lack of student input in the development of resources to support academic buoyancy, leading to a gap in educational practices. The literature regarding students' perspectives on practical ways high schools can help promote academic buoyancy is notably lacking. To support the development of students' academic buoyancy, educational leaders need to better understand the student experience so they can develop effective support. Academic buoyancy is related to several important positive academic and psychological outcomes related to positively managing with common setbacks and challenges in the academic environment. Academic performance was lowest in groups of participants with low academic buoyancy (Putwain & Daly, 2013). Additionally, Putwain and Daly (2013) discovered an inverse relationship between academic anxiety and academic buoyancy and

suggested that academic performance and academic buoyancy are positively related regardless of whether test anxiety is high or low.

As described above, researchers have shown the importance of academic buoyancy as it relates to students' performance and wellbeing. Still, there was a gap in the research specific to practice: studies had not been conducted in which researchers explore students' perspective regarding practical ways schools can help promote academic buoyancy. Without seeking, recording, and incorporating the student perspective in establishing supports for developing academic buoyancy, the effort is not fully informed and therefore likely less effective than it could be. In previous research involving academic buoyancy, researchers had almost exclusively relied on quantitative research designs and had also recommended that future research use qualitative methods (Datu & Yuen, 2018). Datu and Yuen (2018) specifically noted "aspects of the school context can promote academic buoyancy" (p. 210) and this underscores the need for educators to better understand how they can do this in practice.

Middleton et al. (2020) recommended further research on how the nature of the relationship between the assessor and the assessed (student) and the nature of how assessment is provided can help students remain academically buoyant or develop academic buoyancy. Hoferichter et al. (2021) advised that future research regarding the relationship between supportive class and school climate with high academic buoyancy should include "person-oriented approaches" (p. 8) which could serve to find nuance underlying these linked components.

Collie et al. (2017) suggested that some specific school-based interventions can improve academic buoyancy (e.g., identifying and engaging protective factors such as supportive teachers or having a study plan) and noted that the literature is insufficient in exploring the combination of academic and social support, academic adversity, and academic buoyancy and how these factors may combine with different groups of students. A person-focused approach can present an opportunity for powerful and authentic insights into the lived experience of students' academic buoyancy (Martin & Marsh, 2009).

Comerford et al. (2015) recommended that future scholars investigate the relationship between students' self-concept and teachers' attitude and metacognition. Liem et al. (2012) suggested that future scholars should explore how students' pursuit of goals interface with their academic buoyancy and if students might be affected by persistence and/or other predictors of academic buoyancy. Martin et al. (2010) recommended future researchers should explore the relationship between academic buoyancy and the certain "educational capital" that students carry (e.g., ability, prior achievement, socioeconomic status, and prior adverse experiences). Collie et al. (2015) recommended that future researchers focus on how control and other mechanisms influence how buoyancy and achievement are related. One of the very few studies to include both specific practice in the school environment and the students' perspectives was completed by Shafi et al. (2018), who surveyed students to gain their perspective on how feedback on assignments can contribute to the development of academic buoyancy. Shafi et al. found that the way assessment feedback is provided to—and interpreted by—

students can have an influence on the development of academic buoyancy, although they did not recommend future avenues of study.

This study represents an opportunity to add to the body of practice regarding academic buoyancy by better understanding the student experience and how educational leaders can better implement supports to develop academic buoyancy. As a relatively new concept, the literature academic buoyancy relative to practice has gaps. The problem I addressed in this study is the lack of student input in the development of resources to support academic buoyancy, leading to a gap in educational practices.

Purpose of the Study

The purpose of this study was to investigate the perceptions of recent high school students regarding the common academic setbacks and challenges they experienced in high school and how high schools could support students experiencing these challenges. The problem I addressed in this study is the lack of student input in the development of resources to support academic buoyancy, leading to a gap in educational practices.

This study used a basic qualitative design. An important component of qualitative research includes obtaining the views of a small number of participants regarding a phenomenon and analyzing them for descriptions and themes (Creswell, 2009). I interviewed recent high school students currently attending college to record their perceptions regarding common academic challenges, what strategies are effective when facing them, and how schools could support students managing these challenges. The main concept I explored with this study was academic buoyancy.

Research Questions

RQ1: How do recent high school students describe the common academic setbacks and challenges they experienced in high school?

RQ2: What strategies do recent high school students identify as useful to overcoming the common academic setbacks and challenges they experienced in high school?

RQ3: What do recent high school students identify as ways in which high school leaders can help students overcome common academic setbacks and challenges??

Conceptual Framework

The conceptual framework for this research was based upon the work of Martin and Marsh (2008a, 2008b, 2009) who established academic buoyancy as a distinct and researchable construct. However, to understand fully the concept of academic buoyancy, a deeper background on the concept was necessary. Werner and Smith (1977) explored why some people presented as more capable of overcoming adversity than others and other more recent work that has been the result of the positive psychology approach. These components are briefly described here as they gave rise to the conceptual framework provided by Martin and Marsh (2008a, 2008b, 2009).

Werner and Smith (1977) provided seminal research around the question of why some children adapted more favorably to challenging circumstances than others. Their research established the beginning of an understanding of how aspects in one's environment can help facilitate effective adaptations to difficult circumstances. The basic foundations of a framework for understanding the complex and interactive components of

developing academic buoyancy, adaptive coping, buoyancy, grit, and resilience can in many ways be traced back to the work conducted by Werner and Smith. Their foundational research laid the groundwork for much of the resilience-related work that has taken place in the 30 years since. Werner and Smith's work is important because of the amount of information provided over a range of categories including birth conditions, physical and psychological status, school performance, and family characteristics (Rogoff, 1978). Seligman and Csikszentmihalyi (2000) and Seligman (2004) advanced the body of knowledge and the conversation around protective factors and nurturing experiences by explaining the concept and importance of positive psychology, a model that spends less attention on repairing harm and more attention on preventing suffering by establishing and supporting preventative components.

Ultimately, Martin and Marsh (2008a) used a positive psychology lens and established that some students were more adept at navigating the setbacks and challenges common to the educational experience—they were academically buoyant. The framework for this study, presented in greater depth in Chapter 2, is the concept of academic buoyancy developed by Martin and Marsh (2008a): some students struggle less and some students struggle more at overcoming challenges and setbacks common to the educational experience, which defines their level of academic buoyancy. The research questions examine participants' perspective of the common academic setbacks and challenges they experienced in high school, the strategies they used to manage setbacks and challenges, and how high schools could support students experiencing these challenges. Academic buoyancy refers to student experience. The study approach and

research questions are specifically designed examine the student experience as it relates to academic buoyancy, thus the data collection instrument is direct interview of recent high school students. Thematic analysis of the data provided key links between participants' remembered high school experience relative to academic buoyancy and ways that schools can develop academic buoyancy in their students.

Much of the research done to date used language around "resilience" more than "buoyancy" due to the recent development of the concept of academic buoyancy; therefore, studies about resilience can be useful when understanding buoyancy. Specific to this study, the goal of the inquiry was to investigate the perceptions of recent high school students regarding the common academic setbacks and challenges they experienced in high school, the strategies they used to manage setbacks and challenges, and how high schools could support students experiencing these challenges. Chapter 2 provides a more detailed examination and description of the extant literature.

Nature of the Study

Qualitative studies can be useful in learning more about academic buoyancy (Datu & Yuen, 2018); therefore, a basic qualitative design was used in this study. Qualitative research is very common in the field of education, and it is employed when researchers seek to understand "how people interpret their experiences, how they construct their world, and what meaning they attribute to their experiences" (Merriam & Tisdell, 2015, p. 6). The goal of qualitative research is to understand the experience of the participants and the general method used in this endeavor is the collection of words as

data points, which contrasts with quantitative research that relies predominantly on numbers as data (Merriam & Tisdell, 2015).

Qualitative research can take several forms depending on the circumstances and purpose of the research (Creswell, 2009). The research questions provided direction to learn about recent high school students' perspectives regarding the steps high schools can take to develop academic buoyancy in students. The interview questions provided an opportunity to collect data in the form of the interviewees' words that were then analyzed to seek clarification and understanding. Ultimately, through analysis, I was able to answer the research questions. The answers to interview questions were elicited from participants who have knowledge of the subject being studied and can provide useful feedback. Once the interview data were collected, I began the process of identifying codes and developing themes to identify patterns and discrepancies within the data that relate to the specific research questions.

This study was of a basic qualitative design with the purpose of investigating the perceptions of recent high school students regarding the common academic setbacks and challenges they experienced in high school and how high schools could support students experiencing these challenges. Merriam and Tisdell (2015) noted that basic qualitative research often relies on interviews to collect data. For this research, data was gathered via interview from recent high school students and analyzed for themes (Creswell, 2009).

Data were collected via Zoom interviews from a total of nine recent high school students attending a small college in a suburb of Philadelphia, Pennsylvania. I audio-recorded the interviews with participant permission and used field notes. The interviews

were transcribed and analyzed using standard qualitative open coding process with the aid of a software program called MaxQDA.

Definitions

Academic buoyancy: Academic buoyancy is related to resilience but is distinct and relatively less prominent in the tremendous body of traditional resilience literature. Academic buoyancy is defined as "students' ability to successfully deal with academic setbacks and challenges that are typical of the ordinary course of school life" (Martin & Marsh, 2008a, p. 54).

Academic resilience: Academic resilience relates to the ability to overcome dramatic life challenge in adaptive ways that allow for continued academic progress and success (Martin, 2013).

Buoyancy: Buoyancy is a form of resilience that empowers people to respond effectively to standard stresses and commonplace difficulties. Martin and Marsh (2008b) defined buoyancy as the "ability to successfully deal with setbacks and challenges that are typical of everyday life—an 'everyday resilience'" (p. 168).

Protective factors: Protective factors are traits, relationships, and resources that contribute to the ability to adapt and overcome adversity. These can be categorized as individual-level, family-level, and community-level (Afifi & MacMillan, 2011).

Resilience: Resilience is defined as "a dynamic process encompassing positive adaptation within the context of significant adversity" (Luthar et al., 2000, p. 543).

Assumptions

The only aspects of this study that were assumed, but may not have been demonstrably true, dwelt within the realm of the participants' awareness, perceptions, and understanding. An assumption embedded in the research design was that the participants spoke to me and answered questions with honesty regarding their own personal experiences. A second assumption was that the expressed perspectives of the participants shed light on the subject in such a way as to be useful for me and ultimately helpful in educational administration decision making. A third assumption was that the participants had experience with or had been witness to peers experiencing academic challenges during their time in high school. In other words, there was an assumption that the participants are familiar enough with the concept of academic challenge to properly respond to the interview questions. This assumption was partially addressed by including examples of academic challenge in the invitation for participation and subsequence communication with participants.

The participants were students drawn from a college located in Pennsylvania. An assumption was made that the participants were aware of the culture and programs at the high school they attended. As part of the interview introduction process, participants were invited to reflect on their time at their respective high school and consider their memories of the programs offered and culture present while they attended that institution.

A brief definition of academic buoyancy was also included as part of the interview introduction process. I made the assumption that the participants were able to intellectually grasp the concept of academic buoyancy and determine how it intersects

with their memory of their experience at the school. Another assumption was that there was enough diversity of experience that the conclusions drawn from the research may be transferred to schools outside of the geographical area and therefore be of value to the literature. These assumptions were necessarily and inherently present based on the nature of the research.

Scope and Delimitations

The problem I addressed in this study is the lack of student input in the development of resources to support academic buoyancy, leading to a gap in educational practices. The research questions were deliberately conceived to provide enough room for qualitative response while remaining specific to the problem and the gap in existing research literature as it relates to practice.

Per informal conversations I had with colleagues at several local high schools and administrators at a local college, academic buoyancy is an area of interest and concern; however, the concern is not limited to the local environment, nor even to the United States. Though much of the published research addresses academic buoyancy in the United States, Sadeghi and Khalili Geshnigani (2016) studied academic buoyancy in Iran and Miller et al. (2013) studied academic buoyancy in Northern Ireland. Furthermore, Martin et al. (2013) studied motivation, engagement, academic buoyancy, and achievement in Aboriginal Australian students. Martin et al. (2017) conducted a cross-cultural examination of academic buoyancy using participants from China, North America, and the United Kingdom. Academic buoyancy was a concept of interest locally, nationally, and globally.

Given the relative recency of academic buoyancy and the significant gaps in the literature, there was opportunity to add to the body of research and literature on the topic (Datu & Yuen, 2018). The population for this study was the student body at a small Pennsylvania college. The sample was limited to students who indicated a willingness and availability for interview and were recent high school graduates. It was important that participants had attended high school fairly recently (on average between 1 and 4 years prior to the interview) so that their experiences were easily recalled. It was also important that the participants were not active high school students so that they had some time to gain emotional and observational distance from high school and therefore be able to offer an informed, measured perspective. The information gathered from this study contributes to educators' understanding of students' perceptions about the ways in which high schools cultivate the development of academic buoyancy.

To become familiar with the background of academic buoyancy, a general review of related topics was conducted; however, the core of this research was focused specifically on academic buoyancy, which is a related but relatively new concept identified in the literature as recently as 2008. Though nearly any of the extant resilience research could be considered potentially relatable to the goal of this work, for purposes of clarity, consistency, and appropriate scientific expediency, the bulk of the literature research focused primarily on academic buoyancy, and secondarily on resilience—insofar as there were clear linking constructs.

This research effort was focused on recent high school students' perception of their high school experience as it relates to academic buoyancy development. To the

extent that any high school has interest in improving students' academic buoyancy, this research could provide insight and even practical application regardless of location. By finding clear themes regarding how high schools can positively influence students' academic buoyancy, then to the degree that other schools have students with similar experiences related to academic buoyancy, the findings could be very relevant.

The transferability may not be limited to other high schools. If certain identified factors are perceived as particularly supportive to the development of academic buoyancy, school administrators and educators could consider how those same concepts may be present in an elementary, middle, or collegiate environments.

Limitations

The limitations of the study related to design or methodology were specific to the participants and the nature of the topic. The fact that all participants were drawn from a single collegiate institution may in some ways have resulted in outcomes that may be different than if participants had been drawn from multiple collegiate institutions. Also, the participants were drawn from a relatively small college and participants from a larger university could have yielded different results based on the number of potential participants. The participants had attended high school within 4 years of the interviews. For some, there may be a dulling of recollect or a shift in perception the farther out from high school they were. These limitations may negatively impact the transferability of the results.

Regarding the nature of the topic, the outcomes were specific to high school experiences as recalled by participants and therefore were likely be more limited than all

high school experiences experienced by all recent high school students. Another limitation was that an interview is effectively a single data-gathering experience. As such, the participants' mood, degree of interest, depth of understanding, and ability to recall high school experiences in that moment may place limits on richness of the data collected. However, all participants were provided an opportunity to provide additional input and feedback both on a voluntary basis and as part of the participant review process. None chose to provide additional information or correct, improve, or question the transcripts or conclusions drawn.

I have a depth of understanding on the topic of academic buoyancy that was unlikely to be the same for participants. As an educator, I am biased toward improving students' performance and believing that there are ways that schools can facilitate students' improvement. As such, when I was conducting interviews and reviewing data, my bias toward wanting and believing in school-based efforts to improve students' performance could have influenced my interactions with participants and interpretation of the data. I endeavored to limit the influence of this bias by using open-ended questions, keeping clear and thorough notes, including all data in the analysis, and enlisting the aid of a third-party reviewer to help eliminate any bias.

