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Academic Self-Efficacy in College Students During the COVID-19 Pandemic

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ACADEMIC SELF-EFFICACY IN COLLEGE STUDENTS DURING THE COVID-19 PANDEMIC

by

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DISSERTATION

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DEDICATION

To my husband and family – *áhéhéé'* for your unwavering love, support, and encouragement over the years. This dissertation would not have been possible without my family and friends. I dedicate this work to those who came before and those who will come after us. I hope my nephews, niece, and our future Native generations continue to dream big and know they can accomplish hard things. *T'áá hwó ajit'éego t'eiya. Yéego!* Success is up to you through hard work, effort, and determination. Keep going and pushing! Our people and ancestors have come too far for us to limit ourselves or our dreams.

I also dedicate this research to all the students who were deeply affected by the COVID-19 pandemic. You are not alone and there are many out there who care about your experiences and are dedicated to improving teaching and learning moving forward.

Finally, I dedicate this dissertation to my late Uncle Don who always believed in me even when my own self-efficacy wavered. Uncle Don, we did it! This is for you, until we meet again.

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ABSTRACT

The purpose of this study was to explore academic self-efficacy and utility value for college coursework for college undergraduate students during the COVID-19 pandemic. In addition, the present study employed qualitative analysis to explore challenges students faced and what strategies they are using to promote their sense of well-being during the pandemic. One hundred eighty-seven undergraduates enrolled in educational psychology courses completed an online survey during the spring 2022 and summer 2022 semesters. The online survey consisted of a demographic questionnaire, two self-efficacy scales, and a utility value scale. In general, students had high levels of self-efficacy for graduating from college but lower self-efficacy for completing college coursework. A series of two-tailed analysis of variance (ANOVA) were conducted to test whether there were group differences on self-efficacy scales. American Indian/Alaska Native students had higher self-efficacy for successfully completing college coursework than their Hispanic and White peers. Males also had significantly higher self-efficacy scores for successfully completing college coursework than females, and there were differences in mean scores on self-efficacy based on education

level of fathers. Results from the qualitative analysis indicate the majority of students have experienced many challenges associated with online coursework, reported decreased motivation, and increased levels of stress and anxiety during the pandemic. Furthermore, undergraduate's social relationships with family and friends, exercise, and social media are some of the coping strategies students are using to promote their well-being during the ongoing COVID-19 pandemic. Implications of findings within the current research literature and future directions are discussed.

TABLE OF CONTENTS

List of Tables

Chapter I: Introduction

Researchers define academic motivation as a "students' energy and drive to engage in learning" (Ali et al., 2014, p. 123). Student motivation has been linked to student persistence, engagement, and academic achievement. For decades, the goal of motivation researchers has been to understand the mechanisms and processes associated with student motivation for academic achievement, learning, and educational attainment. Two important theories in the motivation literature are academic self-efficacy and expectancy-value theory.

Self-efficacy, in a general sense, is an individual's belief in their ability to achieve or accomplish a task and was born out of social cognitive theory (Bandura, 1977). In the context of education, academic self-efficacy revolves around a person's beliefs about their ability to successfully perform learning activities or tasks. Researchers have found an individual is more likely to persist when confronted with challenges or setbacks when they have high self-efficacy beliefs (Marchand & Schraw, 2016). A high evaluation of self-efficacy can help protect students against feelings of anxiety in the learning context and students are more likely to expend effort on academic tasks (Schunk & Mullen, 2012). Self-efficacy is important for teaching and learning not only because of the established association between adaptive behaviors and outcomes for student learning but also because educators, to a certain degree, can influence a student's level of self-efficacy.

Expectancy-value theory of motivation posits that behavior is determined by two important variables. The first factor is an individual's evaluation of how likely they are to be successful at completing a task (expectancy) and the second factor is the value the student places on the completion of the task for future goals (task value) (Eccles, 1987). Taken together, researchers have found that both expectancies for success and task value influence

performance and achievement related choices (Wigfield & Eccles, 2000). Little research has been done to quantify or better understand the current perceptions of college undergraduates around their motivation to learn and expectations for being successful in their coursework amidst the ongoing pandemic.

This is a unique time in the history of education and educational research due to the ongoing COVID-19 pandemic. Post-secondary institutions experienced a sudden shift in service delivery and most institutions across the United States and around the world closed campuses and moved courses to an online or virtual format for multiple semesters starting in the spring of 2020. Currently, most colleges and universities have adapted the format of course offerings and instituted safety measures for students, faculty, and staff to return to learning. The purpose of the present study is to gain a better understanding of undergraduate self-perceptions of academic self-efficacy for engaging in college coursework and self-efficacy for graduating from college during the COVID-19 pandemic.

Rationale for the Study

The rationale for the current study was to fill current gaps in the literature related to the experiences of undergraduate students during this unique time in education and learning, that of a global pandemic. Although there is a plethora of studies in the existing literature to understand and provide evidence for motivational theories and constructs, there is little research that has been conducted to explore these frameworks after sudden and significant changes to the learning context. Furthermore, the present study employed both quantitative and qualitative research methods in order to gain a richer understanding of student experiences both from motivation instruments and from individual student perspectives from narrative responses.

Statement of the Problem

The current study addresses the gap in the literature associated with understanding undergraduate student motivation for college coursework and their evaluations for success in graduating college during a worldwide pandemic. In addition, this research focused on gaining insight into what challenges undergraduate students are experiencing during the pandemic as well as coping strategies they are employing to promote their overall well-being. Most of the current literature studying the impacts of the pandemic on college students is being conducted internationally and very few studies are being conducted within the United States. Furthermore, the unique characteristics of the student population utilized in this study contribute to the research due to the fact the university is considered a minority majority higher education institution. In fact, at the start of the 2021-2022 academic year, new student enrollment numbers at the University of New Mexico (UNM) had increased since the onset of the pandemic. UNM reported a 10.3 percent total increase in the freshman class from the previous year and increases in enrollment numbers for American Indian students, African American students, and Hispanic students (*UNM New Student Numbers Increase Substantially*, 2021).

Research Questions

The present study focused on eight key research questions. I employed quantitative analysis for the first six research questions to explore student self-efficacy for completing college coursework, self-efficacy for successfully graduating from college, and utility value attributions for completing their college education for future goals. I utilized qualitative analysis for the last two research questions to understand challenges students are

experiencing related to their courses during the pandemic as well as what strategies they are using to promote their well-being.

Research Question 1: What is the level of self-efficacy for successfully completing college coursework among undergraduate students during the COVID-19 pandemic?

Research Question 2: Are there group differences in self-efficacy for successfully completing college coursework for factors such as year in school, race, gender, age, GPA, education level of mother, and education level of father?

Research Question 3: What is the level of self-efficacy for successfully graduating from college among undergraduate students during the COVID-19 pandemic?

Research Question 4: Are there group differences in self-efficacy for successfully graduating from college related to factors such as year in school, race, gender, age, GPA, education level of mother, and education level of father?

Research Question 5: What is the perceived utility value for achieving high grades in college courses during the COVID-19 pandemic?

Research Question 6: What is the perceived utility value for learning course content in college courses during the COVID-19 pandemic?

Research Question 7: What are current challenges undergraduate students are experiencing related to their college courses?

Research Question 8: What are some strategies students are using to promote their own well-being during the ongoing COVID-19 pandemic?

Definition of Terms

Social Cognitive Theory. A framework born out of researcher, Albert Bandura's social learning theory. Social cognitive models of motivation suggest that human functioning

is a reciprocal causation relationship between behaviors, cognition, and one's environment (Bandura, 1989).

Self-Efficacy. According to Bandura (1997), self-efficacy is defined as a person's belief in their own ability or skills to achieve or accomplish a task. Self-efficacy is considered one of the main motivational constructs of social cognitive theory (Linnenbrink & Pintrich, 2002).

Academic Self-Efficacy. Schunk and Mullen (2012) defined academic self-efficacy as, "the perceived confidence in one's ability to execute action for attaining academic goals" (p. 222). Self-efficacy is an evaluation of one's ability to succeed in the academic environment and has been shown to be positively correlated with adaptive behaviors such as college retention and academic achievement as measures by GPA (Robbins et al., 2004).

Expectancy-value Theory. Expectancy-value theory provides a framework to understand achievement motivation utilizing two primary factors (Eccles, 1987; Wigfield & Eccles, 2000). The first factor is the student's evaluation of how likely they are to be successful at the task (expectancy) and the second factor is the value the student places on the completion of the learning task (subjective task value) (Wigfield, 1994). Recently, expectancy-value received an update to the name and is now referred to as Situated Expectancy-value Theory (Eccles & Wigfield, 2020).

Utility Value. Utility value is one of four subjective task values defined within the expectancy-value framework (Eccles & Wigfield, 2002). Utility value is the value associated with a given task that is "determined by how well a task relates to current and future goals, such as career goals" (Eccles & Wigfield, 2002, p. 120).

Chapter II: Review of the Literature

Academic Motivation for College Students

Understanding the current experiences and perceptions of college undergraduates is important because it influences their ability to achieve their academic and life goals (Davis et al., 2006; Pintrich, 2000). From focusing on extrinsic and intrinsic motivation in self-determination theory (Deci et al., 1985) to theories related to how personality traits influence motivation and achievement (Komarraju et al., 2009), there is a plethora of theoretical frameworks and constructs that researchers have posited to help describe and understand motivation for college students. For the present study, I adopt a social cognitive framework for understanding motivation and learning. For the remainder of the chapter, I introduce the major tenets of social cognitive theory and associated motivational constructs operationalized in the current research. Next, I provide an overview of the current context of motivation and learning during this unique time of the COVID-19 pandemic. Finally, I introduce the concept of student well-being and the relevance of well-being for the current study.