Significance

The purpose of this study was to investigate the perceptions of recent high school students regarding the common academic setbacks and challenges they experienced in high school and how high schools could support students experiencing these challenges. Positive social change can be affected by improving the experience and outcomes of

students. With better understanding, administration and faculty can more effectively engage students in ways that can help cultivate buoyancy and therefore provide positive social change. Earning better grades is related to a better sense of subjective well-being (Quinn & Duckworth, 2007). To the extent that academic experiences are linked to happiness, satisfaction, motivation, and other social proactive constructs, improving academic buoyancy could provide very real positive social change for individual students as well as for the culture of a school, family, and community.

The body of extant research establishes definitions of academic buoyancy and identifies the positive effects that academic buoyancy can have on students. In my literature search, studies that asked the opinions of students about their subjective understanding of how their school helped or hindered the development of academic buoyancy were nonexistent. The literature exposes a gap in practice regarding students' perspectives on the practical ways high schools can help promote academic buoyancy (Datu & Yuen, 2018). Martin (2013) recommended future scholars should complete student interviews while Collie et al. (2017) recommended that future researchers should juxtapose the buoyancy and values held by students themselves. Insofar as academic buoyancy is a component that is helpful in both the short and long term and is also a skill that can be taught or developed, schools can engage in positive social change by gaining insight on how to best facilitate the cultivation of academic buoyancy in students and helping their students to develop academic buoyancy. One avenue toward a better understanding of this topic is to ask the opinions of participants who have knowledge of both the school and their own experience as it relates to academic buoyancy. Such a

strategy can also give students an authentic and personal voice in research which can add an important element of positive social change by empowering the perspectives of the students.

The information collected in this study added to the body of knowledge regarding academic buoyancy and may provide faculty and administrators with knowledge that can be used to better understand how students view the school's role and function in academic buoyancy cultivation. The knowledge and understanding borne of this research effort may allow and empower administrators and faculty to discuss, develop, and deploy new programs that are designed to improve students' success through the cultivation of buoyancy as part of a continued policy of positive social change.

Educators and students may be well-served by the results of this research by virtue of deeper understanding of the student experience—specifically the intersection of school experience and buoyancy development—and resultant programming. The educational community may be positively served by the initial research to the extent that the information is applicable and useful in their respective school environments. Every school has its own unique and complex components, constituents, and curriculum. All schools work with students and all students may have an opportunity to be better served through a better understanding of how to cultivate buoyancy.

Schools must be cognizant of factors that can help the development of adaptive coping mechanisms in students and must endeavor to diligently apply practices that support development of buoyancy. This research can improve the understanding of ways schools can apply practices that support development of academic buoyancy. Improving

academic buoyancy can improve student engagement (Rodrigues & Magre, 2018) and academic performance (Colmar et al. 2019). By learning how a school can influence academic buoyancy in students, one could learn how to make the school experience, and perhaps the broader life experience, more manageable, joyful, and successful one student at time.

Summary

Academic buoyancy is defined as "students' ability to successfully deal with academic setbacks and challenges that are typical of the ordinary course of school life" (Martin & Marsh, 2008a, p. 54). The construct of academic buoyancy is new, having been introduced by Martin and Marsh in 2008; therefore, an opportunity existed to add to the body of literature on the subject (Datu & Yuen, 2018). Drawing from conceptual frameworks regarding resilience established by Werner and Smith (1977) and academic buoyancy established by Martin and Marsh (2008a), this basic qualitative research was focused on learning from the perspective of recent high school students regarding common academic setbacks and challenges experienced in high school, strategies they used to manage them, and how high schools could support students experiencing these challenges. The actionable part of this basic qualitative research study included interviewing recent high school students to record their perspectives on the topic. Acknowledging that there were limitations to this study, there remained opportunity to address gaps in the literature such as students' perspectives and how a school may influence students' academic buoyancy.

In terms of transferability, the results of the research may be diverse enough to be applicable across a range of schools. Furthermore, the results can be transferred to educators who are interested in gaining a better understanding of the students' perspectives regarding how schools may influence the development of academic buoyancy. Consequently, this qualitative research study provided useful and applicable information to improve the body of extant literature.

Chapter 1 has provided both a broad background and concise components of this research effort. As part of this chapter, some of the relevant literature has been referenced. What follows, in Chapter 2, is a much more robust review of the literature relating to academic buoyancy.

Chapter 2: Literature Review

The problem I addressed in this study is the lack of student input in the development of resources to support academic buoyancy, leading to a gap in educational practices. Academic buoyancy is the ability to deal with academic setbacks and challenges that are typical of the ordinary course of school life (Martin & Marsh, 2008a). The purpose of this study was to investigate the perceptions of recent high school students regarding the common academic setbacks and challenges they experienced in high school and how high schools could support students experiencing these challenges.

The concept of academic buoyancy stems from a positive psychology approach and is closely related to research regarding resilience which has been accumulating since Werner and Smith's (1977) landmark longitudinal study regarding protective factors as they relate to individuals' success. Academic buoyancy was identified in the literature as a concept linked to the students' success (Martin & Marsh, 2008a). Low academic buoyancy is related to poor outcomes among students, which can present problems in schools. The low success rates among students are not limited to the high school environment, nor to the local or even regional institutions; low academic achievement is a problem that exists worldwide (Martin, Ginns, Papworth, et al., 2013; Martin et al., 2017; Miller et al., 2013; Sadeghi & Khalili Geshnigani, 2016). This research was designed to gain more understanding from students' perspectives of how high schools can cultivate academic buoyancy.

Chapter 2 includes a description of the literature search process including key terms, search engines, data bases, and conceptual framework. The focus of this chapter is

a full literature review which represents an exhaustive review of the current literature and a summary with conclusions that closes the chapter.

Literature Search Strategy

To understand fully the important underlying conceptual factors of this dissertation (e.g., the history of resilience research, the changes over time to resilience concepts, the birth of academic buoyancy as a concept, and the relationship between academic buoyancy and classic resilience), I conducted an extensive review of literature concerning the concepts of buoyancy, resilience, and grit, as they relate to students. I obtained published material using local libraries, Google Scholar, and the Walden University Library. I accessed multiple databases through the Walden University Library including EBSCO, ERIC, NCES, SAGE, ProQuest, Taylor and Francis, and the U.S. Department of Health and Human Services. I began the search process by using *academic buoyancy* as my baseline key term. Given the extent to which buoyancy was so closely linked with and often incorrectly referred to the concept of resilience in the literature, the next set of search terms included *resilience, student resilience,* and *secondary school resilience* as a way of compiling a basic collection of work that could lead to additional sources. Additionally, given that the concept of academic buoyancy was a product of the positive psychology movement, the term *positive psychology* was used as search term both alone and in conjunction with *academic buoyancy*. The information and references contained in the initial collection of work led to further publication mining using additional search terms including *academic adversity, academic resilience, adaptability, buoyancy, coping, everyday resilience, grit, growth mindset, mental toughness,*

mindfulness, protective factors, and *school climate* as stand-alone terms and in conjunction with each other and other terms that included *school, high school, secondary school,* and *student.*

Some of the foundational research was conducted as far back as 1977, but a fair amount of research on resilience was available from the last decade. The most difficult research to find was specific to *academic buoyancy* because it was a relatively new term as applied for the purposes of this study. One of the goals of a literature review is to achieve saturation—to review and absorb enough relevant material to have a full and deep understanding of the topic. I felt that I had reached saturation when each new article I read did not offer much, if any, distinctly new information, but rather provided corroboration or support for work that had already been reviewed. Because of the natural conceptual intersections between resilience and buoyancy, as the collection of sources grew, so did the recognition of common themes. These themes will be identified and discussed below in the "Literature Review Related to Key Concepts and Variables" section.

Conceptual Framework

The conceptual framework specific to this work was provided by Martin and Marsh (2008a, 2008b, 2009), who established academic buoyancy as a distinct and researchable construct. Martin and Marsh first introduced academic buoyancy by defining it as:

> Academic buoyancy is developed as a construct reflecting everyday academic resilience within a positive psychology context and is defined as students' ability

> to successfully deal with academic setbacks and challenges that are typical of the ordinary course of school life (e.g., poor grades, competing deadlines, exam pressure, difficult schoolwork). (2008a, p. 53)

Subsequent research has validated academic buoyancy as a distinct concept and has documented ways in which academic buoyancy interacts with other related concepts such as resilience, confidence, anxiety, and student performance. Using academic buoyancy as the conceptual framework provides established research as a foundation and supports the direction and goal of this research.

Historical Perspective and Seminal Works

The development of academic buoyancy did not happen in a vacuum (Martin & Martin, 2008a); instead, the concept was built upon the work of other researchers and has its roots in the literature of resilience. Werner and Smith's (1977) work was seminal in the area of resilience and attempted to discover why some people responded better to adverse circumstances than others. Their work was important because of the amount of information provided over a range of categories including birth conditions, physical and psychological status, school performance, and family characteristics (Rogoff, 1978). The basic foundations of a framework for understanding the complex and interactive components of developing adaptive coping, buoyancy, grit, and resilience can in many ways be traced back to the work done by Werner and Smith. Specifically, Werner and Smith (1982) established a framework in which protective factors were central to the understanding of developing resilience.

Since Werner and Smith (1977, 1982) published their work, researchers and practitioners have examined the concept of resilience across multiple environments. Because of the complex nature of resilience, the terminology and definitions can sometimes be confusing. Early definitions of resilience tended to focus on the employment of adaptive mechanisms for high-risk children in response to extreme adverse events.

Central to the earlier definitions of resilience are twin components of positive adaptation and significant adversity (Luthar et al., 2000). Much of the resilience literature focused on major life trauma—acute or chronic—such as abuse, death, and poverty. More recent researchers had differentiated between more acute forms of adversity and a more commonplace everyday resilience now identified as buoyancy (e.g., Martin, 2013; Martin & Marsh, 2008a). In both classic resilience and more recent buoyancy research, consideration of protective factors, initiated by Werner and Smith's work, continued to feature prominently and consistently.

Positive psychology was established as a new area of distinct psychological thought when Seligman (2004) addressed concerns that much of the work of psychologists has focused on mitigating misery that detracts from joy as opposed to building strengths that can bring joy to human life. Soon after Seligman officially introduced positive psychology as a focus, Martin and Marsh (2008a, 2008b) developed a foundational framework for buoyancy.

The first step was establishing academic resilience as a specific concept under the larger umbrella of resilience (Martin & Marsh, 2008a). The second step was determining

that academic buoyancy is a construct distinct and separate (though related) from academic resilience (Martin, 2013). The key distinction was that academic resilience, in keeping with the traditional resilience framework, was focused on positive adaptation in respect to school life to catastrophic events (e.g., abuse, loss of a loved one) whereas academic buoyancy was focused on positive adaptation to setbacks considered more common or typical (e.g., failing a quiz, underperforming on an exam). Academic buoyancy was clearly identified as being developed within the general framework of positive psychology (Martin & Marsh, 2008a); however, there was very little research specific to academic resilience, and even less research specific to academic buoyancy (Martin & Marsh, 2009). Researchers had showed that academic buoyancy was more relevant than academic resilience when predicting low-level negative outcomes such as anxiety, uncertain control, and failure avoidance (Martin, 2013). Anxiety has a significant relationship with low academic buoyancy (Martin et al., 2010).

The concept of resilience is an idea that has been explored by philosophers and social scientists for a very long time. Within the last quarter-century, academic resilience has been identified and researched. It has only been in the most recent decade that academic buoyancy (and by extension, buoyancy as a larger construct) has been recognized and examined by practitioners and researchers. Under the contextual umbrella of positive psychology championed by Seligman, the construct of academic buoyancy was a new area of exploration that had been defined and initiated by Marsh and Martin (2008a, 2008b, 2009). Given the work specific to academic buoyancy, the extant literature was not as robust as some of the larger, older concepts relating to resilience.

Nonetheless, thanks to the work of a handful of researchers, a sufficient body of knowledge existed to empower today's practitioners to engage in further efforts to better understand the concept of academic buoyancy.

Literature Review Related to Key Concepts and Variables

To understand academic buoyancy, one should review a number of important, related concepts. This is in addition to reviewing the relatively few published studies specific to the construct of academic buoyancy.

Positive Psychology, Resilience, and Academic Buoyancy

Positive psychology is a particular branch of the discipline developed and championed by Seligman (2004). Buoyancy and resilience share space under the theoretical umbrella of positive psychology. Positive psychology studies the factors that contribute to the most adaptive approaches employed by people, groups, and institutions (Gable & Haidt, 2005). This is different than traditional psychology which identifies disorders and problems, and seeks to correct them. Positive psychology is a proactive, protective model. Academic buoyancy is, itself, a protective competency as Putwain, Gallard, and Beaumont (2020) found that academic achievement of highly academically buoyant students was protected in the presence of certain forms of adversity (e.g., non-attendance and misconduct). Exploring the history of positive psychology, Wong and Roy (2017) noted that the first iteration of positive psychology was limited as it focused almost entirely on the positivity side of a person's psychology and was too limited and binary to provide an effective model. Wong and Roy identified the need for a second, more inclusive model that would acknowledge both the positive and negative psychology

of a person and engage in a more complete, inclusive person-centered approach. Lomas et al. (2020) described three "waves" in the positive psychology movement. The first wave was focused on the establishment of the concept and limited in scope. The second wave was focused on discerning the finer points of "positive" and "negative" components within the psychology of the individual. The third and most current wave goes beyond the individual person, and therefore beyond the confines of personal psychology, to embrace a much more nuanced and complex model that includes consideration of the groups and systems of which people are a part. One useful way to examine theories of resilience is to adopt a broad, complex approach that considers biological, social, and/or ecological systems (Ungar et al., 2013). If one were to explore a complex model, parenting styles and parental personality traits might be included. Soheili et al. (2020) found that the relationship between parental personality traits and academic performance is significantly mediated by academic buoyancy. Rohinsa et al. (2020) found a direct and significant effect of parental support on academic buoyancy. Salehi (2021) found that parental involvement in academic tasks increases academic buoyancy in students through the variables of satisfaction and academic engagement. Parent personality traits, level of support, and degree of involvement are just a few of the components that might be included in a broader view of positive psychology. Although positive psychology has had strong support in certain areas, Kern et al. (2020) offered a cautionary stance to positive psychology, warning that the excited investment, but relatively nonstandardized approach to the topic could lead to exaggerated claims and expectations as well as potential harm. Academic buoyancy is a form of positive psychology and so it is appropriate to view and

research it under that conceptual umbrella. However, researchers should be careful to avoid exaggerated claims or expectations.

Expanding on the work of Werner and Smith (1977, 1982) of examining resilience within the context of protective competencies, Dyer and McGuinness (1996) noted that one of the key outcomes in resilience is effective coping. Effective coping has several important factors that interact with each other. Dyer & McGuiness, 1996 identified four critical, protective factors for supporting effective coping mechanisms: rebounding and carrying on; a sense of self; determination; and a prosocial attitude. Although academic buoyancy can intersect with coping mechanisms, and it can help individuals manage setbacks, Putwain et al. (2012) found that academic buoyancy is a concept distinct from coping.