Social Cognitive Theory

The famous researcher, Albert Bandura, is considered the father of social-cognitive theory which stemmed from his theory of social learning (Bandura, 1977). In contrast to need-based theories such as self-determination theory or self-worth theory, social cognitive theory suggests that human functioning is a reciprocal relationship between behaviors, cognition, and one's environment (Bandura, 1989). Bandura has explained these complex interactions:

> In social cognitive theory, sociostructural factors operate through psychological mechanisms of the self system to produce behavioral effects. Thus for example,

> economic conditions, socioeconomic status, and educational and family structures affect behavior largely through their impact on people's aspirations, sense of efficacy, personal standards, affective states, and other self-regulatory influences. (Bandura, 2001, p. 15)

For social cognitive theory, it is important to consider the impact of an individual's demographic background, their environment, and other contextual factors in addition to self - beliefs to understand behaviors and motivations. Furthermore, these factors are continuously interacting with one other and affecting an individual's behavior with cognitive processes serving as the mediator between all of them.

Linnenbrink and Pintrich (2002) outlined three general assumptions of social cognitive theory. The first assumption is that motivation is a multi-faceted construct so rather than thinking of motivation as a stable holistic characteristic that an individual has or does not have, the goal of motivation research is to understand *why* and *how* students are motivated (Linnenbrink & Pintrich, 2002). Recognizing the multi-faceted nature of motivation also makes it inherently more difficult to measure and study due to how the construct can vary based on contextual factors or a specific domain. As an example, a researcher may want to examine student self-efficacy for completing a college mathematics course. Those student self-efficacy evaluations are not readily generalizable to levels of self-efficacy for other academic subjects such as history, literature, the sciences, or social sciences.

The second assumption of social cognitive theory is that motivation is sensitive to the context so it must be examined and considered within the situation and is also domain specific (Linnenbrink & Pintrich, 2002). This is one of the strengths of social cognitive

theory because it provides a mechanism to consider how real-world phenomenon and events can influence motivation. To use the same example from earlier, a researcher interested in student self-efficacy evaluations for completing a math course face-to-face may not translate to levels of self-efficacy in those same students for completing a college mathematics course being offered completely online. An individual's context, environment, and social structures matter according to social cognitive theory. Bandura (2001) also discusses the importance of cultural background and the interplay of cultural systems with social and or economic systems. Is there a difference in motivational factors based on whether an individual's background is individualistic versus collectivistic? Is it possible that cultural background can boost levels of self-efficacy in a particular domain? These are all important considerations for understanding an individual's motivation and behaviors.

The third assumption in social cognitive theory is that an individual's cognitive processes function as the central mechanism or mediating factor between an individual's context, emotions, or background for achievement and engagement (Linnenbrink & Pintrich, 2002). In other words, an individual is constantly reacting to, making meaning from, and actively influencing their environment and context. This is an important tenet and was unique at the time of the development of social cognitive theory because it was a departure from the behaviorist approach to psychology that human behavior is simply a reaction to one's environment. Instead, this assumption frames the individual as an important active agent functioning within these spheres rather than a passive agent being acted upon (Bandura, 2001).

These three major tenets of the social cognitive theory framework set the theoretical stage for the current study. Social cognitive theory is especially meaningful for educational

research because the resulting findings can translate to create learning environments optimal for student learning, motivation, engagement, persistence, and resilience. Furthermore, social cognitive theory helps researchers and educators alike understand the complexities around student motivation and offer potential strategies and solutions for helping learners adopt adaptive motivational strategies (Alderman, 2013).

Self-efficacy

One of the motivational constructs of particular interest and focus in the present research is self-efficacy. Self-efficacy is defined as a person's belief in their own ability or skills to achieve or accomplish a task (Bandura, 1977). Self-efficacy has been studied consistently over the last forty years and is a theory of motivation that came out of the broader framework of social cognitive theory. In fact, Linnenbrink and Pintrich (2002) consider self-efficacy to be one of the major social cognitive theories for understanding motivation, achievement, and learning.

Self-efficacy beliefs are domain, task, and context specific rather than a general evaluation of the self, such as self-esteem or self-concept constructs (Bandura, 1977; Linnenbrink & Pintrich, 2002). For example, an individual may have high self-efficacy for their ability to finish a calculus test, but their self-efficacy might decrease if they took the same calculus test in a room full of calculus professors and the test was timed. In this example, the change in contextual factors had an influence on the individual's self-efficacy. As such, self-efficacy beliefs can be difficult to study because researchers must outline and be cognizant of the specific situation they are evaluating or measuring self-efficacy beliefs.

Self-efficacy beliefs originate from four important sources, namely mastery experiences, vicarious experience, social experiences, and physiological/emotional

experiences (Bandura, 1977). The first source, prior mastery experiences, are previous instances where an individual has had success at performing the task or a similar/related task. Continuing with the calculus example, an individual may refer to past experiences with calculus including past performances on calculus assignments and tests to inform their assessment of how they would do on the current test. Bandura (1977) postulated that the more mastery experiences, the higher the self-efficacy. Similarly, the more times a person fails at a task, the lower levels of self-efficacy. An important takeaway for the learning context is the notion that increasing the number of mastery experiences to develop a strong self-efficacy expectation for the task serves as a protective factor against future failures. An application for the classroom is for educators to provide learners more opportunities to work through problems successfully and acquire more mastery experiences for a learning task or goal.

The second source of self-efficacy beliefs are vicarious experiences (sometimes referred to as modeled experiences) which are prior experiences when an individual has witnessed someone else perform the task (Schunk & Mullen, 2012). Bandura explains that vicarious experiences are a result of social comparison and therefore are "weaker and more vulnerable to change" than mastery experiences (Bandura, 1977, p. 197). Vicarious experiences are important to consider because of their potential to influence self-efficacy beliefs and the concept has widely been used in intervention research. In the specific context of learning, educators often use students to model desired behaviors in front of their peers to help students adopt coping behaviors (Schunk & Hanson, 1985).

The third source of self-efficacy beliefs is social persuasion, sometimes referred to by Bandura as verbal persuasion, which is manifested by persuading or telling a person that

they can complete a task (Bandura, 1977). Continuing with the example of degree attainment, peers, instructors, or family members may encourage an individual to continue pursuing their college coursework because they believe they can successfully earn a degree. There is one important caveat for social persuasion. Bandura cautioned that although social persuasion is a relatively simple source of self-efficacy to influence, the effects are weaker and not likely to be long lasting (Bandura, 1977). As an example, it is relatively easy to tell an individual that they can do well on a physics test or other task but if the individual subsequently fails the test, that failure experience will have a bigger impact on the individual than the instance of verbal persuasion.

The fourth source of self-efficacy beliefs is information an individual gleans from physiological and/or emotional experiences (Bandura, 1977). An individual's moods and emotions are an important source of information that influence self-efficacy evaluations. In the educational sphere, test anxiety, is an example of added stress that could impact an individual's self-efficacy beliefs for performing a task. Feelings of frustration or helplessness after a low-test score may in turn lower an individual's level of confidence and efficacy for performing well on future tests.

Bandura (1977) proposed a model of how self-efficacy functions and influences other factors. In this model, self-efficacy directly impacts goals, outcome expectations, socio-structural considerations, and behaviors. Within those relationships, self-efficacy impacts goals, and goals in turn influence behavior, the relationship between self-efficacy and behavior is both direct and indirect (Marchand & Schraw, 2016).

In the context of education, self-efficacy offers a framework for not only understanding why (or why not) a student may engage in a certain learning task or behavior,

but also offers opportunities for educators to positively influence learner behaviors (Marchand & Schraw, 2016). For example, teachers can directly influence self-efficacy for a task by offering praise for effort or strategy use on completing a difficult learning task. As a result, a student may have an increase in self-efficacy for performing similar tasks in the future by having attained a mastery experience. In this way, educators can encourage student learning, achievement, self-regulation, and other positive motivational outcomes by focusing on fostering strong student self-efficacy in the learning context.

Schunk and Pajares (2002) note that families and parents can influence the development of an individual's self-efficacy. Parents can help scaffold mastery experiences, provide a source of vicarious learning opportunities, and serve as a source of social persuasion for their children (Schunk & Pajares, 2002). Motivational research has found interesting results when examining other parental factors such as parental level of education on student motivation. For instance, Fike and Fike (2008) found that having a father who has some college education was a positive predictor of college student retention. Students who are identified as first generation college students, or a student who is the first in their immediate family to attend college, are considered at risk for dropping out of college (Choy et al., 2000). Some explanations for why this phenomenon occurs are that first generation college students may not have parents who are as involved with their education or have parents who are not as supportive of their educational goals (Choy et al., 2000; Ratelle et al., 2005). More work needs to be done in this area to understand how factors related to parental educational backgrounds impacts self-efficacy evaluations and student motivation in general.

In the research literature, self-efficacy has shown to have a strong positive association with performance indicators such as GPA (Richardson et al., 2012). In other words, the

higher a student's self-efficacy, the higher the student GPA. The correlation between self-efficacy and academic performance indicators is important because self-efficacy is not a fixed trait. There are many sources of self-efficacy evaluations I have been explained so far in this review. The key takeaway is that due to the malleable nature of self-efficacy, there is the potential to influence self-efficacy evaluations in a positive way. For the next section, I extend the review of the research literature to self-efficacy within the academic context.

Academic Self-Efficacy

Self-efficacy is an important construct in the context of education because one's self-efficacy can direct behaviors, influence decision making processes, determine persistence efforts, and is tied to other adaptive social cognitive processes (Schunk & Mullen, 2012). Schunk and Mullen (2012) defined academic self-efficacy as, "the perceived confidence in one's ability to execute action for attaining academic goals" (p. 222). Zajacova, Lynch, and Espenshade (2005) operationalized academic self-efficacy as "students' confidence in their ability to carry out such academic tasks as preparing for exams and writing term papers" (p. 679). Academic self-efficacy is an important factor because it has shown to be predictive of adaptive behaviors and positive educational outcomes such as persistence in college (Zajacova et al., 2005). Researchers have also found a positive correlation between academic self-efficacy and academic performance (Honicke & Broadbent, 2016). A meta-analysis conducted by Richardson and colleagues found a medium positive correlation between academic self-efficacy and GPA (Richardson et al., 2012). Similarly, a study conducted by Robbins and colleagues (2004) found that academic self-efficacy and achievement motivation were the strongest predictors for college student GPA.

Bandura posits that levels of self-efficacy serve as an indicator to an individual for how much effort to expend on a given task with higher levels of self-efficacy correlating with higher levels of persistence (Bandura, 1977). Academic self-efficacy also gives individuals cues for whether to engage in a particular task or not when it comes to learning tasks and behaviors. There is a positive correlation between academic self-efficacy and the number of hours students spend engaging in studying (Torres & Solberg, 2001). Therefore, academic self-efficacy is related to adaptive and maladaptive behaviors and practices in the context of teaching and learning. To put simply, in an academic context, self-efficacy refers to a student's sense of self-reliance and confidence in their ability to succeed in the learning setting. A student's level of self-efficacy is related to the amount and kind of effort they dedicate to a task as well as how much they may persevere (or not) when faced with difficulties or challenges in the learning context.

In general, self-efficacy research looking at the impact of group differences is sparse. A more recent study conducted by Pintrich (2000) found that in general, self-efficacy decreased over time from eighth grade to ninth grade students. In addition, gender was found to be a significant interaction with females reporting lower levels of self-efficacy for how they could do on their coursework compared to their male counterparts (Pintrich, 2000). More work needs to be done in this area to get a better understanding of how demographic variables such as gender, age, and ethnicity impact academic self-efficacy.

Outcome Expectancies

Bandura's model of self-efficacy (1997) has differentiated between efficacy expectations (discussed in the previous section) and outcome expectancies. According to Bandura, "an outcome expectancy is defined as a person's estimate that a given behavior will

lead to certain outcomes. An efficacy expectation is the conviction that one can successfully execute the behavior required to produce the outcomes" (Bandura, 1977). The outcome expectancy answer questions like, "What will happen if I do this", whereas self-efficacy beliefs answer the question, "Can I do this"? An example of outcome expectancies in the context of education might be that a student believes that obtaining a high score on a college entrance exam (e.g., SAT or ACT) will result in being accepted into a specific college or university. In contrast, the self-efficacy belief for this example would be the student's own perception for how well they will perform on the college entrance exam. For Bandura's model, self-efficacy beliefs are fundamentally different from outcome expectations but both constructs are important to consider for determining student behaviors and performance in the learning context.

Across the varying models of student motivation and learning, the importance of goal setting and/or future planning is widely recognized. In 2004, a conceptual framework for assessing motivation and self-regulated learning was proposed by motivation researcher Paul Pintrich. Pintrich approaches motivation from a self-regulated learning perspective which assumes that individuals take an active role in their own learning through active planning, monitoring, control, and reaction or reflection (Pintrich, 2004). One of the important processes in the forethought or planning phase of Pintrich's model is concerned with the development of future goals, target goal setting, and goal orientation for learning (Pintrich, 2004). Pintrich explains, "Students have to become aware of and monitor their progress toward their learning goals…in order to be able to make any adaptive changes in their learning (Pintrich, 2004, p. 392).

The importance of future goals in Pintrich's work echoes to Bandura's earlier works where he explained, "[t]he capacity to represent future consequences in thought provides one cognitively based sources of motivation. Through cognitive representation of future outcomes individuals can generate current motivators of behavior" (Bandura, 1977). Put simply, future goals or expected outcomes can serve as powerful sources of motivation and ultimately drive an individual's behaviors in the present (Bandura, 2001).

Motivational researchers often combine motivational constructs from different theoretical frameworks and study their relationships and impacts with each other. As an example, self-efficacy is often examined in tandem with self-regulation (Schunk & Zimmerman, 2007; Shell & Husman, 2008). Another key motivational framework that grew out of social cognitive theory and is often examined with self-efficacy is expectancy-value theory. I will explore the key tenants and definitions of expectancy-value theory in the next section.

Situated Expectancy-Value Framework

Expectancy-value theory provides another framework to understand and potentially measure student achievement motivation utilizing two primary factors (Eccles, 1987; Wigfield & Eccles, 2000). The first factor is the student's evaluation of how likely they are to be successful at the task (expectancy) and the second factor is the value the student places on the completion of the learning task (subjective task value) (Wigfield, 1994). Wigfield and Eccles have explained that their expectancy construct is more closely related to Bandura's self-efficacy construct but is different in that expectancies can be measured more generally than self-efficacy (Wigfield & Eccles, 2000). Wigfield and Eccles (2000) also point out that self-efficacy beliefs focus on an individual's evaluations of how successful they will be at

performing a given task whereas expectancy measures often ask individuals to compare their abilities to others.

Expectancies for success stem from a myriad of factors including one's previous experiences, goals, self-concept, and environmental influences (Wigfield, 1994). Together, expectancies and task value influence performance and engagement in achievement related choices (Eccles & Wigfield, 2020). A task value is the subjective evaluation an individual associates with completing or engaging in a specific task. In essence a task value is "determined by how well a task relates to current and future goals" (Eccles & Wigfield, 2002). Eccles (1987) distinguished between four types of task value: attainment value, intrinsic value, utility value, and cost.

The comprehensive expectancy-value model proposed by Eccles and colleagues includes a complex network of social, environmental, and cultural determinants that directly and indirectly influence a person's expectancy and task value evaluations which in turn affect achievement choices, behaviors, and outcomes (Eccles, 2005; Eccles & Wigfield, 2002; Wigfield & Eccles, 1992). Wigfield and Eccles (2000) have acknowledged the similarity between expectancies and self-efficacy but have offered that expectancy for success is considered (and measured) in a more general way than self-efficacy (p. 72). Furthermore, there is a correlation between self-efficacy and outcome expectancy task values in the research literature. Pintrich (2000) found a positive relationship between middle school student self-efficacy evaluations and task value evaluations. The present research extends this type of research to the context of higher education.

Expectancy-value theory has been used to help explain the cultural, social, and environmental mechanisms at work that contribute to disparities in academic motivation and

achievement. Eccles and colleagues argue (2006) that students from underrepresented groups (African American, Hispanics, and Native Americans) may experience discrimination at school which may negatively affect both their expectations to succeed and the value associated with the learning task which ultimately affects motivation for learning (Eccles et al., 2006). Stereotype threat, Ogbu's (1992) involuntary minority theory, and other similar constructs have been related to expectancy-value theory and illustrate how minority students are put at more risk for devaluing the importance of school due to cultural and social pressures (Steele, 1992). More work needs to be done to understand how these constructs function in higher educational settings that are considered minority majority (student population is made of up large numbers of traditionally underrepresented groups). Is it possible that institutions that serve more minority students provide some level of protection against stereotype threat? How might that affect student motivation in that learning context?

After four decades, expectancy-value theory received an important update. In 2020, the well-known researchers Eccles and Wigfield renamed their classic framework situated expectancy-value theory or SEVT (Eccles & Wigfield, 2020). The new update calls for a renewed focus on the specific situation and as the authors explain the idea that, "all of the processes underlying the SEVT model occur over time and are very much influenced by the immediate situation in which each decision is taking place" (Eccles & Wigfield, 2020, p. 2). This critical update to expectancy value theory highlights the importance of conducting research work and framing the study within the larger social, cultural, and environmental context.

Subjective Task Value

One motivation construct that is important in motivational research that stems from expectancy-value theory are subjective task values. Subjective task values are defined as, "how a task meets different needs of individuals" (Wigfield, 1994, p. 52). Eccles (1987) distinguished between four types of subjective task values; attainment value, intrinsic value, cost, and utility value. Attainment values are reflected by the personal importance associated with engaging and doing well on a certain task and are related to a person's personal identity or sense of self (Eccles, 2005). For example, if a student believes they are a strong writer, they may give more attainment value to a writing assignment than a math assignment.

The second type of task value is intrinsic value (also referred to as interest value) which is the inherent enjoyment one experiences by engaging in a specific task (Wigfield & Eccles, 2000). An example of intrinsic value is if a student is interested in learning about astronomy, then they are more likely to find intrinsic value from taking an astronomy college course than a history course. Intrinsic value is similar to the intrinsic motivation construct within self-determination theory of achievement motivation (Ryan & Deci, 2000) as well as situational and individual interest as defined by Hidi and Harackiewicz (2000).

The third type of task value is cost which is the perceived cost (loss of time and energy) for engaging in a task (Eccles, 1987). Eccles explains that individuals have to make choices for what they will expend their limited resources on and therein lies the evaluation of cost relative to the benefits of engaging in a task (Eccles, 1987; Eccles & Wigfield, 2020). The choices can be related to an individual's future goals, personal values, or other set of beliefs and inherently assumes an individual forms a hierarchy of perceived importance of the task (Eccles, 1987). An example of task value cost is a student assessing how much effort

to study for a midterm exam. A student may consider how time spent studying on a midterm exam will take away from participating in other activities or other course assignments.