The research did not indicate a single factor that alone reliably predicts resilience; however, there were some important consistencies to consider. The more a child is exposed to adversity, the greater is the importance of environment and resources in the child's development of resilience (Zimmerman et al., 2013). Children exposed to higher levels of stress tend to be more likely to use maladaptive strategies for coping (Stix, 2011). What may be considered an adaptive approach in one context may be considered maladaptive in another context. Some responses to stress may be termed "ugly" because they are potentially socially less than ideal (e.g., commonly considered narcissistic or dysfunctional) but can ultimately be adaptive for the individual dealing with crisis (Stix, 2011). Regarding the relationship between academic buoyancy and academic adversity, Martin and Marsh (2020) found that academic buoyancy predicted lower levels of

subsequent academic adversity, but that academic adversity did not predict higher levels of subsequent academic buoyancy. That is to say that academic buoyancy has an effect on how students are able to manage adversity but experiencing adversity does not strengthen a student's academic buoyancy.

Luthar et al. (2000) noted three consistent themes affiliated with resilience: close relations with supportive adults, effective schools, and connections with competent, prosocial adults in the wider community. Note that close relations with supportive adults is a category distinct from connections with competent, prosocial adults in the wider community; both themes are important. Zimmerman et al. (2013) described three factors that can promote resilience (ethnic identity, social support, prosocial involvement) and indicated that interventions can enhance the development of resilience in youth. Here, again, support and social engagement are noted as important, but the added component of ethnic identity is added. Under the framework of motivational development, Skinner and Pitzer (2012) had been particularly instrumental in examining the ways in which student engagement, coping mechanisms, and everyday resilience relate to each other. Coping mechanisms support everyday resilience, and everyday resilience can improve student engagement. Might it also be true that engaged students enjoy stronger relationships with supportive and prosocial adults?

Hurlington (2010) found that schools and teachers play a critical role in student development of resilience and identified seven strategies for establishing environments that foster resilience. These seven strategies can be summarized as caring relationships, high expectations and academic standards, and opportunities for participation and

contribution. Middleton et al. (2020) explored the impact of assessment on academic buoyancy and found that the relationship between assessor and assessed can influence academic buoyancy. Ghenaati and Nastiezaie (2019) found that employing certain specific effective teacher features can enhance academic buoyancy in university students. Cahyadi and Rohinsa (2020) found that teacher support has a direct significant effect on academic buoyancy and that teacher support also has a mediated effect on academic buoyancy through basic need satisfaction. This paragraph identifies several components that center on ways teachers can influence academic buoyancy. Perhaps deploying programs and strategies similar to these would be useful for schools in the effort to develop academic buoyancy in students.

Specific to the preparation of high school students for matriculation to higher education, understanding if there is a relationship between resilience and academic performance at the higher education levels may be valuable. Regarding academic resilience, the way in which undergraduate students perceive their own academic abilities is a significant predictor in their academic resilience (Cassidy, 2015). Specific components (e.g., spirituality, competence) can have differing levels of influence and meaning depending on the gender of the student (Allan et al., 2014). Other demographic components (e.g., grade level, and absenteeism) as well as gender can influence resilience (Arastaman & Balci, 2013). According to these studies, a number of items can influence resilience including the way students perceive their own ability, spirituality, grade level, and even gender. Perhaps there are ways that schools can become more aware of these

factors and incorporate strategies that use increased awareness of these factors to maximize opportunities to improve buoyancy.

Skinner et al. (2013) explored children's coping processes in the academic environment as part of a larger model of motivational resilience. The authors identified five adaptive and six maladaptive ways of dealing with academic problems. The context of this research was focused more on everyday coping than responding to severe incidents and adopted a self-deterministic motivational model. The five adaptive responses were strategizing, help seeking, comfort seeking, self-encouragement, and commitment. The six maladaptive responses were confusion, escape, concealment, self-pity, rumination, and projection. These adaptive and maladaptive responses were analyzed regarding their correlation to self-system processes of relatedness, competence, and autonomy as well as motivational concepts of engagement, reengagement, disaffection, catastrophizing, and emotional reactivity. The results support the notion that there is useful overlap in exploring concepts of adaptive and maladaptive academic coping mechanisms in concert with the larger context of motivational resilience. Regarding the adaptive response of commitment, in a study that produced results inconsistent with previous studies, Gazki et al. (2019) found no significant relationship between academic commitment and academic buoyancy.

Although much of the research provided a positive perspective on resilience and the scholarly articles tended to encourage practitioners to find ways to improve resilience, not everyone agrees. Noting the U.S. Army's recent efforts to establish a resiliency training doctrine, Stix (2011) raised the question of whether it is worth the time and

energy to train people in resilience, or if people will respond naturally and appropriately based on their unique psychological make-up. Stix indicated that time and resources may be better spent identifying and leveraging existing personal strengths rather than attempting to deploy one-size-fits-all programs for resilience training, which is important to consider in the context of this research as the goal was to provide insight for some form of buoyancy programming.

The body of literature regarding positive psychology, resilience, and buoyancy is robust. The relationships between these three constructs and shared components (e.g. coping) is complex. These are important elements to understanding the concepts related to this study.

Buoyancy

Academic buoyancy is a new construct, introduced by Martin and Marsh (2008). Drawing a distinction from the construct of academic resilience which typically focused on chronic or acute challenges to academic achievement (Martin, 2013), academic buoyancy is defined as "students' ability to successfully deal with academic setbacks and challenges that are typical of the ordinary course of school life" (Martin & Marsh, 2008a, p. 54). Martin (2013) showed that academic buoyancy and academic resilience are distinctly different but correlated concepts. The two constructs were found to represent distinct factors that shared about 35% variance. Martin (2013) also found that academic buoyancy can predict academic resilience and academic resilience can predict major outcomes. Buoyancy and resilience are distinct based on differences in two specific areas: degree and type (Martin & Marsh, 2008a, 2009). Academic resilience and

academic buoyancy are separate and distinct concepts, though there is some correlation with related factors. The focus of this study is academic buoyancy which is possible thanks to the work of Martin and Marsh (2013, 2008a) identifying academic buoyancy as a distinct concept that can be explored,

The relationship between academic achievement and academic buoyancy is difficult to effectively study due to many related and integrated elements (e.g., protective factors, motivational components, emotional disposition, etc.). Datu and Yang (2021) found that academic buoyancy had an effect on academic achievement indirectly through motivation. Yun et al. (2018) found that not only did higher academic buoyancy relate to higher achievement in a classroom setting for learning a second language, but it also sustained motivation for language learning. Gellor (2019) found that academic buoyancy was necessary for mathematic achievement, but was insufficient without the proper school environment. Although the relationship is complicated, there is evidence that academic buoyancy is related to academic achievement. To the extent that academic achievement is something that schools are concerned with, this study may help influence their efforts in this regard.

In the vein of motivational elements, Martin et al. (2010) showed that that there are five motivational constructs which are significant predictors of academic buoyancy. These constructs are known as the “Five C’s” and include confidence, coordination, commitment, composure, and control. Another important predictor of academic buoyancy is psychological risk. Again, five constructs have been included in the basket defining psychological risk: anxiety, fear of failure, uncertain control, emotional instability, and

neuroticism (Martin, Ginns, Brackett, et al., 2013). Control is a construct shared between both models. All five of the named psychological risks significantly negatively predict academic buoyancy and vice versa (Martin, Ginns, Brackett, et al., 2013), which means that to the extent that these risks are mitigated or reduced is the extent to which academic buoyancy may be improved. These studies provide information relative to the relationships between academic buoyancy and related concepts in the area of motivation and psychological risk. Control is a consistent factor between both areas and may be particularly important for consideration when schools seek to improve academic buoyancy in students.

Definitive causal relationships are difficult to locate; however, the linking construct of control is clearly an important factor in the discussion. When students experience positive academic achievements (e.g., earning good grades or successfully meeting challenges), they believe themselves to have greater control over future academic successes. Greater control can lead to better ability to manage setbacks in the academic environment, which is a key component of academic buoyancy (Collie et al., 2015). Hoferichter et al. (2021) found that in middle school students academic buoyancy affected school satisfaction. Here again one can see the importance of control as a contributing factor to academic buoyancy. Central to the notion of control is positive academic achievements, and through the linking of academic buoyancy therefore affects school satisfaction. To the extent schools are concerned with student satisfaction and academic buoyancy, finding ways to provide positive academic experiences may be useful.

af Ursin et al. (2021) found that academic buoyancy and social support fully mediated the effects of academic stress on cognitive engagement in a study of young school children. Thomas and Allen (2021) found that academic buoyancy partially mediated the relationship between certain elements of student engagement (specifically, behavioral engagement, emotional engagement, and emotional dissatisfaction). Bakhshaee et al. (2017) found that academic buoyancy is directly affected by positive youth development in adolescents. The extent to which a person can find meaning in life can positively predict academic buoyancy (Soltani Benavandi et al., 2017). Dahal et al. (2018) found that when students face academic failure, academic buoyancy remained high in students who have support through strong cultural connections and belief systems. These studies link positive development, including belief systems and finding meaning in life, with academic buoyancy and identify that academic buoyancy supports the engagement of students. For schools that seek student engagement and strong student academic buoyancy, perhaps finding ways to provide positive development, including ways to support student belief systems and finding meaning in life would be helpful.

As it was a relatively new concept, the amount of available literature borne of qualitative research regarding buoyancy was not as robust as one might have hoped. However, the concept of buoyancy is grounded in research regarding resilience (Putwain et al., 2012) and is also related to grit (Yeager & Dweck, 2012). Resilience and grit are two terms that are closely related to buoyancy and each other and are often incorrectly used interchangeably. The literature regarding resilience addresses the ability to adapt to and overcome significant adversity (Craciun, 2013). Grit incorporates elements of

resilience and buoyancy, but also includes elements of concentrated effort and focus, of choosing to stick to a path and the decisions that must be made to continue moving forward (Perkins-Gough, 2013). Fong and Kim (2019) found that grit and academic buoyancy are modestly correlated with each other, and suggested that this was due to a shared motivational component. Given the overlaps in terminology and conceptual elements, one may naturally question to what extent each construct is unique as opposed to a new name for an already-identified construct. Suffice it to say, constructs such as grit, resilience, and buoyancy are closely related and can share common factors, including motivational component. However, each construct is distinct and the focus of this study is specifically academic buoyancy,

Putwain et al. (2012) asked if academic buoyancy was the same as or different from the already well-established concept of adaptive coping. In fact, Putwain et al. found that buoyancy is unrelated to coping and that academic buoyancy can be identified as a construct distinct from adaptive coping. Academic buoyancy is an important concept relating to adaptive response and success in the academic environment (Collie et al., 2015). Buoyancy relates to an individual's problem response to everyday challenges (Martin & Marsh, 2008b). Buoyancy can be developed through the interplay of experiences and individual mindset (Martin, 2013). Adaptive coping was a construct established prior to academic buoyancy, and the two constructs, though related, are not the same. Schools that are interested in improving students' adaptive responses to overcoming everyday challenges in the academic environment should be aware of the relationship of academic buoyancy with and individual's experiences and mindset.

Academic buoyancy is a concept specific to the academic environment. As most students experience more than one subject in the academic environment, Malmberg et al. (2013) conducted research exploring student perception of buoyancy across multiple academic disciplines. Malmberg and colleagues found that although student perceptions of competence, difficulty, and effort may vary between specific subjects (e.g., math, science, physical education), student perceptions of academic buoyancy remained more constant, which could be useful in exploring how students may approach academic challenges across a range of subjects or programs. It may be useful for schools interested in improving student academic buoyancy to acknowledge that students will likely have different perspectives of their own abilities across a range of curricula, but the level of academic buoyancy will likely be perceived as more constant.

In many of today's schools, high stakes testing has become a common experience. Putwain et al. (2015) showed that there is a negative relationship between test worry and academic buoyancy and that students who were more academically buoyant experienced better performance on high stakes tests. Putwain, Wood, and Pekrun (2020) provided additional evidence that the relationship between anxiety and test performance is moderated by academic buoyancy, that is to say that when buoyancy was high, anxiety was low and performance was high. Sometimes, teachers employ fear appeals to motivate student performance. Symes et al. (2015) found that academic buoyancy serves an enabling and protective role specific to fear appeals used in connection with high stakes examinations. Hirvonen et al. (2020) found that higher academic buoyancy in students predicted lower avoidance behaviors, fewer failure expectations, lower boredom, and

higher hope and task-oriented planning. Azadianbojnordi et al. (2020) reported a relationship between academic hope and academic buoyancy and found the relationship between academic engagement and academic hope was partially mediated by academic buoyancy. Putwain, Gallard, and Beaumont (2020) found that academic buoyancy protects academic achievement against some types of minor adversities. These studies show that academic buoyancy can be a protective and enabling force that helps students achieve in several categories, including test performance. Additionally, academic buoyancy can improve hope which can lead to improved engagement. Academic buoyancy can also protect against fear appeals which are generally unhelpful. This information may be helpful for schools that are interested in developing approaches that improve student academic buoyancy.

As this current work was being engaged, the world experienced a global pandemic (COVID-19) that dramatically changed many aspects of life, including education, for billions of people. For many students, the traditional experience of in-person learning had to shift to a hybrid or fully remote (on-line) model. Seeing an opportunity for additional research on academic buoyancy as it relates to modern education, Abdellatif et al. (2020) found a positive relationship between academic buoyancy and students' attitudes toward using Blackboard, a common online learning platform. To the extent that online learning may become an increasingly present part of the student experience, it may be useful to appreciate the finding that there is a relationship between academic buoyancy and student attitude toward at least one of the common online learning platforms.

Schools' Influence on Buoyancy

Following up on the success of Putwain et al. (2015), Putwain et al. (2016) reported on the relationship between maladaptive test anxiety (worry) and academic buoyancy and provided recommendations for in-school training that can improve student performance. Specifically, two general implications for educational practice were described. The first implication offered that "training students in academic buoyancy could be an effective way of ameliorating the performance-interfering influence of worry" (Putwain et al., 2016, p. 1821). This recommendation referenced the Five C's identified by Martin and Marsh (2006)—confidence (self-efficacy), coordination (planning), control, composure (low anxiety), and commitment (persistence)—and suggested that programs designed to promote academic resilience could be used to train students to manage the more typical challenges considered the domain of academic buoyancy. The second implication recommended that educators could encourage students and deliberately construct instructional programming to support planning and study strategies to improve academic buoyancy and further reduce maladaptive anxiety. Putwain, Wood, and Pekrun (2020) also found that academic buoyancy moderated the relationship between anxiety and performance on tests. Calhoun et al. (2019) researched the Five C's as they relate to both athletics and academic buoyancy, finding that there is some evidence for a multidimensional buoyancy model that shows some generalizing across both academic and athletic domains. These studies may be very useful for schools engaged in developing programming to improve student academic buoyancy. In short, academic buoyancy can reduce the maladaptive component of worry and encouraging

students while developing programming that supports planning and study strategies is helpful in further improving student academic buoyancy.

Recently there has been an increased interest in the non-cognitive components of academic performance including the related concepts of resilience, buoyancy, and mental toughness (Clough et al., 2016; McGeown et al., 2016). Hejazi and Abbasi (2021) found that when teachers guide students toward a model in which they focus on personal best goals, their academic buoyancy is improved. This suggests that for purposes of improving student academic buoyancy, it may be useful for teachers to spend less attention on comparative student performance on assessments, and instead focus on individual student success.