The fourth type of task value is utility value which is the value placed on a task that is "determined by how well a task relates to current and future goals, such as career goals" (Eccles & Wigfield, 2002, p. 120). Future value goals are formed within a student's sociocultural context, past experiences with one's family, community, school, and other societal institutions. The logic is if an individual rates a task as having high utility value, they will be more motivated to expend effort and resources to complete it even if the individual does not find the task inherently interesting or rewarding (Eccles & Wigfield, 2002). Utility value has been more closely associated with the concept of extrinsic motivation in self-determination theory which is defined as engaging in a task for some external reward or to avoid a punishment (Ryan & Deci, 2000). Utility value, studied extensively in white middle class populations, has been correlated with positive academic outcomes including interest, effort, and performance. In the current context, utility value of education is a student's assessment of how valuable school and education is for their future goals, endeavors, and success. This present study is interested in examining the utility value college students attribute to their college education and achievement for future life goals.

The COVID-19 Pandemic

Social cognitive theory and expectancy value theory emphasize the importance of considering the context and environment on student achievement and motivation. With the onset of the COVID-19 pandemic, sudden changes were made to the learning environment for students and educators across the globe. In order to understand the potential impacts of the pandemic on academic motivation, it is important to frame the COVID-19 pandemic and

subsequent response within both the national and local context. Although the COVID-19 pandemic has impacted every country, nation, and state worldwide, this study acknowledges that not all have experienced the pandemic in the same way. Across the United States, individual states took widely different approaches to responding to the pandemic including mask and vaccine mandates, shuttering schools and higher education institutions, social distancing protocols, and lockdown procedures. In this section, I will provide a brief overview of major events of the pandemic and includes a timeline of events in the state of New Mexico and the University of New Mexico (UNM) in order to provide a better picture of what participants in the current study experienced during the pandemic.

In early January of 2020, the novel coronavirus was identified in China by Public health officials after a cluster of patients became sick with pneumonia-like symptoms in December of 2019 (CDC, 2022). Within the same month, the CDC reported the first confirmed cases of (COVID-19) in the United States (CDC, 2022). In New Mexico, the first cases of COVID-19 were confirmed on March 11, 2020 and the very next day, on March 12, 2020, New Mexico closed all K-12 schools (*NMDOH Observes Two-Year Anniversary of First COVID-19 Cases in New Mexico | NMDOH - Coronavirus Updates*, 2022).

On March 10, 2020, UNM issued guidance regarding university travel, and instituted a 14-day isolation period for any students, faculty, or staff who experienced symptoms consistent with COVID-19 (*Novel Coronavirus (COVID-19) Update and Guidance*, 2020). In the weeks following, UNM took measures to reduce the spread of the virus by restricting access to labs, libraries, and other critical campus facilities along with extending Spring break. Days later, the university postponed and canceled campus-wide events including Spring 2020 Commencement and also announced the transition to remote instruction starting

March 23 and continuing until the end of the spring 2020 semester (*UNM Postpones Spring 2020 Commencement Exercises*, 2020). Examining the timeline illustrates how drastically the learning context changed for all students, K-12 through higher education. At UNM, students, staff and faculty only had a total of 10 calendar days from the first confirmed cases in the state of New Mexico to make the transition to limited operations at the university including remote instruction for the remainder of the semester.

Higher education institutions around the globe had to make similar drastic changes to operation and over the course of the ensuing months, the higher education landscape was completely changed. Not only was the mode of instructional delivery changed but so were assessments and grading norms as well. Many colleges and universities offered a credit or no credit grade system including UNM (*Students Can Opt into Credit/No Credit System*, 2020). In fall of 2020, the University of New Mexico offered hybrid instruction with a combination of online and face-to-face classes being offered (*UNM Plans Campus Return*, 2020). In spring 2021, in addition to continued limited operation status, and hybrid instruction modes, UNM along with other colleges and universities across the globe, instituted additional safety measures and mitigation efforts such as mandatory vaccination requirements, testing, mask mandates, and continued limits on gatherings. UNM returned in the fall 2021 semester with mandatory vaccine requirements and mandatory mask-wearing policy for all students, staff, and faculty (*UNM to Implement Vaccination Mandate*, 2021). The mandatory mask mandate was briefly lifted, however, in the early spring 2022 semester, the university reinstated mask mandates due to the omicron variant surge (*UNM Updates Mask Requirements amid Omicron Surge*, 2022). As recent as July 2022, the CDC released data that Omicron variants were the dominant strains of new COVID-19 case numbers across the U.S. (CDC, 2022). The

University of New Mexico continues to monitor and adhere to guidance from the State of New Mexico and frequently updates campus guidelines and mandates to adjust to ever changing local conditions on their website (*Bringing Back the Pack | The University of New Mexico*, n.d.).

Although UNM has returned to almost full operation status, returned to more face-to-face instruction, and lifted limits on gatherings, the pandemic is still ongoing and faculty, staff, and students alike are continuing to experience real impacts of the pandemic. For example, a report published in November of 2022 utilized survey data collected from UNM faculty members in the Spring 2022 semester to assess work climate (Advance, 2022). The major findings of the report were that faculty were experiencing continued stress and burnout from the pandemic and reported numerous negative impacts to their scholarship, psychological and physical well-being amidst increased demands for teaching mentoring, and service obligations. The majority (83%) of faculty members reported the pandemic had negatively affected their motivation at work (Advance, 2022, p. 3). Some faculty members also reported higher instances of mental health concerns from their students (Advance, 2022).

Nationally, some researchers have started looking at the impact of the COVID-19 pandemic on the psychological health and well-being of college students and have found increases in levels of stress, anxiety, and depression in college students in the United States (Kecojevic et al., 2020). Wang and colleagues (2020) found that the biggest contributor to stress for college students amidst the pandemic was for academics, namely difficulty with transition and maintenance of online classes, concern over grades, and delayed graduation (Wang et al., 2020). Another finding from Wang and colleagues (2020) was that one of the main causes of increased college student stress was due to unemployment and/or uncertainty

of future employment. Similarly, Browning and colleagues (2021) surveyed college students across the United States and found an increase in lack of motivation as well as an increase in stress and anxiety were common experiences among participants. In fact, over 21% of students mentioned lack of motivation, an increase or procrastination, and difficulty with concentrating in open-ended responses to the survey (Browning et al., 2021, pp. 8–9). In addition, students described increased anxiety and concern related to online learning tasks and requirements (Browning et al., 2021). The research associated with measuring impacts the pandemic has on student motivation, perceptions for outcomes is new and will likely continue to be studied for decades to come.

Daniels, Goegan, and Parker (2021) utilized retrospective self-report surveys collected from Canadian undergraduate students to examine student motivation, engagement, and perceptions of success before COVID-19 and then while in remote learning. The findings from the study were that student achievement goals, engagement, and perceptions of success all significantly decreased (Daniels et al., 2021). The authors concluded that the change in learning conditions caused by COVID-19 had "a meaningful impact on students' achievement goals and their self-reported engagement" (Daniels et al., 2021, p. 311). One limitation the authors identified in their study is the researchers did not collect data related to participants personal wellbeing or hardships related to COVID-19 which may have contributed to the learning conditions while in remote learning. A qualitative study conducted internationally with college students in India interviewed 30 college students and found that participants spent more time with family, hobbies, and exercise as coping mechanisms to combat stress and anxiety from the pandemic (George & Thomas, 2021). The

present study seeks to extend and fill some of the gap in the research by asking students what personal challenges and coping strategies they were employing during the pandemic.

A better understanding of student academic self-efficacy for college coursework, self-efficacy for graduating from college, and utility value for college coursework for undergraduates will help educators and researchers understand potential areas to support students as the COVID-19 pandemic continues.

College Student Well-being

The Centers for Disease Control and Prevention (CDC) has helped to define a broad definition of well-being,

> There is general agreement that at minimum, well-being includes the presence of positive emotions and moods, the absence of negative emotions, satisfaction with life, fulfillment and positive functioning. In simple terms, well-being can be described as judging life positively and feeling good. (*Well-Being Concepts | HRQOL | CDC*, 2018)

There are multiple aspects of well-being including physical, social, emotional, psychological, economic, and life satisfaction that comprise the research related to the broad construct of well-being (*Well-Being Concepts | HRQOL | CDC*, 2018). Well-being is important because it has been correlated with longevity, healthy behaviors, productivity, mental and physical illness as well as social connectedness (*Well-Being Concepts | HRQOL | CDC*, 2018). This is a strength of Bandura's social cognitive theory because it provides a framework for examining context, background, social, and even emotional factors with self-efficacy. Researchers have examined the link between self-efficacy and emotional factors such as stress, but the literature is very limited. One study found a moderate negative relationship

between academic self-efficacy and stress for college students (Zajacova et al., 2005). In other words, the higher levels of academic self-efficacy correlate with lower levels of perceived stress for college students.

Given the relationship between academic self-efficacy and stress, it is not a far stretch to assume that self-efficacy is impacted by student well-being and vice versa. Well-being is important to consider within the context of higher education and learning because the research literature has shown a correlation between health and well-being indicators and academic performance in college students (Ruthig et al., 2011). Most of the existing research on student well-being and academic performance has been conducted internationally. For example, a study conducted by Andrews and Wilding (2004) found that adverse life experiences resulted in increases in anxiety and depression which in turn predicted a decrease in exam performance in undergraduate students in the United Kingdom. Outside of clinical psychology research, the existing research literature on college student well-being and academic motivation is sparse.