Effective programs may improve resilience by disrupting poor patterns and changing a student's social ecology (Ungar et al., 2014). Golestaneh and Behzadi (2019) found that positive psychology intervention training can enhance academic buoyancy. However, Putwain et al. (2019) found mixed and equivocal effects from a specific positive psychology intervention on academic buoyancy. Positive psychology interventions (PPIs) are efforts designed to improve happiness and decrease depressive symptoms (Wellenzohn, et al., 2018). Puolakanaho et al. (2019) found that a specific intervention program (Youth COMPASS) resulted in a reduction in stress symptoms and an increase in academic buoyancy. Using meta-analysis, Hendriks et al. (2020) found small to moderate effects for subjective well-being and psychological well-being, and small effects for depression, anxiety, and stress. In different meta-analysis research effort, White et al. (2019) found challenges with previously reported effectiveness of PPIs,

finding that effect on well-being were small but significant and effect on depression were variable and not statistically significant overall. Hirvonen et al. (2019) suggested that interventions designed to help students improve academic buoyancy may also decrease school stress and improve student performance. Malmberg et al. (2013) suggested that school interventions that are more broadly focused are more likely to be effective than more narrowly or subject-focused interventions. Ghorbani et al. (2020) found that a form of emotive behavior therapy increased academic buoyancy in a group of high school students. Research regarding the effectiveness of PPIs is mixed. But not all interventions are classified under the umbrella of positive psychology interventions. Specific to the goals of improving student academic buoyancy, schools may want to review existing available interventions across a range of options and consider efficacy, efficiency, and applicability to their respective tudent populations.

On the other hand, Cigman (2012) suggested that a return to more traditional education would be useful in developing buoyancy. Current educational trends see a departure from more strictly limited curricula and the inclusion of enhanced goals that attempt to specifically identify and address certain adaptive traits. Cigman contended that a return to focus on concept mastery carries with it an intrinsic motivational opportunity to support the development of personal skills such as patience, self-discipline, and resilience as these traits are often necessary for successful mastery of traditional curriculum. Academic self-concept is “one’s perception of one’s own ability in a specific academic domain” (Cooper et al., 2018, p. 200). Colmer et al. (2019) found a significant relationship between academic performance and academic buoyancy and that relationship

was mediated by academic self-concept. Haktanir et al. (2021) found that academic self-concept was positively related to students being able to adjust to college. Perhaps, in an effort to improve student academic buoyancy, in addition to concepts discussed above, a focused return to traditional concept mastery which may lend itself to a improving perception of one's academic ability could prove useful.

Datu and Yang (2018), Esmailzade Ashini et al. (2020), Javadi Elmi et al. (2020), and Rodrigues and Magre (2018), found a significant relationship between student engagement and academic buoyancy. Jalilian et al. (2018) found a significant positive correlation between academic buoyancy with perception of academic engagement and psychological hardiness. Ershadi Chahardeh (2020) found that academic buoyancy training in a school setting led to increased academic engagement and recommended that schools engage academic buoyancy training methods to improve academic characteristics. These studies provide evidence that schools can expect more academically buoyant students to likely be more engaged and successful students.

Regardless of the specific approaches a school decides to employ, school-based programing and the school environment can have an impact on students' academic buoyancy (Arastaman & Balci, 2013; Gamel, 2014). Adaptive approaches can be learned and when schools pay attention to important contributing factors such as safety, relationships, teaching, learning, and institutional environment, school climates can foster a resilient mindset (Cohen, 2013). Positive, "warm," student relationships with peers and teachers promote "everyday motivational resilience" (Furrer et al., 2014, p. 107). Farid and Ashrafzade (2021) found a causal relationship between improved teacher-student

interactions and academic buoyancy (mediated by academic self-efficacy and academic hope). However, teachers may not be good judges of students' academic buoyancy. Verrier et al. (2018) found that there are often significant differences between teachers' and students' self-reports of academic buoyancy and notes that teachers are often not very good at accurately assessing academic buoyancy in students. Although there may be discrepancies between teacher and student perspectives of how academically buoyant a student may be, it is clear that positive, meaningful relationships with teachers is important to the development of academic buoyancy. Schools should pay attention to encouraging these meaningful relationships.

Peer support is very important to the development of buoyancy (Arastaman & Balci, 2013). School climate perceptions (i.e., how students perceive the life and character quality of the school environment) and positive youth development (such as a different competence, confidence, connection, caring, and character) have a positive and significant effect on students' academic buoyancy (Bakhshaee et al., 2016). Skinner and Pitzer (2012) described a number of ways in which contributing factors (e.g., context, self, action, and outcomes and the intersections with engagement and disaffection) can be affected by teachers, peers, and schools as part of a process of developing intrinsic motivational tendencies. School-based mindfulness programs could have a positive effect on students' academic buoyancy (Ramasubramanian, 2017). Tajoldini et al. (2018) found that mindfulness-based stress reduction training can improve academic buoyancy in students. Mindfulness and relationships with teachers and peers are important to the way students perceive their school experience and influences the development of academic

buoyancy. Helping students establish these relationships with others and develop mindfulness may be useful for schools who are invested in improving student academic buoyancy.

Smith (2015) noted the problems associated with schools that focus on resilience-based programs, indicating that part of the challenge is the vague and conceptually weak nature of the word resilience. Smith urged schools to pivot away from resilience-focused efforts and toward academic buoyancy-focused efforts to help students be more successful. Part of this urging includes recommending schools to consider adopting approaches that celebrate individual growth, conceptualize failure as a natural part of the learning cycle, and praise effort over intellect. Martin et al. (2010) identified a need for further research regarding the context of teacher-related influences on academic buoyancy. This speaks to the challenge with the development of the research and the traditional relationship between closely related concepts such as grit, resilience, and buoyancy. Part of the success of any program a school might put into place should include educating parties about the definitions and background of the key components, perhaps most importantly the similarities and differences between resilience and buoyancy.

According to Collie et al. (2017) academic support, especially for high-needs students has significant positive effect on buoyancy. Those populations that may experience significantly more academic struggle or face challenges with managing change or uncertainty may in fact experience a larger positive effect from school programs designed to improve academic buoyancy (Martin & Burns, 2014). Not all

students struggle in school the same way and at-risk populations (e.g., those with disabilities or other learning differences) should be included in school planning for buoyancy cultivation.

Each generation is confronted with new challenges that stem from changing cultures, technology, and resources. What is consistent across generations is that challenges will certainly occur. If students experience challenge, cultivating an adaptive approach to challenge, by application of buoyant responses, will provide means to overcome challenge and lead to increased opportunity for success. To the extent that schools are concerned with educating students for the 21st century, one must acknowledge that effective and appropriate response to set backs must be part of that education. Though the specific, granular details of challenges experienced by students may include subtle change over time, the fact that challenges continue to occur will not be a surprise. Educators would do well to understand students' experiences in the local environment that can develop buoyancy in the students they are charged with serving.

Summary and Conclusions

Defined as "students' ability to successfully deal with academic setbacks and challenges that are typical of the ordinary course of school life" (Martin & Marsh, 2008a, p. 54), academic buoyancy is a construct grounded in the work regarding resilience and strongly influenced by positive psychology. Academic buoyancy is a concept related to grit, growth mindsets, and similar psychological elements, although it is uniquely and squarely focused on the academic environment. The definition of academic buoyancy has been established and studies have been conducted to successfully establish the construct's

independence from and relationship with other constructs (e.g., coping, academic resilience). Very little, if any, research has been conducted regarding students' perspectives or how schools can specifically influence academic buoyancy. Drawing from resilience literature, and assuming a general similarity between resilience and academic buoyancy, one may draw conclusions that school environment and programs can influence academic buoyancy. Very little research has been conducted to specifically explore or prove this line of thinking.

Thus, this research study represented an opportunity to fill gaps in the extant literature because it was designed to elicit students' perspective on how high schools can influence the development of academic buoyancy. The present study was unique insofar as the extant literature was lacking both students' perspectives and a firm understanding of how school culture and programming can affect students' academic buoyancy. The basis for this study was strongly supported by the existing literature and represented a unique effort that had not been undertaken yet by the educational community to collect relevant, useful information specific to the intersection of school culture and programing with academic buoyancy as perceived by the very individuals to whom the concept of academic buoyancy is being applied: the students. As will be seen below in Chapter 3, the methodology is specific and central to this aim.

Chapter 3: Research Method

The purpose of this study was to investigate the perceptions of recent high school students regarding the common academic setbacks and challenges they experienced in high school and how high schools could support students experiencing these challenges. This chapter restates the research question and clarifies the central phenomenon being studied. The role of the researcher is described including potential biases and the identification of potential power relationships. The methodology is explained, including participant selection, instrumentation, data collection, and data analysis. Trustworthiness (e.g., credibility, transferability, and dependability) is discussed as are ethical procedures and the Institutional Review Board application is included. A summary concludes this chapter and provides transition to Chapter 4.

Research Design and Rationale

The central concept for this study was academic buoyancy, defined by Martin and Marsh (2008a) as "students' ability to successfully deal with academic setbacks and challenges that are typical of the ordinary course of school life" (p. 54). The phenomenon at the heart of this research was recent high school students' perspectives regarding the common academic setbacks and challenges they experienced in high school, the strategies students used to manage the setbacks and challenges, and how high schools could support students experiencing these setbacks and challenges. The following research questions were established to collect information specific to the primary phenomenon.

RQ1: How do recent high school students describe the common academic setbacks and challenges they experienced in high school?

RQ2: What strategies do recent high school students identify as useful to overcoming the common academic setbacks and challenges they experienced in high school?

RQ3: What do recent high school students identify as ways in which high school leaders can help students overcome common academic setbacks and challenges?

Qualitative researchers collect and examine data using verbal methods such as interviews with a focus on learning about the meaning that participants place on a particular issue (Creswell, 2009; Lodico et al., 2010). I used a basic qualitative design in this research study. In this instance, the issue was academic buoyancy and how high schools can help students overcome academic setbacks and challenges. I developed the interview questions to provide an opportunity to learn from participants their perspectives regarding how high schools can influence the development of academic buoyancy. The answers to these interview questions were appropriately elicited from research participants who had knowledge of the subject and could provide useful feedback.

Merriam and Tisdell (2015) noted that education and similar fields tend to engage in activities that when researched, are often best explored using a qualitative approach. Qualitative research methods support efforts to understand how "people interpret their experiences…and what meaning they attribute to their experiences" (Merriam & Tisdell, 2015, p. 6). This study, based on the descriptions and definitions provided, was a basic qualitative design, and the methodology described below engages common best practices

for appropriate data collection. A basic qualitative design was determined to be best for this research effort as it maximizes the opportunity for breadth and depth of information and rich descriptions of the subject being examined.

Role of the Researcher

I conducted interviews and recorded the verbal data provided by participants. The role of the researcher in qualitative research includes effort to access the thoughts and feelings of study participants (Sutton & Austin, 2015). Following the data collection, I analyzed, coded, and interpreted the data to provide themes and conclusions.

I am the principal of a high school in close geographical proximity to the college from which participants were drawn. Fewer than 10% of the students at the college serving as the research site are graduates of the high school at which I work. While it is possible that a participant may have had existing relationship with me if they graduated from the school at which I am an administrator, attend the college from which participants were drawn, and volunteered to engage in the research, former students were not specifically sought for the study. At the time of the interviews, I had no institutional authority over the participants, and they were completely free to engage or not as they saw fit. If there was some negative carryover with a potential participant, he or she was in complete freedom to decline the invitation to engage. If an invitee volunteered to be part of the research study, they did so in complete freedom and without any form of coercive influence. The final group of participants from the entire college population was drawn from the pool of invitees who indicated voluntary willingness to participate. Creswell (2012) stated that “one-on-one interviews are ideal for interviewing participants who are

not hesitant to speak, who are articulate, and who can share ideas comfortably" (p. 218). By virtue of volunteering for participation, the participants self-identified as individuals who are willing and able to speak with me on the topic.

An important responsibility of the interviewer is to establish rapport (Merriam & Tisdell, 2015); therefore, as part of the preliminary contact and initial interview process, I sought to establish a sphere of honesty, warmth, comfort, authentic listening, and psychological safety for the participants. I accomplished rapport by providing an honest expression of purpose and meaningful, clear requests for the participants to provide their honest opinions. The participants were free to withdraw from the research at any point. The participants were invited to review the interview scripts and my interpretations of their perspectives and make adjustments and recommendations as they saw appropriate. The participants were also encouraged to be honest and truthful in every way, as the goal of the research was to learn from them their perspective regarding the intersection of high school experiences and the development of academic buoyancy.

Methodology

The purpose of this study was to investigate the perceptions of recent high school students regarding the common academic setbacks and challenges they experienced in high school and how high schools could support students experiencing these challenges. The participants were recent high school students drawn from a small, suburban college, and data collection was qualitative in nature, specifically interviews. The data were analyzed with consideration for trustworthiness and ethics.

Participant Selection

In any basic qualitative study, the researcher is typically concerned with the meaning that a phenomenon has for those people directly involved and data can be collected with interviews (Merriam & Tisdell, 2015). The general topic for this study was academic buoyancy, made more specific insofar as the research question asked how recent high school students perceived the common setbacks and challenges they experienced in high school, the strategies they used to manage them, and how high schools could support students experiencing those challenges. The research questions called for the perspectives of recent high school students to be the primary source of understanding.

A population is defined as "a group of individuals who have the same characteristic" (Creswell, 2012, p. 142). This research was focused on the perspectives of recent high school students. As the research aimed to collect information from participants regarding their high school experience it was important that the participants had experienced high school recently, to be able to effectively recall the experience. It was also important that the participants were not current high school students, allowing for some measure of objective distance from the experience to facilitate reflective recollection. The decision to focus on recent high school students' perspectives was because they can offer a combination of recent experiential recall and the ability to self-reflect.

A sample is a subgroup of the larger population that the researcher uses to represent the larger group (Creswell, 2012). In this basic qualitative study, the population

of all recent high school students was further reduced to a sample, drawn from a college located in southeast Pennsylvania. The college draws students primarily from Pennsylvania and surrounding states, but also has students from across the United States and around the world. The college is accredited by the Middle States Commission on Higher Education.

The criteria used to identify participants was students attending the institution who were willing to be involved in the study, who were available for a face-to-face interview, and who had attended at least 1 year of high school within the last 5 years. Walden University's Institutional Review Board (IRB) provided approval for the study, assigning the approval number 11-12-19-0550185. After obtaining permission for data collection from Walden's IRB and the study location's Human Subjects Research Committee, my initial request for engagement was via an email that was sent to all students for whom the college granted me access. Email was determined the most efficient way to reach the full complement of potential participants. The initial contact explained the intent of the research and invited the potential participants to respond. The initial contact also included an informed consent form and a link to a form that the potential participants could complete to collect contact information (name, phone, email). The form also collected an acknowledgement of informed consent, confirmed participants' willingness to engage in a face-to-face interview, and confirmed that participants had experienced at least 1 year of high school within the last 5 years. If a potential participant did not complete the form, the assumption was that they had opted out of the opportunity to be part of the research effort.

Once a pool of willing participants had been determined, I selected interviewees from the pool. Sadly, due to the outbreak of the global COVID-19 pandemic as my research was beginning, the pool of willing participants was much smaller than hoped. Ultimately, I interviewed all willing participants. Convenience sampling involves the use of participants selected because of their willingness and availability for study inclusion (Creswell, 2012). By virtue of volunteering for this study, potential participants had indicated that they were willing to participate and they believed they had something to contribute to the study, thus indicating that they believed they had some useful insight regarding the research. Practical limitations, especially regarding time, finances, and distance did not allow for an effective way to draw a sample for interviews from the population of all recent high school students. Convenience sampling has limitations; researchers employing this approach may not say with certainty that the results are representative of the entire population (Creswell, 2012). That said, it was the only method practically deployable in this case and can provide useful information for addressing the research question.

Because this basic qualitative research involved the exploration of individual student recollection and perspectives, the variability regarding specific memories or interpretations was nearly infinite. However, the goal of this basic qualitative research study was to determine consistent elements from the perspective of recent high school students regarding common academic setbacks and challenges experienced in high school, strategies they used to manage them, and how high schools could support students experiencing these challenges. Through careful use of the prescribed interview

questions that aligned with the research question and in conjunction with follow-up questions I was able to identify common themes among the participants' perspectives.

All students who indicated willingness to engage in the research were placed in a pool and informed of their status. From that pool, all were selected to be interviewed. Francis et al. (2010) recommended that an initial sample should be comprised of 10 participants, after which groups of three additional interviewees should be engaged until no new major themes emerge. Hagaman and Wutich (2017) found that 16 or fewer interviews were enough in homogenous populations and note that the quality of the interviews is often more important than the number of interviews. The ideal data collection process would include saturation—the point at which no new information regarding the phenomenon would be collected by interviewing another person (Merriam & Tisdell, 2015). To determine if saturation was met, I analyzed and coded for themes during the data collection process.

The final number of participants in this research was in part determined by the point at which no major new themes emerged but also by availability of willing participants. The initial pool of willing participants included three students so I sent multiple additional email requests and visited (with permission from the research site) several classes in which I explained my research and invited participation. Ultimately, there were nine willing participants, and it was clear that I was unlikely to gain more willing participants. The outbreak of COVID-19 had completely changed the educational landscape for the population and students had very little interest in taking on additional time commitments. Four themes were established and present by the completion of the

fourth interview. No new themes emerged after the fourth interview and each theme was present in every interview.

Instrumentation

One-on-one interviews are a well-respected approach in qualitative research (Creswell, 2009). I used face-to-face interviews and created specific interview questions (Appendix A) designed to solicit responses in line with the research questions. I designed the interview questions to align with the research questions and allow for open-ended responses to encourage broad and deep responses. I formulated follow-up questions as additional opportunities to solicit in-depth responses.

Each research question was sufficiently addressed through the interview questions as evidenced by the alignment table available in Appendix A. I developed the questions in consultation with advisers and colleagues who aided in the specific wording as well as the order in which they would be asked to maximize effectiveness of response and provide sufficient data. I established validity with member checking (see Merriam & Tisdell, 2015). I provided the interviewees with a transcript of their interviews as well as my preliminary analysis to determine if it was in line with their intent. As the purpose of this study was to investigate the perceptions of recent high school students, a semistructured interview was an appropriate format. A semistructured interview is used when it is important for the researcher to respond to concepts that may arise in the interview including the worldview of the participant and to new ideas that may be raised relating to the topic (Merriam & Tisdell, 2015). Using a one-on-one interview approach

allowed for the inclusion of probing questions which could be used to clarify information or gain additional depth of response (Creswell, 2009).

Procedures for Recruitment, Participation, and Data Collection

I selected participants based on a convenience sampling of students who attended a single college. In this case, the convenience was a combination of access by the local college administration, participants' willingness, and participants' ability to be part of a face-to-face interview. As part of the invitation to the study, I provided an Informed Consent Form to the participants. If the participants chose to participate, I collected a signed copy of the Informed Consent Form prior to scheduling an interview. I also provided a brief explanation of academic buoyancy as well as a copy of the interview questions to the participants in advance of the interviews.

Originally, the design called for an approach that, dependent upon the availability of participants, would result in scheduling interviews at a mutually-agreed upon time. The interview location was based on the preference of each participant; however, due to the pandemic restrictions placed on the region in which I was attempting to conduct the research, face-to-face interviews were impossible. Therefore, I used Zoom, a videoconference application that allowed for virtual face-to-face interviews with all participants. I recorded the audio of the conversations using a separate digital voice recorder. The appointments were still made based on a mutually agreed-upon time and the video conferencing also provided for the other important considerations when conducting interviews. It was important that the interview location protect the participant's confidentiality and provide an atmosphere appropriate for interviewing.

Using Zoom, the participant had total control of location. Minimizing distractions was also important and using Zoom allowed the participants to find a time and location that minimized distractions. Similarly, privacy and confidentiality are important considerations in order to maximize the likelihood that the participants are entirely forthcoming with answers. Zoom provided these things because the participants had total control of the time and location that the interviews took place.

The interviews began with opening remarks which included thanking the participants for engaging and verifying that the participant consented to the interview (Appendix A). I also acknowledged the tremendous stressors that the global pandemic had likely placed on the interviewees. I articulated the research problem and reminded the participants that the purpose of the interviews was to record the interviewees' perspective regarding common academic setbacks and challenges they experienced in high school, the strategies they used to manage them, and how high schools could support students experiencing these challenges. I briefly explained academic buoyancy and provided a definition (Martin & Marsh, 2008a).

I spent ample time before and during the interview to establish and maintain rapport and a sense of comfort and safety for the participant (Merriam & Tisdell, 2015). Jacob and Furgerson (2012) recommended that interviews should last 90 minutes or less. The invitation indicated that interviews for this research effort were expected to last approximately 60 minutes but could extend to 90 minutes depending on use of probing questions. In the end, the longest interview lasted 57 minutes and the shortest interview

lasted 23 minutes. The audio of the interviews was recorded, having secured participant permission, using an external digital recording device.

I took minimal field notes during the interview and briefly noted items that stood out (e.g., specific words, physiological cues) as deemed useful. Following the opening remarks, I asked a series of open-ended questions and used predetermined follow-up questions. Throughout the interview process, I employed additional probes as deemed appropriate and useful for deeper understanding. These exploratory follow-up questions were impossible to predict in advance of the interview as they were wholly dependent upon how the interviewee responded to the lead question (Merriam & Tisdell, 2015). Using pre-established research questions and follow up questions, as well as the judicious and appropriate use of additional probes, respondent perspectives were identified and recorded. At the close of each interview, I thanked participants for their engagement and informed them that a transcript of the interview as well as interpretations and findings based on the interview would be shared with them for their review and feedback as part of a member checking protocol.

Data Analysis Plan

Following the interviews, I supplemented the brief written field notes with additional notes that included thoughts, ideas, phrases, and other potentially useful data that I recalled from the interaction. I copied these more robust field notes to a password-protected electronic document. Also following the interviews, I transcribed the data from the recordings. I transcribed the audio myself and stored the transcripts in a password-

protected electronic file. I reviewed and organized the transcriptions and field notes in a document to provide both overview and specificity as appropriate.

Saldaña (2015) recommended engaging in initial coding as data is collected, not waiting until all data has been compiled. As part of the data analysis, I reviewed and categorized the interview data using a thematic coding process soon after each respective interview. For purposes of this coding process, I employed MaxQDA. The data from the field notes and transcripts were entered into MaxQDA, explored, and reviewed within the MaxQDA user interface.

Following standard qualitative analysis recommendations, the first step was open coding in which the collection of data (field notes and transcripts) for each interview was reviewed and notations (codes) were made regarding items that seem potentially relevant. Open coding included identifying the research questions addressed by each datum. I also coded responses to interview questions that related to specific research questions. Some responses, though specific to a particular interview question, provided insight for more than one research question. These responses were coded as such, identifying more than one research question as applicable. These codes were further grouped together or combined based on similarities as part of a process commonly called axial coding (Merriam & Tisdell, 2015) and I completed this process for each interview. I noted similar codes across data and the patterns became the categories or themes (Merriam & Tisdell, 2015).

Saldaña (2015) recommended a multi-phased approach to coding interview data during which as the information is coded and recoded, the codes and categories become

more refined and often more conceptual. Categories should be faithful to the purpose of the research, be exhaustive (the collection of categories encompass the entire range of possible outcomes) and be mutually exclusive (items within a category are only applicable to that single category and no others) (Merriam & Tisdell, 2015). Saldaña identified that sometimes subcategories may be appropriate, so they may be employed as appropriate and useful. Across all interview data, I identified and analyzed common words, phrases, events, programs, perspectives, experiences, recommendations, and other items.

As this research effort was designed to better understand a phenomenon (academic buoyancy) through the perspectives of multiple participants, this analytic process could be considered imaginative variation which is a form of phenomenological analysis (Merriam & Tisdell, 2015). The data analysis plan called for areas of discrepancy, divergence, or significant uniqueness to be noted. After the data were explored, I noted no areas of discrepancy, divergence, or significant uniqueness.

Trustworthiness

Trusting the results of research is a critical component of the research effort (Merriam & Tisdell, 2015). The trustworthiness of this research effort was established in several different ways. Credibility was established through respondent validation or member checking. To facilitate member checking, the preliminary findings were shared with participants who were asked if the findings resonated with the meaning they intended (Carlson, 2010). Peer debriefing (see Anney, 2014), a process through which insights and conclusions are shared with and questioned by a third party familiar with

qualitative methodology was also be employed, using a humanities professor who had offered to help my efforts in this enterprise and is well-versed in qualitative research. This professor did not and had never worked for the college that served as the research site. I spent adequate time collecting and analyzing the data, including seeking discrepant perspectives among participants (Merriam & Tisdell, 2015).

Transferability may be somewhat limited by the fact that the participants were drawn from a single college. Although this single college draws from many different high schools across the country and globe, it is a small, private college that represents a small percentage of recent high school students nationally and globally. As such, it is possible that some of the themes, conclusions, or recommendations may be applicable only to this relatively small sample. On the other hand, if the results resonate with the perception of other recent high school students or the assumptions and perceptions of school officials, the results of this study may be very useful for schools to consider in their own, individual efforts to improve academic buoyancy in their specific environments.

I established dependability by use of an audit trail, which was kept as a research journal including reflections, questions, and decisions made while the data were collected. The journal also included a running record of how I interacted with the data and accomplished the analysis. Confirmability was in large part managed through reflexivity. I considered how my background influences my decisions about process and interpretation of the results. These considerations were noted as reflexive entries in the research journal as appropriate.

Ethical Procedures

Maintaining high ethical standards is central to proper research and ensuring trustworthiness as well as honoring the human component of qualitative research (Merriam & Tisdell, 2015). I completed the National Institute of Health training course entitled "Protecting Human Research Participants." Additionally, the research proposal was authorized by the Walden Institutional Review Board which is tasked with ensuring that the proposed research complies with certain federal regulations and university policies. Specifically, the IRB ensures that appropriate levels of beneficence, justice, and respect for persons are clearly articulated as part of the proposed research. Part of the IRB process requires the securing of a letter of cooperation from community partners. In the case of this research, the local college was considered a community partner as that is the entity that aids in establishing contact with the participants. Because the college was sending the participation email on my behalf, a letter of cooperation was secured from the college for the purposes of this research.

In addition, I was required to submit my request and be approved by the research site's Human Subjects Research Committee. I initiated contact with that group's chairperson and was informed that I could begin that process which included submitting to the committee a list of proposed interview questions, a summary of the proposed method for gathering data (i.e., interviews), and a statement regarding data management. The committee chose to approve the research based on those components.

Informed consent that acknowledges participant privacy considerations is a crucial component of conducting qualitative research of the type described herein

(Creswell, 2009). The initial invitation to participate included an informed consent form which provided the opportunity for the participants to be informed about the purpose and method of research and acknowledge the consent prior to actual engagement with the interview questions.

My relationship with participants was another important ethical consideration (Creswell, 2009). I am the principal of a boys' high school in close geographical proximity to the college from which participants was drawn. Fewer than 10% of the students at the college serving as the research site are graduates of the high school at which I work. Because of the authority vested in administrators, careful consideration needed to be employed to ensure that participants did not feel threatened or coerced, and that full and honest responses will be provided. The participants were not under my authority and were over the age of 18. The participants' responses in the interviews were not linked back to them in the final report so that the individual and aggregate data were protected and confidential. That said, of the nine participants, seven of them had previous contact with me in some capacity, either as a student in the boys' high school for which I am principal or as a student in the girls' high school with which my school is very closely linked.

Participants who chose to be interviewed were never identified in field notes using real names or contact information. Interview data were collected and organized using non-personal nomenclature (e.g., Interviewee #1). I protected all information pertaining to the interview participants using encrypted electronic documents. Pen-and-paper field notes were secured in a private, locked filing cabinet which were then

transferred to digital copy and the originals were destroyed. I stored audio recordings in encrypted files. Upon completion of the project, the electronic data were stored on a non-network electronic storage device for 5 years to allow for review as necessary. After 5 years, the data will be destroyed.

Summary

The purpose of this qualitative research study was to investigate the perceptions of recent high school students regarding the common academic setbacks and challenges they experienced in high school and how high schools could support students experiencing these challenges. The population in this study included recent high school students, a sample of whom were drawn from a small college in Pennsylvania. I selected the participants for interviews based upon their willingness and ability to be interviewed as long as they attended at least one year of high school. I coded and categorized the data from the interviews, which contributed to the development of themes.

Chapter 4 provides a detailed recounting of the data collection process and an explanation of the coding process and what themes were identified. The results are presented which include summarized answers to the research question.

Chapter 4: Reflections and Conclusions

The purpose of this study was to investigate the perceptions of recent high school students regarding the common academic setbacks and challenges they experienced in high school and how high schools could support students experiencing these challenges. The problem I addressed in this study is the lack of student input in the development of resources to support academic buoyancy, leading to a gap in educational practices. The research questions were:

RQ1: How do recent high school students describe the common academic setbacks and challenges they experienced in high school?

RQ2: What strategies do recent high school students identify as useful to overcoming the common academic setbacks and challenges they experienced in high school?

RQ3: What do recent high school students identify as ways in which high school leaders can help students overcome common academic setbacks and challenges?

This chapter provides a description of the setting and data collection including unusual circumstances encountered. Data analysis and results are discussed as well as evidence of trustworthiness.

Setting

Participants were drawn from a small college located in southeast Pennsylvania. The participants' demographics and characteristics that were relevant to the study included that all participants were recent high school students and actively attending the college from which participants were drawn. The purpose of this study was to investigate

the perceptions of recent high school students regarding the common academic setbacks and challenges they experienced in high school and how high schools could support students experiencing these challenges. Unfortunately, as the participant invitation phase of this research was just beginning, the world experienced a pandemic due to COVID-19 which is an infectious disease caused by severe acute respiratory syndrome coronavirus 2. In very quick order, businesses and schools were shut down and people were required to engage in mitigation efforts such as social distancing and mask wearing.