Researchers are now beginning to look at the impacts of COVID-19 on college student well-being. One study found that undergraduate well-being in terms of physical health, negative emotions, and loneliness had increased over the course of the pandemic (Prasath et al., 2021). Furthermore, adaptive coping strategies served as a mediating factor to well-being, in other words, utilizing coping strategies such as emotional support and positive reframing, helped to counter the negative effects of the pandemic on student well-being (Prasath et al., 2021). More work is needed to understand the impacts (if any) of student well-being on academic motivation. The goal of the present research is to start to bridge the gap in the literature by examining well-being, strategies that promote well-being, and

academic motivation for undergraduate students within the context of the worldwide pandemic.

The Present Study

The current study utilized social cognitive theory to examine two motivational constructs, academic self-efficacy and utility value, in order to gain an understanding of academic motivation of college undergraduates attending the University of New Mexico during the COVID-19 pandemic. This cross-sectional survey research design also explored potential group differences on key motivational constructs based on factors such as year in school, ethnicity, gender, age, and education level of parents. In addition, the present study employed qualitative research methods to understand current challenges undergraduate students are facing related to their coursework and what strategies they are using to promote their sense of well-being. The context of the university is unique from other studies in that the diverse student population has earned the university a designation as a minority majority higher education institution. While previous research may have used retrospective surveys, the present study collected perspectives from students while they were still engaged in online learning.

Chapter III: Methods

For the current study, I employed a cross-sectional survey research design to collect both quantitative and qualitative data to respond to the research questions. The purpose of this study was to gain a better understanding of academic self-efficacy for completing college coursework, self-efficacy for graduating from college, and utility value for college coursework for college undergraduate students. Another goal was to understand some of the challenges and experiences undergraduate students have faced during the COVID-19 pandemic as well as strategies students have used to promote their well-being. I utilized an online survey consisting of demographic questions, motivational scales, and open-ended questions that participants could complete as part of a research requirement for their educational psychology courses. This study is considered a mixed methods study as both quantitative and qualitative data were collected and analyzed.

The general approach I used for the quantitative analysis was to utilize exploratory data analysis, referred to as EDA. Exploratory data analysis is to "look at the data from as many angles as possible, always on the lookout for some interesting feature. The data analyst is interesting in uncovering facts about the data…and to think about the data from many points of view" (Morgenthaler, 2009, p. 33). EDA is attributed to the writings and teachings of famous mathematical statistician John W. Tukey, who argued for the necessity of using data exploration prior to model-building and confirmation (Morgenthaler, 2009).

Common procedures for EDA include examining measures of central tendency (e.g., average, standard deviation), the shapes of distributions, type of variation within variables, and type of covariation between variables (Grolemund, 2017; Morgenthaler, 2009). Grolemund (2017) outlined a three-stage iterative cycle with EDA. These stages are, "1)

Generate questions your data. 2) Search for answers by visualizing, transforming, and modeling your data. 3) Use what you learn to refine your questions and/or generate new questions" (Grolemund, 2017, sec. EDA Introduction). EDA seemed appropriate for my research questions of this study due to the characteristics of the sample population as well as the situational context this study is framed around (i.e., the COVID-19 pandemic).

In the following sections, I outline the participants, instruments, considerations for methodological integrity, research procedures, and the quantitative and qualitative analyses for the present study.

Participants

The participants for this study were a convenience sample recruited from undergraduate students enrolled in educational psychology courses at the University of New Mexico. Students had the option of participating in the study in order to complete a research requirement as part of their undergraduate course. Students who did not wish to participate in this study were given the option of completing an alternative assignment for credit. All undergraduates enrolled in educational psychology courses in the Spring 2022 and Summer 2022 semesters had the option of participating in this study to fulfill part of their course requirement. For the Spring 2022 semester, there were a total of 323 students enrolled in the three Educational Psychology courses (13 different sections). There was one additional study that ran for the first three weeks of the Spring 2022 semester. In the Summer 2022 semester, there 68 students enrolled in three Educational Psychology courses (5 different sections).

There was a total of 230 attempts to respond to the online survey during the spring 2022 and summer 2022 semesters. For the 2021-2022 academic year, UNM reported there were a total of 15,336 (58% Women) undergraduates with 49% Hispanic/Latinx, 29% White,

6% American Indian or Alaska Native, and 4% Asian (*Common Data Set for the University of New Mexico :: Office of Institutional Analytics | The University of New Mexico*, n.d.).

Instrumentation

The instruments I used in this study were compiled from a few different scales developed by other researchers to measure academic motivational constructs such as self-efficacy for completing college coursework, self-efficacy for graduating from college, and utility value for future goals. In addition, I developed a demographic questionnaire to gather information from each participant that consisted of closed-ended questions, Likert-type items, and open-ended questions. The instruments I used in this study are included as Appendices.

Demographic Questionnaire

Participants completed a questionnaire (see Appendix A) to collect demographic information including year in school, college major, ethnicity, gender, age, and the highest education level of both their mother and father. In addition to these, participants were asked to provide a self-reported estimate of GPA, a measure of academic achievement. Participants also self-reported the number of classes they were taking online, the number of classes they were taking face-to-face, and whether they have access to a reliable computer and internet connection in their home.

In addition to the demographic information, the participants were also asked three questions related to their sense of well-being. One question asked, “What strategies do you use to promote your sense of wellbeing as a college student?” and listed 15 pre-populated wellness strategies such as meditation, mindfulness, time with friends, social media, etc. I compiled these self-care strategies from a combination of sources including the CDC and the

Mental Health First Aid program from the National Council for Mental Wellbeing (Nelson, 2022; *Well-Being Concepts | HRQOL | CDC*, 2018). Participants could simply check either a "Yes" or "No" box next to each listed strategy. Participants also had the option of filling in the blank for the "Other" category which was open-ended. I intentionally allowed the participants to determine what the definition of well-being meant for them. I did not explicitly provide a definition of well-being to the participants. Students taking educational psychology courses 303 and 310 had some exposure to well-being concepts as part of course assignment so this could have had an impact on the way the students understood and interpreted well-being on the survey questions.

Next, I included two open-ended questions to close out the demographic portion of the survey. The first question asked, "What is the impact of these strategies on your motivation for completing your college education?" Participants had a large text box they could use to write their responses to the question. The second open-ended question asked participants to list three challenges they had experienced while completing college coursework during the COVID-19 pandemic. Participants had a large text box they could use to write their responses to this question as well.

Self-Efficacy for Successfully Completing College Coursework Scale

To measure student levels of academic self-efficacy for successfully completing college courses, I used the Self-Efficacy for Successfully Completing College Coursework scale was used (see Appendix B). Participants were asked to rate on a scale from "0 (completely unconfident)" to "100 (completely confident)" their level of confidence for being successful on 14 different learning tasks. Example tasks include, "Keep your attention focused while reading the text or readings", and "Study effectively for the course exams".

This scale was developed and used with an undergraduate sample by Shell and Husman (2008) with a reliability estimate of $\alpha = 0.94$ which is considered very good internal consistency for social science research. Shell and Husman (2008) also conducted a principal components analysis to examine construct validity of the scale and the analysis resulted in a single factor. For this instrument, a mean score was calculated across all fourteen items which results in an overall self-efficacy score. This scale is similar to other instruments geared toward measuring academic self-efficacy such as the Academic Self-efficacy Scale (Chemers et al., 2001) and the College Self-Efficacy Inventory (Solberg et al., 1993). The Academic Self-efficacy Scale was an eight-item scale developed by Chemers and colleagues (2001) and asks participants to rate their level of confidence to perform well on academic tasks such as test taking, researching and writing papers, and note taking. The College Self-Efficacy Inventory was developed by Solberg and colleagues (1993) and asks participants to rate the level of confidence to perform various academic tasks and was used with a Hispanic student population.

The reliability estimate for the Self-Efficacy for Successfully Completing College Coursework scale for this sample was calculated using Cronbach's alpha resulting in an estimate of $\alpha = 0.96$ which is considered very good internal consistency. In other words, the items in this scale seem to be measuring the same latent construct (Vogt, 2007).

Self-Efficacy for Successfully Graduating from College

To measure student levels of self-efficacy for graduating from college, participants were asked to rate on a scale of "0 (Completely Unconfident)" to "100 (Completely Confident)" how confident they were for being able to achieve this goal. I adapted this item from a similar instrument also used by Shell and Husman (2008) which asked undergraduate

students about their self-efficacy for achieving high grades, understanding course material, and graduating from college. This scale is included as part of the self-efficacy scales and included in Appendix B.

Utility Value Scales

Participants were also asked to complete a utility value scale adapted from Shell and Husman (2008) and a similar scale also used by Shell (1989). The scales consisted of two parts with 12 items in each part, resulting in a total of 24 items (see Appendix C). Part 1 of the scale (referred to as Utility Value for High Grades hereafter) consisted of items asking participants to rate how important achieving high grades (extrinsic outcome) are for accomplishing a myriad of future goals ranging from future employment, family life, and general citizenship. Participants were asked to rate each item on a 5-point Likert scale from "1 (Very Unimportant)" to "5 (Very Important)". Internal consistency reported by Shell and Husman (2008) for Part 1 of the scale was $\alpha = 0.89$ which is acceptable for social science research. In the current study, reliability estimates using the Cronbach alpha coefficient for the Utility Value Grades scale was $\alpha = 0.93$ which is considered very good internal consistency.

Part 2 part of the utility value scale (referred to hereafter as Utility Value for Learning Course Content) consisted of items related to how important learning and understanding the course content (intrinsic outcome) was for achieving the same future goals in part one. Again, participants were asked to rate each item on a 5-point Likert scale from "Very Unimportant" to "Very Important". Cronbach's alpha estimates for the reliability of the Utility Value Learning scale was conducted by Shell and Husman (2008) and resulted in $\alpha = 0.88$ which is deemed acceptable for social science research. In the current study, the

Cronbach alpha coefficient for the Utility Value Learning scale was $\alpha = 0.90$. It should be noted that this scale is similar to other scales that measure task or utility value which provides content validity for the scale (Muijs, 2010). Pintrich (2000) also utilized a utility value instrument that asked similar questions such as, "I think what I'm learning in class is useful for me to know" (p. 555).

Part 1 and Part 2 of the Utility Value Scale were used to calculate two overall mean scores for each of these constructs for each individual. The mean scores were utilized as two individual variables for all statistical analysis in this study.

Methodological Integrity

Reliability

Table 1 provides reliability estimates for the Self-efficacy for Successfully Completing College Coursework Scale and Parts 1 and 2 of the Utility value scales from the Shell and Husman (2008) study and from the sample in the present study. In general, estimates of internal consistency using Cronbach's alpha estimates between the two studies were between .88 and .96 which is considered very good for social science research (Vogt, 2007, p. 90). Cronbach's coefficient estimate provides information about how closely related the items are as a group and that the items are measuring the same underlying construct (Muijs, 2010). It is important for researchers to examine reliability estimates to understand how a scale performs with a specific sample. For the sample used in this study, which was comprised of higher numbers of minority students (Hispanic and American Indian), the scale reliability estimates were similar to reliability estimates in Shell and Husman's (2008) participant sample.

Table 1

Reliability Estimates of Self-Efficacy for Successfully Completing College Coursework Scale and Utility Value Scales using Cronbach's Alpha

	Number of items in the scale	2008 Shell & Husman Undergraduate Students N= 397	2023 Lane Undergraduate Students Present Study N = 184
Self-Efficacy for Successfully Completing College Coursework	14 items	.94	.96
Utility Value for High Grades	12 items	.89	.93
Utility Value for Learning Course Content	12 items	.88	.90

Validity

For the present study, I used three different scales to measure three motivational constructs. The Self-Efficacy for Successfully Completing College Coursework Scale purports to measure a student's level of confidence for successfully completing a series of tasks consistent with undertaking college coursework (e.g., taking effective notes on course lectures, study for course exams, and understanding the course text or readings) (Shell & Husman, 2008). I calculated a self-efficacy scale score for each individual by averaging the responses across the 14 items. The content of each item in the scale is similar to other self-efficacy scales such as the Academic Self-efficacy Scale (Chemers et al., 2001) and the College Self-Efficacy Inventory (Solberg et al., 1993).

Two scales were used to measure two different types of values or learning goals. The first scale, the Utility Task Value for High Grades, focused on measuring the value or

importance an individual holds for achieving high grades (extrinsic goal) for achieving future life goals. The second part of the scale, the Utility Task Value for Learning Course Content, was focused on measuring the value or importance an individual holds for learning course content (intrinsic goal) in achieving future life goals. There were 12 items in each scale. I calculated scale scores for each of these constructs by averaging across the 12-items.

I estimated Pearson's correlation coefficients for the three motivation scales in the study as well as GPA and the results are presented in Table 2. The relationship between student achievement (as measured by estimated GPA) and self-efficacy for graduating from college was investigated using Pearson product-moment correlation coefficient. There was a small positive relation between student achievement (as measured by estimated GPA) and self-efficacy for graduating from college, $r = .24$, $n = 183$, $p < .01$. There was also a small positive relationship between GPA and self-efficacy for successfully completing college coursework, $r = .16$, $n = 183$, $p < .01$. We can interpret these relationships that the higher self-efficacy and expectancy value scores, the higher GPA (academic achievement). These positive correlations between the self-efficacy and academic achievement variables aligns with the research literature about the positive relationship these motivation constructs have with student achievement (Honicke & Broadbent, 2016; Richardson et al., 2012).

I investigated the relationship between self-efficacy for completing college coursework and self-efficacy for graduating college using Pearson product-moment correlation coefficient. There was a medium, positive correlation between the two variables, $r = .76$, $n = 184$, $p < .01$. This result suggests that high levels of self-efficacy for using successfully completing college courses are associated with higher self-efficacy for successfully graduating from college. This relationship provides evidence for construct

validity for the scales in that we would expect two scales that measure self-efficacy to be positively correlated with one another.

I investigated the relationship between the of Value of Learning Course Content and the Value of High Grades using Pearson product-moment correlation coefficient. There was a strong positive correlation between the two variables, $r = .76$, $n = 184$, $p < .01$. This result suggests that the higher the Value Learning course content score, the higher the Value of Grades score. The Value for Learning course content also had a small positive relationship with Self-efficacy for successfully completing college coursework, $r = .16$, $n = 184$, $p < .05$. This result suggests the higher a student's score on the Value for Learning course content scale, the higher the scores for self-efficacy for successfully completing college coursework. These correlation results are interesting because it suggests the higher a student rates their current self-efficacy for completing college coursework, the higher their value of learning course content on achieving future goals.

Overall, the results from the correlational analyses support the theoretical framework around self-efficacy for successfully completing college coursework, self-efficacy for graduating from college, and utility value. Furthermore, the positive correlation between self-efficacy and expectancy for success and GPA supports theoretical and empirical findings for these two important motivational constructs.

Table 2

Estimated Pearson's Correlation Coefficients for Motivation Scales and GPA

	GPA	Self-Efficacy College Coursework	Self-Efficacy Graduate College	Utility Value for High Grades	Utility Value for Learning Course Content
GPA	-	.163*	.240**	-.014	.060

Self-Efficacy College Coursework	-	.492**	.122	.161*
Self-Efficacy Graduate College		-	.042	.107
Utility Value for High Grades			-	.757**
Utility Value for Learning Course Content				-

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Procedure

For this cross-sectional study, I focused on describing academic motivation factors for undergraduate students attending university in the southwest United States. Educational psychology course instructors provided their students with information about the study to fulfill their research course requirements. Those students interested in participating in this study were provided a link to complete the online questionnaire hosted by Survey Monkey (http://www.surveymonkey.com). Students followed the link and were directed to an informed consent page and had to actively agree to before being allowed to proceed to the rest of the survey. Once the informed consent form had been reviewed and accepted, the participants went on to complete the Demographic portion of the questionnaire followed by the Academic Self-Efficacy for Successfully Completing College Coursework Questionnaire, Self-Efficacy for Successfully Graduating from College, and Utility Value for Future Goal Scales. The entire survey took participants about 10-40 minutes to complete. Students who did not wish to participate in this study were given the option of participating in another research opportunity or completing an alternative assignment for credit.

Data Analysis

For the current study, I utilized both quantitative and qualitative research methods and analysis. I conducted statistical analysis using IBM Statistical Package for Social Sciences (SPSS) (Version 28.0) and the qualitative analysis using Microsoft Excel. I downloaded the responses to the online survey from the Survey Monkey platform into a spreadsheet in Microsoft Excel (2019). It is important to note I did not collect any personal identifying information from participants so there was no mechanism to link survey responses back to individual participants.

Data screening and missing values

Out of the total 230 responses to the survey, 36 responses were entirely blank and I considered them unit nonresponse as defined by Schafer and Graham (2002). I did not include the 36 responses in either the analytical or qualitative dataset. One additional participant selected they "did NOT wish to participate in this study" on the informed consent page. Two additional responses were exact duplicates, so I deleted them listwise. One participant indicated they were a "Graduate" level student and I omitted their responses from the study. The total number of participant responses in the dataset used for the qualitative analysis was n=187. Furthermore, six participants had more than 50% missing data for the scale variables. I deleted listwise these responses and did not use them in any of the statistical analysis. The analytical dataset had a total of 184 participant responses.

I conducted an item nonresponse analysis for the analytical dataset using dummy variable coding and independent samples t-tests for the continuous variables (self-efficacy, expectation for graduating from college, value grades and value learning). Osborne (2013) outlined the categories of missingness including missing completely at random (MCAR) or

missing at random (MAR) as ignorable but could potentially impact statistical power. Missing not at random (MNAR) could potentially show bias in the results (Rubin, 1976). I conducted Levene's Test for Equality of Variances and there were no significant mean differences between the participants with missing data versus those without missing data for all the continuous variables tested. For this sample, I determined that the missing values could be ignored for subsequent inferential statistical analysis (Rubin, 1976).

I examined the motivation subscales for missing variables. In general, the missing data for the motivation subscales was very low with this sample. Out of the 184 responses in the analytic dataset, there were no missing data for the self-efficacy for successfully completing college coursework scale. For the value of achieving high grades part 1 scale, there were a total of 6 missing values. For the value of learning course content part 2 scale, there were 3 missing values. For each of these missing values, I imputed the mean for the individual on the other subscale items. This method of mean imputation is deemed acceptable practice when internal reliability estimates are over .90 for the subscale (Osborne, 2013) which was true for each of the subscales used in the study. I then exported the cleaned dataset with imputed values for all missing items on the motivation scales into SPSS.

I calculated descriptive statistics for continuous variables such as age, estimated GPA, and motivation scale scores. I also calculated frequency distributions for the categorical variables in the demographic questionnaire such as for gender, ethnicity, year in school, major, and parental level of educational attainment variables.