During the pandemic, college students were blindsided by the tremendous upheaval created by organizational responses to the pandemic. Efforts to solicit participants became much more difficult than originally expected and fewer participants were willing to engage in the research than originally hoped. In-person interviews were impossible to conduct, so all communication needed to be done electronically, with technology such as Zoom used to conduct the interviews. The amount of effort to secure and engage with participants was much more than expected and was challenging. Although the number of participants was smaller than desired, the results were very consistent and saturation was achieved.

Data Collection

A total of nine participants were interviewed. Due to the pandemic, it took over 6 months to secure these volunteers. Each of the students indicated feeling overwhelmed and challenged due to the dramatically altered landscape of both their personal and educational lives. I collected the data via interviews (Appendix A) which I recorded using a voice recorder. I also took field notes during the interviews. The only variation from the

data collection plan presented in Chapter 3 is that the interviews did not take place face-to-face, but rather were conducted via Zoom. Ultimately, in some ways, Zoom interviews may have presented an advantage for the participants insofar as they had a high degree of control over the location from which they chose to be interviewed. Each participant was interviewed once. Length of interviews ranged from roughly 30 minutes to just under 1 hour. There were no unusual circumstances specific to the collection of data other than adapting to a completely different environment due to the pandemic.

Data Analysis

The field notes were reviewed immediately following each interview and notes (codes) were made identifying important words or phrases. Once all the interviews were completed, I manually transcribed the audio recordings of interviews, which enhanced familiarity with the text and an awareness of consistent patterns or concepts. I loaded the transcriptions of the interviews into a qualitative data analysis tool called MaxQDA. The original plan was to use QDA Miner, but upon further comparison of the programs, MaxQDA seemed to be more appropriate for the task at hand.

I reviewed the interview transcripts and categorized them using a thematic coding process that followed standard qualitative analysis recommendations. For each interview, I reviewed the text and made notations (codes) identifying items that seemed potentially relevant, including identifying which research questions were addressed by each datum. I coded the responses to interview questions that related to specific research questions as such. Initially, I identified 98 codes, which allowed for some subtle variation in specificity. These codes were distributed across the research questions, allowing for the

fact that some responses addressed more than one research question as per the alignment table provided in Appendix A. Of the 98 codes, 31 applied to RQ1, 76 applied to RQ2, and 64 applied to RQ3. In terms of frequency, the 98 codes were applied 106 times to RQ1, 231 times to RQ2, and 201 times to RQ3. That is to say that all research questions had codes that applied to them as one would expect, and RQ2 (What strategies do recent high school students identify as useful to overcoming the common academic setbacks and challenges they experienced in high school?) had the highest number of applicable items drawn from the data.

I grouped all codes together or combined them based on similarities as part of the axial coding process (see Merriam & Tisdell, 2015). I noted similar codes across the transcripts and those patterns became the categories or themes (see Merriam & Tisdell, 2015). I used a multiphased approach to coding the interview data in which the information was coded and recoded, allowing the codes and categories to become increasingly refined (see Saldaña, 2015). I also tried to establish categories that were faithful to the purpose of the research, exhaustive, and mutually exclusive (see Merriam & Tisdell, 2015). I grouped the initial 98 codes into four themes containing a total of 21 categories. The four themes were very clear: “commonly experienced setbacks,” “programs,” “relationships,” and “correct culture.” Table 1 provides the themes and the respective categories. Table 2 provides subcategories that were present for two of the categories.

Table 1

Themes and Categories

Themes	Categories
Common Experienced Setbacks	Work/Activity Overload and Competing Deadlines
	Poor Performance/Preparation
	Not Understanding Material
	Procrastination, Not Trying, Not Caring
	Critical/Harsh Feedback/Situation
	Lack of Teacher Flexibility
Programs	Academic Support
	Counseling/Mental Health
Relationships	Parents/Family
	Peers
	Staff/Teachers
Culture	Highly Supportive and Engaged Staff
	Strenuous/Rigorous/Accountability
	Shared Experiences/Inclusivity
	Ability to be Authentic/Oneself
	Emotional/Academic "Safety Net"
	Reduction of Urgency/Catastrophizing
	Challenge/Encourage but Allow for Individual Growth
	Encourage Trying New Things
	Normalized Mental Health Options
	Normalized Requesting and Receiving Help

Table 2

Categories with Subcategories

Categories	Subcategories
Peers	Academic Support
	Emotional Support
Staff/Teachers	Flexibility
	Invested
	Going Above and Beyond

Discrepant or contradictory data were nonexistent. Examples of seemingly discrepant data could include circumstances in which one or more interviewees would suggest that maintaining a strenuous or rigorous approach to academics is an important cultural component while one or more interviewees would suggest that reducing academic urgency or catastrophizing performance is an important cultural component. Without appreciating the subtle layers of these concepts, one might assume that a culture is unable to demand rigor without catastrophizing failures; however, the participants were clear that such a discrepancy does not exist. In fact, several participants indicated that both cultural components can and should happen in a single organization. That is to say that the very few times that data might have initially appeared discrepant, upon further analysis and exploration, the data were not actually discrepant nor contradictory.

The data included a small number of specific items that only occurred once or twice. Examples include only a single participant mentioning "God and faith" and a different single participant mentioning "trying to be happy for others," both in response to a follow-up question regarding what they saw in their peers as adaptive behavior relative to academic buoyancy. These single data points were effectively absorbed into the larger categorical and thematic structure. The data did not contain any concepts or constructs that directly opposed another within a category.

Results

The research questions were individually addressed in order. RQ1 was "How do recent high school students describe the common academic setbacks and challenges they experienced in high school?" This research question had six scripted interview and

follow-up questions assigned to it. One of the specific interview questions (IQ2) was, "What are some of the 'common setbacks and challenges' that you can remember experiencing while in high school?" Responses included expected data such as "sometimes the work would get too much" (Interviewee #1) or "not having my homework prepped to the level I'd like" (Interviewee #5). This interview question had a higher frequency of coding hits (38) than any other question as well as the highest number of initial codes applied to any interview question (11). One of the four themes that most clearly dovetailed with this interview question was "commonly experienced setbacks" with its six categories (work or activity overload and competing deadlines, procrastination and lack of effort, poor performance or preparation, not understanding material, critical or harsh feedback or situation, and lack of teacher flexibility and adaptability).

The two categories that were the clear frontrunners were "work or activity overload and competing deadlines" and "procrastination and lack of effort." All the participants spoke about coping mechanisms that were employed to balance and prioritize their academics and activities in high school. Interviewee #1 said,

> I'm the type of person to like lose focus so I would just write everything down, like I would make to-do lists every day…okay this is what I need to get done this is when it needs to get done and I'm trying to just do it in terms of I get to the smallest things done first so that way they're done and out of the way in out of my mind and really focus on the things that need my attention more.

It was clear that these students were engaged in several different activities in high school. All participants indicated appreciation and gratitude for the opportunities to have a wide range of experiences, but also acknowledged the necessity of academic buoyancy to effectively navigate competing demands on time and energy.

All the participants indicated some form of struggle with procrastination and lack of effort in some way. For some, it was much more common than others. But all participants identified this as a problem at some point or points during their high school career. When asked to describe their experience with procrastination, Interviewee #5 said, "The way I would procrastinate is I would waste a lot of time, but I would always end up getting the work done and would end up getting a good grade on it. So, I call it 'functional procrastination.'" It was important to differentiate between the categories of "procrastination and lack of effort" and "poor performance or preparation." The participants were clear that the former was always due to their own decision making and choices whereas the latter was often due to misunderstanding the nature or expectations of assessment, lack of adequate assistance leading up to assessments, and similar issues that are predominantly outside of their own decision making and choices.

Included in "procrastination and lack of effort" were concepts of "not caring" or "not thinking it was worth it." Also included was the notion of giving up or not bothering to try in areas where the participant anticipated experiencing a struggle and only being willing to apply effort in areas that the student felt he or she would be successful in or was "already good at it." Interviewee #6, while describing what setbacks were present for them stated,

> The biggest one was that I just didn't...that if I got a bad grade, I just didn't really care because it usually meant it was in a class that I wasn't very good at and so if you take something like chemistry, I got a bad grade, and the biggest setback for me was that I wouldn't really try to change it.

This quote is an example of giving up as identified as part of not bothering to try in an area where the participant anticipated struggle. Several participants had similar comments.

The fourth category, "not understanding material" was distinct from "poor performance or preparation" as the former was focused on learning and understanding curriculum satisfactorily and the latter was focused on performance and preparation on assessments, projects, and similar assignments. When confronted with the "not understanding material" category, participants indicated that they had a choice to give up on the material and move on or seek additional help. Describing their role in managing situations in which material was not understood, Interviewee #6 said, "But if I really didn't get it, [I'd] stay behind after class. If I didn't stay behind after class, then I'd ask someone in the dorm who knew what they were doing." The point being made with this quote is a sense of choice. The participant could choose whether and how to do something not understanding the material: stay after class or ask a peer.

The fifth category, "critical or harsh feedback or situation" is self-explanatory but involved some nuance. Several participants pointed out that although they experienced critical feedback from a teacher that they would consider a form of academic setback, they also noted that sometimes that critical feedback is exactly what they needed to move

forward. The caution embedded in this category of setback is that schools should not stop providing critical feedback, but they should avoid being "harsh," "mean," "unkind," or "unreasonable." Another item included in this category was the impact that marking colors can have on a student. Interviewee #4 stated, "I had one teacher who would use purple. And that felt just fine. I don't know what it is about red, but it just feels so....like....not good." The way in which assessment feedback is delivered can make a difference. Participants identified certain words and even colors of ink that can create an environment that is perceived as harsh.

The sixth category, "lack of teacher flexibility and adaptability" is one of the categories that was consistent across many of the challenges and setbacks described by the participants. The concept has some measure of nuance, but not a single participant indicated a desire to teachers to give up on rigor or ignore problems. On the contrary, baked into this concept was a request that teachers increase awareness of challenges and problems that students might be experiencing and increase flexibility and adaptability to mitigate the concern most effectively. "Lack of teacher flexibility and adaptability" covers a range of circumstances including unwillingness to adjust deadlines when students were overloaded, failure to adapt to changing circumstances in the student's personal or academic life, and rejection of requests for compromise based on reasonable circumstances. Of the six categories, this was the category that seemed to carry the most emotional weight. Interviewee #6 summarized their perspective on this item saying,

> Just asking teachers to be flexible when possible. Maybe get a sense of where the class is heading and go easier or harder depending on what that specific class is

> like. So yeah, flexibility in teachers. Which is really difficult, and probably comes more naturally for some teachers than others. But just an ability to be flexible and understand the overall vibe of a classroom and what works well with certain groups and what doesn't work.

This participant was able to articulate that teacher flexibility is a challenging art and may be easier for some teachers than others. But nevertheless, this is an important category of the theme centered around common experienced setbacks.

RQ1 was specific to the participants recalling and describing academic setbacks they experienced in high school. The six categories contained within the theme of "common experienced setbacks" contains data directly related to this RQ.

RQ2 was, "What strategies do recent high school students identify as useful to overcoming the common academic setbacks and challenges they experienced in high school?" Scripted Interview Questions 3 (When you experienced those setbacks, how do you think you typically managed them?), 4 (When you were able to manage setbacks well, what do you think helped you manage them well?), and 5 (Do you remember seeing other students who were particularly good at managing setbacks?) with their respective follow-up questions were designed to address this question.

RQ3 was, "What do recent high school students identify as ways in which high schools can help students overcome common academic setbacks and challenges?" Scripted Interview Questions 4 (When you were able to manage setbacks well, what do you think helped you manage them well?), 5 (Do you remember seeing other students who were particularly good at managing setbacks?), 6 (What are some of the things you

remember from when you were in secondary school that helped you feel capable of overcoming obstacles at school?), 7 (Are there things you think high schools should do more of or add that could help students manage setbacks or learn how to be more buoyant?), and 8 (Is there anything you want to add about how schools do or should influence the development of academic buoyancy in students?) with their respective follow-up questions were designed to address this question.

There was overlap between RQ2 and RQ3 in Interview Questions 4 and 5 because identifying ways that students managed setbacks well was closely linked to both RQ2: "What strategies do recent high school students identify as useful to overcoming the common academic setbacks and challenges they experienced in high school?" and RQ3: "What do recent high school students identify as ways in which high schools can help students overcome common academic setbacks and challenges?"

During the interviews, the participants consistently combined elements of Research Questions 2 and 3 in their responses. For example, when asked what made them feel capable of overcoming obstacles, Interviewee #2 included, "I think it's again, the safety nets of the friends and the teachers who were there to support you when you went through it." When asked what they thought that high schools should do more of or add into their programs that could help students manage setbacks or learn how to be more buoyant, Interviewee #2 responded,

> So, the main thing I was talking about at the beginning was I felt incredibly supported by all my teachers. I knew that they wanted me to succeed, and they made that very clear. And with the whole, like, even giving out personal

> cellphone numbers and saying, ‘Look, if you ever need anything, contact me, I want you to succeed,’ and I think that was very beneficial to me. Like I heard other people, at, it might have been at college or at high school, but it was just like, ‘These are my office hours and don’t contact me outside,’ that’s...and that was shocking because I was not in a high school that was like that.

The first statement is specific to RQ2 and the second statement is specific to RQ3, but they are clearly closely related. Because of how closely linked RQ2 and RQ3 are, and because the participant responses consistently confirmed the linkage, both RQ2 and RQ3 shared 3 sets of themes and categories.

The first shared theme was “programs” with its two categories “academic support” and “counseling/mental health” This was the least robust theme to be drawn from the data but is arguably the most concise. When asked how they were able to overcome common setbacks and academic obstacles they experienced or ways that they thought high schools could help students overcome common setbacks and academic obstacles, participants described programs that they engaged in, knew others had engaged in, and/or believed would be useful for schools to include as part of their offerings. Interviewee #1 explained that in their school, “there was this thing called flex time and you would sign up for a certain thing like say like you didn’t think you needed it but you wanted it just to be sure you could get extra help in a certain subject.” The category of “academic support” includes formal and informal study groups, study periods, aides, one-on-one teacher assistance with difficult or unclear topics, and academic guidance counseling.

The category of "counseling/mental health" included mental health professionals, school-based counselors, and mental wellness programs. Interviewee #4 went so far as to state that they thought it would be useful "if there were to be an assembly where they talk about academic buoyancy." Several participants expressed a belief that although there was less of a stigma associated with getting or seeking mental health help than in years past, schools would do well to work hard to further reduce the stigma of mental health and seek to normalize counseling and similar programs. Interviewee #2 said, "I don't think there's an easy answer to that [question about accessing mental health] but I guess just trying to lessen the stigma and make it more normal for people to talk to professionals." Interviewee #2 suggested,

> I think it could be really interesting if you had one mandatory meeting with a student and a therapist, like once at the beginning of the year, and just had everyone try it and see it and experience it. And I don't know if you can do that or if that's something that would be feasible, but I think that it could be a really interesting opportunity to get people to try it out and not feel weird about it because everyone is doing it.

Several participants recommended requiring all students at one or more points in the year to visit a mental health professional in an effort to normalize the behavior and reduce concerns or fears that some students might have about engaging in such programs.

The second theme relating to RQ2 and RQ3 was relationships. This theme had three categories (parents/family, peers, and staff/teachers). The category of "parents/family" was the least commonly identified category, with only four instances in

the data. Interviewee Three said that, “if things were beyond me, it felt like I would probably just turn to my parents.” This category included feeling that parents and family would be there to discuss problems, provide possible solutions, and provide emotional support.