Research Questions Using Quantitative Analysis

Research Question 1: What is the level of self-efficacy for successfully completing college coursework among undergraduate students during the COVID-19 pandemic

This research question was designed to explore current academic motivation beliefs in college undergraduate students. More specifically, the goal of this research question was to be able to describe where college students are at with regard to self-efficacy evaluations for successfully completing college coursework. In order to answer this research question, I calculated descriptive statistics (mean and standard deviation) for the participant responses to the academic self-efficacy questionnaire items (individual mean score across a total of 14 items). This research question is of particular interest during this important historical time in the history of education. What does student self-belief levels look like during this time when their learning context has changed and more and more students are compelled to take more online courses than ever before? I chose to explore self-efficacy at this particular moment in the educational context because I believed it to be important for establishing a baseline for this unique population as well as for future work in this research area.

Research Question 2: Are there group differences in self-efficacy for successfully completing college coursework on factors such as year in school, race, gender, age, GPA, education level of mother, and education level of father?

For this research question, I conducted a series of two-tailed analysis of variance (ANOVA) to test whether there were differences between groups based on demographic variables including year in school, ethnicity, age, gender, GPA, education level of mother, and education level of father. Prior to each test, I tested for assumptions for ANOVA including for normality (skewness and kurtosis) and homogeneity of variance (residual plots and Levene's test). The assumption for homogeneity of variance was met for all tests. For the dependent variable, self-efficacy successfully completing college coursework, the Kolmogorov-Smirnov statistic was significant at the <.001 level which violates the

assumption of normality. However, ANOVA is quite robust to violations of the assumption of normality with a larger sample size which can be as large as "a dozen or so" according to Wickens and Keppel (2004, p. 145). I followed up all significant mean group comparisons with post hoc pairwise comparisons using Tukey HSD, and also calculated effect sizes using eta squared (η^2). I used eta squared because my goal was to understand the proportion of variance in the dependent variable (self-efficacy for college coursework) explained by the independent variables (grouping variables).

Research Question 3: What is the level of self-efficacy for successfully graduating from college among undergraduate students during the COVID-19 pandemic?

In order to answer this research question, I calculated descriptive statistics for the participant responses to the self-efficacy for graduating from college item in the online survey. Each student was asked to rate on a scale of "0 (Completely Unconfident)" to 100 (Completely Confident)" their level of confidence for successfully graduating from college. The sample was drawn from a university with a unique undergraduate student population. UNM is considered a minority serving institution with the majority of the student population being Hispanic. What does self-efficacy for successfully graduating from college look like for this specific student population during the COVID-19 pandemic? I chose to explore student self-efficacy during this critical time with this student population due to the changes in the educational landscape and in order to establish a baseline for future work in motivation research.

Research Question 4: Are there group differences in self-efficacy for successfully graduating from college related to factors such as year in school, race, gender, age, GPA, education level of mother, and education level of father?

For this research question, I conducted a series of one-way analysis of variance (ANOVA) to test whether there were differences between groups in self-efficacy for successfully graduating from college based on demographic variables including year in school, ethnicity, age, gender, GPA, education level of mother, and education level of father. Prior to each test, I tested assumptions for ANOVA including normality (skewness and kurtosis) and homogeneity of variance (residual plots and Levene's test). The assumption for homogeneity of variance was met for all tests. For the dependent variable, self-efficacy for successfully graduating from college, the Kolmogorov-Smirnov statistic was significant at the <.001 level which violates the assumption of normality. However, ANOVA is quite robust to violations of the assumption of normality with a larger sample size which can be as large as "a dozen or so" according to Wickens and Keppel (2004, p. 145). I calculated effect sizes for all significant omnibus F tests using eta squared. I also followed up all significant mean group comparisons with post hoc pairwise comparisons using Tukey HSD.

Research Question 5: What is the perceived utility value for achieving high grades in college courses during the COVID-19 pandemic?

In order to answer this research question, I calculated descriptive statistics for the participant responses to the utility value scale for achieving high grades and reported measures of central tendency. The descriptive information provided data for how college students rated the value of achieving high grades as important for accomplishing future goals during the COVID-19 pandemic.

This factor was important to understand because the research literature has shown that higher levels in these variables correlate with positive learning outcomes and academic

achievement. I consider these key factors in this unique sample population important to explore during the era of COVID-19.

Research Question 6: What is the perceived utility value for learning course content in college courses during the COVID-19 pandemic?

I calculated descriptive statistics for the participant responses to the utility value for learning course content scale. I reported measures of central tendency which provided information for how college students rate the value of learning course content as important for accomplishing future goals while taking college courses during the COVID-19 pandemic.

This factor was important to understand because the research literature has shown that higher levels in these variables correlate with positive learning outcomes and academic achievement. I consider these key factors in this unique sample population important to explore during the era of COVID-19.

Research Questions Using Qualitative Analysis

For the open-ended questions of the survey, I used Microsoft Excel (2019) to organize and tabulate the frequency of themes across the responses that emerged from inductive thematic coding. The goal of adapting a parallel mixed analysis approach (Yin, 2015), that is, the combination of open-ended questions and quantitative items in the survey was two-fold. First, it was important to use the open-ended questions to allow participants to provide details and information about current challenges of being a college student during COVID-19 as well as how well-being strategies impacted their academic motivation. This is a strength of qualitative research as explained by Robert Yin (2015),

> qualitative research differs because of its ability to represent the views and perspectives of the participants in a study…. Thus the events and ideas emerging

> from qualitative research can represent the meanings given to real-life events by the people who live them, not the values, preconceptions, or meanings held by researchers. (p. 8)

The participant narratives allow for "thick description" of the experiences of the participants in this sample during this specific time of a global pandemic (Ponterotto, 2006; Rudestam & Newton, 2014, p. 113). In addition, the approach I used to analyze the qualitative data most closely aligns with grounded theory which relies on inductive reasoning (Rossman & Rallis, 2011). In other words, the approach was to develop or generate categories from the student narratives directly rather than trying to have pre-determined themes or codes identified.

The second goal of incorporating open-ended questions was to have an additional data source (narrative text) to add to the closed-ended quantitative data. Rudestam and Newton (2014) refer to this concept as "triangulation" in which data is solicited from different methods in order to cross-check or build evidence (p. 114). In the case of the present study, I examined the narrative data collected from the participants alongside the closed-ended quantitative motivational scales.

In general, I followed the five-phased cycle of qualitative analysis as described by Yin (2015). These five phases consist of "compiling, disassembling, reassembling, interpreting, and concluding" (Yin, 2015, p. 177). It is important to note that this process is not considered to be linear but is iterative. I compiled the narrative responses to the open-ended questions using Microsoft Excel. I then "disassembled" the data by assigning labels or codes to each of the narrative responses. This phase has also been referred to as open or Level 1 coding (Hahn, 2008). It should be noted that responses could contain multiple codes and therefore could be grouped or ungrouped in multiple ways (Rossman & Rallis, 2011). I

then “reassembled” the initial codes by reorganizing the responses based on codes and combining codes together to generate larger categories. This is also referred to as Level 2 or category development coding (Hahn, 2008). This stage of coding is an example of the iterative nature of qualitative analysis. Once I generated initial codes, all responses that had been coded similarly were re-read and compared with one another to try to get to some level of consistency. I then grouped together the resulting category codes (Level 2) to form a few major themes (Level 3 coding) (Hahn, 2008). I then tabulated the Level 3 themes and reported frequencies. In addition, I selected exemplary quotes taken directly from the participant narratives and included the highlighted quotes in the results section for the qualitative research questions.

The merits of this process are explained by Hahn (2008) who explains that this cycle of coding is useful for researchers who are interested in the “exploration of phenomena than the development of theory” (p. 8). Moreover, the general approach I used in the open coding phase was to use the words included directly in the narrative responses as initial codes. For example, students may have specifically mentioned “stress” or “anxiety” in their response and I simply labeled each of those response as “stress” and “anxiety”. Then in the next round of coding, I grouped those two codes together and created a new label under “mental health”. My goal with using this inductive approach to coding was to be able to reflect the content of the narratives through the categories and eventually the broad themes that were developed as a result. I detail more specific information related to each research question involving qualitative analysis in the following sections.

Research Question 7: What are current challenges undergraduate students are experiencing related to their college courses?

I analyzed participant responses to the open-ended question on the online survey, “What are three (3) challenges you have experienced while completing college coursework during the COVID-19 pandemic?” using qualitative coding techniques to answer this research question. I generated initial open codes based on the specific text included in each participant’s narrative response. I then grouped these initial codes together to develop a categorical structure. These categories were them consolidated into four larger themes. I tabulated frequencies across the responses for each theme and reported the themes in the results section.

Utilizing qualitative research methods can aid in providing additional information that can be used in tandem with quantitative information. My goal for including this open-ended question in the survey was to be able to learn more about individualized personal experiences from each participant in the sample about what specific challenges they experienced while taking courses during the pandemic. I had some idea of the types of challenges students were facing but ultimately this question helps to fill a gap in the current research literature. Instead of assuming I knew what challenges students were facing and asking a closed-ended question, my goal was to be able to hear directly from students themselves about what challenges they have encountered. When taken together, the findings from the statistical analysis can be informed by the findings from the qualitative analysis to have a more well-rounded perspective of learning experiences from the sample during this important historical event of the COVID-19 pandemic.

Research Question 8: What are some strategies students are using to promote their own well-being during the ongoing COVID-19 pandemic?

In order to answer this research question, I analyzed responses to the open-ended question on the survey, “What is the impact of these strategies on your motivation for completing your college education?”. I generated initial codes based on the narrative text included from each

participant response. I then grouped the initial codes together into categories and generated themes from the categories. Frequencies were tabulated for each of the larger themes and are reported in the results section.