The category of “peers” was identified more than “parents/family” but less than “staff/teachers.” The “relationship with peers” category was broken into two distinct components: academic support and emotional support. Participants described receiving academic support through homework groups, study sessions, or getting assistance for specific projects or assessment preparation. Interviewee #1 described it as

> we would always be like if there was problems or there’s a test coming up instead of us working on a single thing by ourselves we are all like chip in and add things and take away things and just like overall just help each other out.

Such a sentiment was described as different from emotional support. Participants described receiving emotional support mainly through one-on-one peer conversations, but sometimes in group settings. Interviewee #2 described peer emotional support as

> when I was upset with something they wouldn’t say like, ‘Oh, don’t worry about that it doesn’t matter,’ they would understand that that was something that was upsetting and say, ‘Yeah, I’m really sorry you feel that way, and what can we do to fix it,’ and not just dwell on it but they didn’t say ‘forget about it and don’t think about it anymore.’

Emotional support could be received as very specific responses to a given setback, or it could be received as a general sense of psychological well-being due to feeling as if one

"belongs" or has friends "who will always be there if I need them." Sometimes, emotional support was received as a way of downplaying setbacks. Participants described emotional support as including an approach that was "non-judgmental" and "supportive" when the participant tried something new or something the participant wasn't good at in class. Interviewee #6 described their sense of this, saying,

> people weren't necessarily going to judge you for saying something stupid or getting a question wrong, and so...yeah, supportive in the sense that nobody was out to make another person look stupid for not knowing the answer to a question. They might try to make you look stupid in other ways, just for fun, but I think in general, a really supportive atmosphere, in terms of class discussion.

Interviewee #5 said, "the fact that I had friends who would follow me into the bathroom if I left crying, which I did, that helps [sic] me succeed academically because my emotions." Peer academic support is clearly important to the participants, but the peer emotional support was mentioned more than twice as often and described in much greater detail. The participants clearly expressed that while they were both important support opportunities, the emotional support was much more important than the academic support.

The third and final category in the "relationship" theme was "staff/teachers." This relationship category was overwhelmingly described and discussed to a significantly greater extent than the other two categories combined. Although participants described many ways in which the relationship between themselves and staff was beneficial,

ultimately the bulk of the narrative could be distilled into three areas: flexibility and adaptability, being invested, and a willingness to go above and beyond.

One of the types of common experienced setbacks discussed for RQ1 was "lack of teacher flexibility," so it was no surprise that this was an area of focus for the relationship between participants and staff. Words such as "kind," "caring," "respectful, and "compassionate" were part of the flexibility and adaptability conversation. Participants used those and similar words when describing the teachers who were most willing to be flexible and adaptable. Participants were clear that being flexible and adaptable does not mean being a "pushover" or unwilling to hold students to a high standard. Interviewee #1 does a nice job of describing this, saying,

> I think it just really all leads back to the proactiveness like for the teacher like obviously the school should set like really high expectations like my school set really high expectations and kids were held to a certain standard and if they were falling short of that standard they would like sit back and be like, 'What is going on; how can we help you.'

Being flexible and adaptable centered on a willingness to trust students, to assume that students were being honest when explaining the background to a setback. Being flexible and adaptable suggested a lack of rigid approach. One participant used the example of being more flexible regarding classroom banter and discussions as a way of making both the teacher and the material more accessible. Interviewee 6 stated:

> That's what I always thought [name of school] was really good at, was just getting the students to do the talking a lot of the time and sort-of facilitating

> discussion that way. I think that maybe, allowing for a little bit of leeway when it was appropriate, meaning I think the best teachers were able to understand when the class was in control or out of control. And sometimes you do just want to let students talk out of turn because it might facilitate a better discussion. And then other times you need to reign it in and say, "Okay, raise your hands if you want to talk next." I think those teachers were good at recognizing when those moments were. Maybe not leaving everything black and white, like if you do this then you'll get kicked out of class or, like, trusting students to understand where the line is. And I wasn't great at understanding where the line was, but a lot of teachers are good at drawing that line for the students themselves and able to make it a little bit flexible.

Ultimately, the concept of flexibility and adaptability centered on a mindset that encouraged students to be open about problems and concerns and then actively engaging in finding meaningful solutions that may depart from original expectations or deadlines.

The second area of being invested was further distributed across two concepts: investment in the craft of teaching and investment in the student. Interviewee #1 described a favorite teacher, saying that

> she just love[d] teaching it so much and you could just like really tell and it got you really involved because she was so into it. I think that your attitude towards learning and a subject they were teaching like really helped a lot.

Participants described the value and positive impact of knowing when a teacher was invested in their work, of being able to see that a teacher loved what they were doing and

were eager to share that love with their pupils. Participants strongly encouraged schools to focus on hiring teachers who loved teaching, even if they may not be subject experts as the relationship is more important than the curriculum, and a person can almost always increase subject knowledge.

Investment in the students borrowed a bit from the concept of flexibility in that it placed the value of the student above the value of the assignment and therefore lent itself to a willingness to adapt to circumstances and setbacks that the student may have experienced. Interviewee 8 described the value of this approach, stating, “They all showed actual interest in my well-being as a person, not just a student, but as a person. But also, in the student aspect, them seeing in me that I could do better. And expressing that to me.” A common thread in this vein was the very strong value placed on the importance of reducing urgency. Repeatedly, participants described school settings as distressing when teachers were unable to see them as individuals, as humans, as people, which was often tied to a feeling that the teacher cared more about assignments and assessments and their own course and curriculum than for the student.

Conversely, when teachers were able to make a student feel “seen” and “heard” and feel that they were being approached “at a human level,” the school setting is seen as far more healthy, safe, useful, and engaging. Interviewee #3, when describing their favorite staffers, said, “they were willing to compromise and approach you on a human level as opposed to the traditional pedagogical sense of the teacher on the pedestal versus the lowly students in the pews, so to speak.” Several participants described specific examples of performing poorly on an assessment and feeling very anxious until the

teacher reminded them that it was only one assignment and in the grand scheme of life was essentially meaningless. Investment in the students translated to a mindset that put the student and the student wellbeing ahead of performance on assessments, which is most meaningful and powerful when a teacher took the time to de-escalate anxiety by providing awareness that the assessment at hand was far less important than the student. Interviewee #2 described this nicely, expressing appreciation for some of their math teachers who, before a test would say, “Hey, this is just a test. In the grand scheme of things, this isn’t going to matter, and this is just an opportunity to show what you know.” Acknowledging “real life” and priorities and relative value of individual assignments was important to the concept of teachers being invested in students.

The third concept related to staff relationships was going above and beyond. Participants indicated that they were acutely aware of times that teachers did more than was necessary on behalf of a student or class. Examples included holding study sessions after hours in preparation for an upcoming assessment, sharing personal cell phone numbers and providing help on homework and assignments after hours, celebrating student successes both academic and non-academic, attending athletic contests or theater performances, inquiring about the student’s life and authentically listening and responding to both successes and setbacks. Interviewee #2 described her perspective, saying,

> almost every single one of my teachers was very invested in me succeeding and they would say multiple times, ‘If you have any questions, you can come to me after class, here’s my personal cellphone number, if you need anything,’ and they

> clearly wanted me to succeed. And hearing from some of my friends in other high schools they did not have those similar things, so I think that was a very...just the fact that every teacher showed that they were invested in my learning with their extra hours and office hours and things that they were willing to do.

This concept, especially, was extended to non-classroom staff. Non-academic staff were acknowledged and praised for times that they went above and beyond to establish a mutual appreciation and deeper relationship while also meeting needs of students that may not be met during the normal and typically prescribed limits of a staff member's job description. Interviewee #8 described an interaction in this category, saying,

> There was one incident where an administrator saw me in the hallway, and he called me up and they basically just said to me, 'I know you're a good kid, just stay on that path.' It helped me realize that people actually did see that I'm doing the right thing, I want to be a good person. And because that person was an administrator—the principal—that helped a lot.

Relationships was the theme that received more time and energy during the interviews than any other single theme. Relationships were mentioned in response to every research question, and in some way to nearly every interview question. When asked to describe the common theme across positive experiences in high school, Interviewee #1 replied, "The teachers. I absolutely loved my teachers. I had a close relationship with my principal…I really love the relationships I developed with my teachers and they were so willing to help not just me but anybody." Relationships was the

dominate category across this research effort. Participants clearly identified relationships as being a central necessity in establishing and developing academic buoyancy.

The third and final theme relating to RQ2 and RQ3 was “correct culture.” School culture may be created and maintained differently according to elements specific to a given school community. The participants acknowledged that different schools do things differently based on their mission, staff, focus, ability, and resources. However, there were ten general cultural components that the participants identified as central to a school culture that supports students and aids their ability to experience and develop academic buoyancy: a highly supportive and engaged staff, a strenuous and rigorous expectations that maintain accountability, shared experiences and inclusivity, opportunity to be authentically oneself, a sense of an emotional and academic “safety net,” reduction of catastrophizing or extreme urgency, challenging and encouraging students while allowing for individual growth, encouraging students to try new things, normalizing mental health options, and normalizing the requesting and receiving of help across all categories of student experience. Interviewee #9 suggested that high schools should pay attention to “maintaining a balance of support but not dragging students along. Being there if they need it but not pushing them down the path. Letting them do their own thing but being a safety net.” This statement in many ways encapsulates many of the specific categories identified for the theme of “correct culture.”

These 10 categories within the theme of “correct culture,” identified by participants as ways that schools can help develop academic buoyancy in their students, were not listed in order of value or need. Participants acknowledged that different

students may need different things from their school experience. But these 10 categories, taken together and in general, may provide the beginnings of a roadmap for how schools could respond to common experienced setbacks and help students establish and develop academic buoyancy. There was a symbiotic relationship between commonly experienced setbacks, programs, relationships, and culture. Each of these four themes could drive and influence each of the other themes. Providing the right programs, hiring the right people, and establishing the right culture were all related to the ways participants experienced setbacks and responded to them. And according to the participants in this research, the themes of programs, culture, and relationships are central to establishing and developing academic buoyancy in high school students.

As discussed above in the Chapter 4, the data did not contain any concepts or constructs that directly opposed another within a category. There were no nonconforming data drawn from the research; however, there were nuanced data. For example, a participant may have simultaneously encouraged teachers to be rigorous and flexible. For some, this may seem to be a contradiction, but it is not. A teacher can have high standards and push students to perform at their best. And that same teacher can adapt and be flexible when the situation warrants. Another example could be that one participant identified “relationships with my teachers” while a different participant identified “relationships with my friends” as the single most important component to developing academic buoyancy. Though the participants may not have agreed on the type of relationship that is central to their ability to develop academic buoyancy, they shared the

fact that some human relationship was the key and such a nuance appears several times in the data.

Evidence of Trustworthiness

Credibility was established through member checking. During the interview, questions were asked to verify intent and meaning. Transcripts and preliminary findings were shared with participants who were asked if the findings resonated with the meaning they intended. Peer debriefing was engaged by sharing the coding system, interview transcripts, conclusions, themes, and categories with a university humanities professor with qualitative methodology research. The professor ran the data through a program different than the one that I used and responded that the categories and themes identified "look great" and that his method did not find any data contradictory to those provided by me.

Transferability may be somewhat limited by the fact that the participants were drawn from a single college. That said, several of the participants attended more than one high school which could indicate that their perspective was broader as it relates to high school experiences than students who only attend one school. Some participants were male, some were female. Some participants attended private high schools and others attended public high schools. All participants identified setbacks experienced during high school which included feeling overloaded and dealing with competing deadlines, experiencing poor performance or preparation, not understanding material, dealing with procrastination or lack of effort, receiving critical feedback, and being frustrated with lack of teacher flexibility. Of these setbacks, the two that were clearly the most common

were “work activity and competing deadlines” and “procrastination and lack of effort.” Although work activity overload and competing deadlines was a common setback, participants also indicated they all engaged in multiple activities while in high school and they expressed appreciation for the opportunities to have a broad range of experiences.

Participants indicated an awareness that critical feedback from teachers is a part of the educational process, but the manner in which the feedback is provided is important. Harsh, unkind or unreasonable feedback represent challenges. Even the color of ink used by teachers can be considered challenging, as specifically identified by one participant.

Teacher flexibility was an important concern for the participants. Participants indicated that it’s important for the teacher to see the whole student and adapt when reasonable to help students succeed and feel cared for.

Participants identified two basic types of programming that is important to developing academic buoyancy: academic support and mental health support. Participants identified a number of approaches or programs that could be helpful including study periods, study groups, counseling programs, destigmatizing efforts which could include potentially required counseling for all students in an effort to normalize the experience.

Participants identified relationships as the most important element of their high school experience relating to academic buoyancy. Relationships with parents and family was important. Relationships with peers was even more important, with the type of support received through those relationship being broken into two categories: academic and emotional. Academic support can be formal or informal and the emotional support covers a range of approaches from addressing a specific setback to deescalating to feeling

a sense of belonging. But the single most overwhelmingly identified component for participants relative to their high school experience and academic buoyancy was their relationship with teachers and staff. Staff that was flexible and adaptable was important. Staff that was clearly invested in their chosen career and, more importantly, in the students, was important. And those things lend themselves to a willingness to go above and beyond which participants identified as important. Staff that was able to avoid catastrophizing and actively sought to deescalate setbacks was valuable for the participants. Participants appreciated staff who clearly demonstrated that the value of the student was greater than the value of any assignment, project, grade, or assessment.

All high schools have students. All high schools have faculty and staff. The quality of the relationships between students themselves and between students and staff was identified by participants as the most important element relating to the development of academic buoyancy during high school.

Dependability was be established by use of an audit trail. The audit trail was kept as a research journal. The journal included notes regarding reflections, questions, and decisions made while the research was being collected. The journal also included a brief record of how I interacted with the data and accomplished the analysis. Given the small number of participants, and the straightforward way in which the data was coded, there were not many areas of challenge. There were a few times when the recording of the interview was reviewed to establish nuance of language based on tone. An example could be determining if a particular sentence was said in jest or seriousness.

Confirmability was in large part managed through reflexivity. I considered how my background may influence my decisions about process and interpretation of the results noted as reflexive entries in the research journal as appropriate. These considerations were important because it is critical that the participants' voices, not the researcher's, be heard through the research.

Summary

In summary, nine interviews were conducted to collect data specific to three research questions. Research Question One asked, "How do recent high school students describe the common academic setbacks and challenges they experienced in high school?" This research question had six scripted interview and follow-up questions assigned to it. The data yielded a specific theme entitled "common experienced setbacks" with six categories contained therein: work or activity overload and competing deadlines; procrastination and lack of effort; poor performance or preparation; not understanding material; critical or harsh feedback or situation; lack of teacher flexibility and adaptability.

Research Question Two asked "What strategies do recent high school students identify as useful to overcoming the common academic setbacks and challenges they experienced in high school?" Research Question Three asked, "What do recent high school students identify as ways in which high schools can help students overcome common academic setbacks and challenges?" During the interviews, the participants consistently combined elements of Research Questions 2 and 3 in their responses. Because of how closely linked RQ2 and RQ3 are, and because the participant responses

consistently confirmed the linkage, both RQ2 and RQ3 shared 3 sets of themes and categories. The first theme was “programs” with two categories: academic support and counseling/mental health. The second theme was “relationships” with three categories: parents/family, peers, and staff/teachers. The peers category was further distributed across “academic support” and “emotional support.” The staff/teachers category was further distributed across “flexibility and adaptability,” “invested,” and “going above and beyond.” The third theme was “correct culture” with ten categories: a highly supportive and engaged staff, a strenuous and rigorous expectations that maintain accountability, shared experiences and inclusivity, opportunity to be authentically oneself, a sense of an emotional and academic “safety net,” reduction of catastrophizing or extreme urgency, challenging and encouraging students while allowing for individual growth, encouraging students to try new things, normalizing mental health options, and normalizing the requesting and receiving of help across all categories of student experience.

These key findings represented an appropriate summary of the data provided by interviewed participants and related directly to the research questions. The key findings represented the first time in published research that students’ voices were being heard relative to the effort to help schools learn how to establish and develop academic buoyancy in their students. Discussion, conclusions, and recommendations are provided in Chapter 5.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to investigate the perceptions of recent high school students regarding the common academic setbacks and challenges they experienced in high school and how high schools could support students experiencing these challenges. The conceptual framework for this research was based upon the work of Martin and Marsh (2008a, 2008b, 2009), who established academic buoyancy as a distinct and researchable construct. This study followed a basic qualitative design, collecting data from interviews.

The problem I addressed in this study is the lack of student input in the development of resources to support academic buoyancy, leading to a gap in educational practices. The key findings included four themes. The first theme, "common experienced setbacks," was specific to RQ1 and had six categories describing types of setbacks. The second theme, "programs" (specific to RQ2 and RQ3) had two categories describing specific types of programs. The third theme, "relationships" (specific to RQ2 and RQ3), had three categories of type (parents/family, peers, and staff/teachers) and two of those categories were further distributed with additional granularity of type. The fourth theme, "correct culture" (specific to RQ2 and RQ3) provided the 10 categories that were identified and distilled from the data as being most critical.

Interpretation of the Findings

The findings were an important extension of the knowledge in the discipline because there was nothing with which to compare them. This research represented the

first time that students' perspectives had been represented regarding practical ways high schools can help promote academic buoyancy.

Martin et al. (2013) found that academic buoyancy and psychological risk have a reciprocal relationship in high school students and that interventions in either space (academic buoyancy or psychological risk) can be valuable. The data from the interviews for this study aligned with that finding. Specifically, participants indicated that finding ways to reduce some psychological risk would likely benefit the development of academic buoyancy.

Collie et al. (2017) found that the students' experience of adversity is closely related to levels of academic support and the results from this study align with those results. Shafi et al. (2018) found that teachers influence the development of academic buoyancy in students through the ways in which they approach assessment feedback. The data from the interviews for this study aligned with those findings. Specifically, participants indicated that academic support structures likely benefit the development of academic buoyancy and that the way in which teachers interact with students, including through assessment feedback, impacts academic buoyancy.

Luthar (2000) found themes closely related to resilience including close relationships with supportive adults, effective schools, connections with competent, pro-social adults in wider community. The data from the interviews for this study aligned with those themes. Specifically, participants indicated that relationships with competent, caring adults positively affected academic buoyancy. Hurlington (2000) found that schools and teachers play a critical role in the development of resilience and the key

themes can be broadly described as caring relationships, high expectations and academic standards, and opportunities for participation and contribution. The data from the interviews for this study strongly aligned with those findings. Specifically, the participants indicated that knowing teachers cared about student well-being and success, holding high expectations and academic standards, and providing opportunities for participation in a variety of activities positively influenced academic buoyancy.

Zimmerman et al. (2013) described social support as one of three key factors for resilience. Furrer et al. (2014) found that positive, "warm," student relationships with peers and teachers promote "everyday motivational resilience" (p. 107). Arastaman and Balci (2013) similarly found that peer support is very important to the development of buoyancy. The data from the interviews for this study aligned with all these findings. Specifically, the strongest and most consistent data from the participants was that the relationships with teachers and peers was the most important component in developing academic buoyancy.

The conceptual framework for this research is based upon Martin and Marsh (2008a, 2008b, 2009), who established academic buoyancy as a distinct construct. Academic buoyancy is linked with or closely related to several concepts. The results of the present research aligned with the position that academic buoyancy is a researchable construct that it is linked with or closely related to other concepts. As part of the definition of academic buoyancy, Martin and Marsh (2008a) identified specific examples of common setbacks experienced in the academic environment. Some of those same specific examples as well as additional examples were provided by participants in this

research. The four themes drawn from this research and specifically related to the research questions establish that common experienced setbacks, programs, relationships, and culture are linked with student perception of academic buoyancy.

Limitations of the Study

The data collection for this study was set to begin just as the world experienced one of the worst pandemics of the modern age. When the COVID-19 pandemic sent the global community reeling with urgent and extreme responses, the ability to effectively navigate this sort of research was dramatically impacted. Although saturation was achieved and trustworthiness established, the extremely limited size of the participant pool is a significant limitation. Additionally, as schools around the world have been shut down and the global academic community is experiencing the tremendous psychological consequence of not being able to provide in-person education as is typically prevalent, students' perspectives on academic buoyancy may be changing. Finally, this study focused on the voice of recent high school students reflecting on their experience in high school. As such, criteria for participation included at least 1 year of high school and having been in high school within the last 5 years. The reason that current high school students were not included as participants is that some reflective distance was deemed to be useful for the purposes of the research. High school students, actively engaged in the life of high school, might find it different to find the cognitive space to effectively view, from an intellectual distance, the high school experience, and its intersection with academic buoyancy. Choosing recent—but not active—high school students seemed a reasonable way to solicit useful information that would not be limited the participants' in

situ psychology. Although all participants had attended high school at least 1 year prior to but fewer than 5 years prior to the interviews, it is possible that since the participants were no longer actively in high school, they may have carried modified or diminished memories of their high school experience. The further removed from high school, it is possible the further their memories were modified or diminished. It is also possible, though, that the further removed from high school, it is possible that their understanding of their experiences and memories were informed by reflection and maturation, thereby allowing for a more thorough, complex, and nuanced response to the interview questions. Although there may be some components applicable across all levels of education, this study is limited to a perspective of academic buoyancy specific to high school experience.

Recommendations

Additional data collection from students is necessary to establish a more robust and complete picture of students' perspectives on academic buoyancy. Surveys and interviews should be conducted at every grade level. A high school student reflecting on their experience as a primary school student may look very different than a college student reflecting on their experience as a high school student. Additionally, asking questions about what students are currently experiencing as opposed to what was experienced 2 or 3 years in the past may yield valuable information.

Conducting research that tests some of the findings in this study would be useful also. Engaging students as well as school staff and administrators in discussions about the findings and implications of this study may spur further extension of knowledge in the

discipline. Developing programs, mindfully nurturing relationships, and carefully establishing correct culture based on the findings of this research and then investigating the impact of those efforts may provide additional applicable data.

Implications

The implications of this research are important to educators. Schools can learn how to better serve their students in the development of academic buoyancy; the participants in this study provided valuable information. It is important for school communities to have an awareness of the types of commonly experienced setbacks as described in the first theme. Work or activity overload, competing deadlines, poor performance and preparation, not understanding material, procrastination, not trying or caring, critical or harsh feedback, and the lack of teachers' flexibility represented the general categories of commonly experienced setbacks. Armed with this knowledge, educators can be watchful for these challenges and actively seek to mitigate these setbacks. They can also seek to find ways to develop academic buoyancy in students to address these challenges.

Two very specific categories of programming were provided by the participants as helpful to developing academic buoyancy. The first, academic support, can take many forms such as tutoring, study groups, study halls, free time, and flex time. The results indicate that schools that provide academic support programs can help students develop academic buoyancy. The second category of programming is counseling and mental health: educators who provide accessible, destigmatized counseling and mental health programs can help students develop academic buoyancy.

The theme of correct culture provides 10 specific areas of culture that the data indicate are useful for schools who want to help students develop academic buoyancy. A highly supportive and engaged staff aligns with previous research and was the most-often mentioned category in the data. School leaders should encourage and celebrate staff who fit this category. It is always possible to provide a rigorous, strenuous, and accountable culture: a rigorous culture holds students accountable and also adapts to students' needs. Shared experiences and inclusivity refers to the opportunity to feel included, see and celebrate variety, and engage in activities and experiences that create a sense of bonding between students as well as between students and staff. Specific examples could include class trips, unusual curriculum variations, club activities, athletic traditions, and many others. The ability to be authentic may be reminiscent of the mental health programs mentioned above. High school can be a challenging period of time, especially in regard to students feeling safe enough to be their authentic selves. School cultures where students can be themselves also promote emotional and academic "safety nets" for students who are struggling.

The culture category of reducing urgency and catastrophizing was mentioned repeatedly by the participants in different ways. Participants clearly valued teachers who take the time and deploy the emotional intelligence to put their course, assessment, project, homework, or expectations on the back burner relative to investing in the student's current state of mind. Encouraging an objective viewpoint that places the current challenge in correct context and priority relative to students' current conditions and entirety of their remaining lifetime is an important opportunity in humility and

humanity. Challenging and encouraging students while also allowing for individual growth speaks to the importance of taking note when students struggle and succeed and address those moment accordingly. Understanding and acknowledging that each student is on their own path and pace and working with each student where they are can help student feel academically buoyant.

Encouraging students to try new things is related to shared experiences listed above. Several participants indicated that some of their most meaningful and buoyantly positive experiences were due to being encouraged to try something new and finding a new passion or a new skill or a new group of supportive peers. Schools should provide a range of activities and actively encourage students to try new things. Normalizing mental health options is more than just destigmatizing the mental health experience. It also speaks to ensuring that there are a range of accessible and relevant mental health options available to students that should be boldly advertised. Several participants strongly recommended that schools should require all students to attend a number of counseling sessions to become more comfortable with it and be more able to accept it because of a sense of shared experience.

And lastly, a culture that normalizes requesting and receiving help means, again, more than just destigmatizing the notion of needing or getting help. In such a culture, educators can establish protocols by which students can safely and comfortably ask for help. Academic and emotional support are two very broad categories that can look very different for different students and different situations. Schools would do well to model asking for and receiving help as well.

The final theme for discussion is relationships, which is a theme that has touchpoints throughout many of the other themes and categories. Schools may not have much influence on nurturing the relationship between students and their respective family or parents, but it is something worth looking at. School leaders have a significant opportunity to foster healthy, supportive peer relationships. Educating students about healthy peer relationships is one thing, modeling healthy relationships is another thing, addressing unhealthy relationships is yet another thing. Schools should explore providing space and opportunity for peers to develop relationships that may result in the emotional and academic support the data indicates is so important.

The single most overwhelmingly significant category the data from this research provided was the relationship between students and staff. More than any other topic, the relationship between students and staff received the most time and input from participants. Schools must focus on hiring the right people and training them, encouraging them, and requiring them to put real and focused energy on establishing meaningful, healthy relationships with students. Staff must be flexible and adaptable so that they can make changes when students need them. Educators should also be invested in their own role, find ways to encourage continued professional development, promote a culture of staff who love their work, and find ways to support teachers who put students before returns. It is also important to put people before assessments and humanity before curriculum. Staff must be encouraged and given the resources to go above and beyond. The data from this research showed that when staff make it a priority to invest in students beyond a standard job description, it may help students feel valued, to believe in

themselves, to inspire them to try harder, and to believe they can overcome obstacles when they arise.

The implications of this research are important. If schools choose to honestly and deliberately incorporate these findings to improve their programs, culture, and relationships, the voices of the students themselves will have been heard. As a result, schools may see an important improvement in the development of academic buoyancy in their students.

Conclusion

The concept of academic buoyancy is in its infancy, having only been identified about a decade ago (Martin & Marsh, 2008a). Much more research can and should be conducted to add to the base of knowledge already established. The present research study is an important opportunity to add to that knowledge. For the first time, the students themselves told us what they perceive as most critical for schools to know to develop academic buoyancy in their students. Schools should be invested in helping students overcome challenges and setbacks common to the academic environment. In this research, students have told them how. It is refreshingly simple: school leaders need to focus energy and resources on providing the programs, culture, and relationships that support students, which is not new information. What is new is the nuanced specificity provided by this research offered by students themselves.

As an educational community, we can do better. We will do better. Thanks to the voices of these few participants, we have information that we can use to be better for our students.

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Appendix A: Interview Script, Questions, RQ Alignment

Script prior to interview:

Thank you for agreeing to be part of this research effort. I want to make sure you understand my goal. I am researching recent high school students' perspectives on what high schools do that develops academic buoyancy. Academic buoyancy is defined as students' ability to successfully deal with academic setbacks and challenges that are typical of the ordinary course of school life. Examples could include competing deadlines, critical teacher feedback, poor performance on a test, and other similar circumstances. Students are not all the same: some of them are more academically buoyant than others. I'm interested in learning from you what you think high schools do or could do that develops academic buoyancy

Before we continue, I want to ensure that you have read and understand the informed consent form.

[review consent form, ensure that both participant and researcher have a signed copy]

Great! Before we begin the interview, do you have any questions? [Discuss questions] *If any other questions come up at any point, feel free to ask them.*

Interview Questions

Let's think back to your time in high school. Allow yourself to remember the good, the bad, and everything in between. Think about the classes, the teachers, the other students, the activities, the programs, the culture of the school, and the many varied experiences you had while there.

IQ1 In general, how would you describe your high school experience?

Follow-up: Can you identify what factors were consistent across your most positive experiences in high school?

Follow-up: Can you identify what factors were consistent across your favorite teachers, staffers, and administrators in high school?

Follow-up: Can you identify ways that your friends and classmates were able to be supportive of you in high school?

IQ2 What are some of the "common setbacks and challenges" that you can remember experiencing while in high school?

Follow-up: Do you think there are any common characteristics for these setbacks for you?

IQ3 When you experienced those setbacks, how do you think you typically managed them?

Follow-up: How do you think your management of setbacks changed over time while in high school?

Follow-up: Why do you think that is? What contributed to that?

IQ4 When you were able to manage setbacks well, what do you think helped you manage them well?

Follow-up: Was there anything the school did or offered *before* you ran into setbacks that helped your ability to manage them or learn how to manage them?

Follow-up: Was there anything the school did or offered *after* you ran into setbacks that helped your ability to manage them or learn how to manage them?

IQ5 Do you remember seeing other students who were particularly good at managing setbacks?

Follow-up: If so, why do you think they were particularly good at it?

Follow-up: Do you think there were elements of their high school experience that helped them be good at managing setbacks?

IQ6 What are some of the things you remember from when you were in secondary school that helped you feel capable of overcoming obstacles at school?

IQ7 Are there things you think high schools should do more of or add that could help students manage setbacks or learn how to be more buoyant?

IQ8 Last question: Is there anything you want to add about how schools do or should influence the development of academic buoyancy in students?

Interview Question Alignment

Interview Question	Research Question
IQ1	Icebreaker, RQ1, 2, 3
IQ2	RQ1
IQ3	RQ2
IQ4	RQ2, 3
IQ5	RQ2, 3
IQ6	RQ3
IQ7	RQ3
IQ8	RQ3