I purposefully framed this research question to take a strengths-based approach for this study. My goal was to be able to learn about both positive and negative experiences during COVID-19 from the participants in the study. For this research question, my goal was to identify adaptive behaviors that participants felt were useful for their well-being during this pandemic. Current research has shown that college students have experienced increased mental and emotional stress during the pandemic (Son et al., 2020). I wanted to understand positive coping mechanisms students have found useful for their wellbeing so those behaviors and practices can be encouraged and promoted across larger student populations.

Chapter IV: Results

The purpose of this cross-sectional mixed methods study was to gain a better understanding of undergraduate academic motivation in terms of levels of self-efficacy for completing college courses, level of self-efficacy for completing their college degree, and their utility value evaluations for college courses on future life goals. Self-efficacy in particular is a construct the literature has found is correlated with adaptive learning goals and persistence and is of particular interest in this study. For this sample, the purpose of this study was to explore differences between groups in levels of self-efficacy based on several factors such as year in school, ethnicity, gender, age, academic performance (as measured by GPA), and education levels of the participant's mother and father. ANOVA was used to compare group means across the demographic factors.

In addition to understanding academic motivational profiles, I analyzed qualitative data to get a better understanding of the educational experiences college students encountered during the COVID-19 pandemic including what challenges they faced as well as what strategies they use to promote their wellbeing. I used thematic coding techniques to analyze participant responses on two open-ended questions in the online survey and identified major themes. In this chapter, I outline the results of both the statistical and qualitative analysis of the study. First, I present characteristics of the sample participants followed by results from the analysis of all research questions.

Participants

The target population for this study was all undergraduate students enrolled in educational psychology courses within the College of Education and Human Sciences (COEHS) at the University of New Mexico. Across the spring 2022 and summer 2022

semesters, a total of 230 undergraduate student attempts to complete the survey were captured from the online survey platform (Survey Monkey). I use “attempts” to describe the responses because there were 36 participant responses that were completely blank. This research study was offered as an option to complete a research requirement for each educational psychology course for the semester. A possible reason there were so many blank attempts could be that these participants were unfamiliar with the survey platform and after accepting the informed consent section of the survey, did not want to go on to finish completing the survey at that time. Another reason may be that students wanted to get the research credit for their course without actually taking the time to complete the survey. The survey was optional and no personal identifying information (name or email) was collected from the participants in order to protect their confidentiality. These factors make it difficult to definitively ascertain the reasons behind the high number of blank responses to the online survey.

After cleaning the dataset and imputing missing values following the procedures outlined in the previous chapter, the final sample used for qualitative data analysis was n=187. Furthermore, six participants had more than 50% missing data for the motivational scale variables. I deleted these responses listwise and did not use them in any of the statistical analysis. The analytical dataset had a total of 184 participant responses.

Table 3 includes a frequency table for the categorical demographic variables for the sample. The sample was comprised of 145 (79%) females, 38 (21%) males and one individual who selected “prefer not to say” for the gender question. Six (3%) participants reported they were freshman, 34 (19%) sophomore, 69 (38%) junior, and 68 (37%) in their senior year, and seven (4%) participants selected “other” for Year in School. The majority of

students (46%) self-reported as Hispanic, 27% White, 15% American Indian, 5% Black or African American, and 3% Asian. In addition, seven participants indicated "Other" as their category for ethnicity.

Participants were asked to report their major in college. The majority of participants (63%) were majoring in education including programs such as elementary, secondary, or special education. Twenty-eight (15%) participants were majoring in social science, 16 (9%) in Liberal Arts, 11 (6%) in the sciences such as Biology, and 6 (3%) in fine arts. An additional 6 participants (3%) were majoring in a health or medicine field, and two participants responded they were still "Undecided" about their major.

Participants were asked to indicate what the highest education level was of their mother and father, respectively. Fifty-two percent (n=100) of the participants reported their mother had a high school diploma, 2% a Vocational/Technical Degree, 14% an Associate's Degree, 15% an Undergraduate/College degree, and 17% a graduate degree. Sixty-three percent (n=121) of the participants reported their father had a high school diploma, 3% a Vocational/Technical Degree, 9% an Associate's Degree, 16% an undergraduate/College degree, and 8% a graduate degree.

To obtain a snapshot of the current coursework loads, I included survey questions for participants to report how many of their classes at the university were occurring face-to-face. Fifty-seven (30%) of students indicated "0" or none of their classes were being offered face-to-face. Forty-nine percent of sample (n=95) reported up to three classes being offered face-to-face. Thirty-seven (19%) of participants reported four or more classes being offered face-to-face. Similarly, participants were also asked to report on the survey how many courses they were enrolled in that were being offered online. Eleven participants (6%) indicated "0"

or none of their classes were being offered online. The majority of the sample 64% percent (n=124) of students reported up to three classes being offered online. Thirty percent (n=58) of respondents reported four or more classes being offered online. I conducted additional analysis for the number of online classes and face-to-faces and found that for 60% of the sample, at least half of their semester courseload was comprised of online courses. These statistics inform us that despite the University of New Mexico being fully open by the spring 2022 semester, the majority of student's courseload was made up of at least 50% of classes held online. This information helps to form a baseline for future research to look at longitudinal changes to the format of course offerings for undergraduate students. Also, this information about the prevalence of online courses for this sample has implications for the qualitative results of this study that speak to challenges students encountered during the COVID-19 pandemic explained later in the chapter.

Ninety-two percent (n = 170) of the sample reported they had a reliable computer in their home. Similarly, 97% (n = 178) of the participants responded they had a reliable internet connection at home.

Table 3

Frequency Table of the Categorical Variables

Variable	Variable Categories	*n*	%
Gender	1=Male	38	20.7
	2=Female	145	78.8
	3=Prefer Not to Say	1	.5
Year in School	1=Freshman	6	3.3
	2=Sophomore	34	18.5
	3=Junior	69	37.5
	4=Senior	68	37.0
	5=Other	7	3.8

Variable	Variable Categories	*n*	%
Ethnicity	1=Hispanic	85	46.2
	2=White	49	26.6
	3=American Indian/Alaska Native	27	14.7
	4=Black or African American	10	5.4
	5=Asian	6	3.3
	6=Other	7	3.8
Major	1=Education	116	63.0
	2=Science	11	6.0
	3=Liberal Arts	16	8.7
	4=Fine Arts	6	3.3
	5=Medicine & Health	6	3.3
	6=Social Sciences	27	14.7
	7=Undecided	2	1.1
Mother Education Level	1=High School	95	51.6
	2=Vocational/Technical	3	1.6
	3=Associate's Degree	25	13.6
	4=Undergraduate/College Degree	26	14.1
	5=Graduate Degree	32	17.4
	Missing	3	1.6
Father Education Level	1=High School	114	62.0
	2=Vocational/Technical	6	3.3
	3=Associate's Degree	16	8.7
	4=Undergraduate/College Degree	29	15.8
	5=Graduate Degree	15	8.2
	Missing	4	2.2
Reliable Computer at home	1=Yes	170	92.4
	2=No	13	7.1
	Missing	1	0.5
Reliable Internet At home	1=Yes	178	96.7
	2=No	6	3.3

Table 4 includes descriptive statistics for all continuous variables for this sample. There was a wide range of ages from 18 - 61 years old. The mean age of the sample was 26 years old with an *SD* = 8.87 years. Participants self-reported their GPA, the range in values was 1.50 to 4.30, with a mean of 3.37, and *SD* = 0.47.

Table 4

Descriptive Statistics for the Continuous Variables

Measure	*M*	SD	Min	Max
Age	25.98	9.02	18.00	61.00
Estimated GPA	3.34	.53	.00	4.30
Self-Efficacy for College Courses	64.92	17.50	2.86	100.00
Self-Efficacy Graduate College	90.48	16.25	.00	100.00
Expectancy Value High Grades	3.77	1.01	1.00	5.00
Expectancy Value Learning	3.83	.85	1.00	5.00

Research Questions Using Quantitative Analyses

Research Question 1: What is the level of self-efficacy for successfully completing college coursework among undergraduate students during the COVID-19 pandemic

In order to answer this research question, I calculated descriptive statistics (mean and standard deviation) for the participant responses to the Self-Efficacy for Successfully Completing College Coursework Scale (14 items total) which are summarized in Table 4. The mean score for undergraduate self-efficacy for successfully completing college coursework was *M* = 64.92, *SD*=17.50 on a scale of "0 (completely unconfident)" to "100 (completely confident)". The 95% Confidence interval was 62.37 - 67.46. There were extreme values in the sample with the minimum score of 2.86 and the maximum value of 100. For this sample, self-efficacy scores for completing college coursework are considered fair. The lowest mean score was for the self-efficacy item that asked students to rate their

level of confidence to “Keep your attention focused while reading the text or readings” at *M* = 54.64, *SD* = 23.507. The highest mean score was for the self-efficacy item that asked students to rate their level of confidence to “Learn the important information and concepts from the lectures or other class presentations” at *M* = 70.24, *SD* = 18.97. These descriptives for student self-efficacy relay important information about current levels of student motivation given the drastic change to the student learning context during the pandemic. Students were obliged to switch to online courses and cope with unique challenges brought on by the pandemic such as social distancing and campus closures.

I calculated internal consistency of the self-efficacy scale for successfully completing college coursework scale using the Cronbach alpha coefficient which resulted in $\alpha = 0.96$ and suggests very good internal consistency for this scale. Item-Total correlations ranged from .67 to .88 across the 14-items.

Research Question 2: Are there group differences in self-efficacy for successfully completing college coursework on factors such as year in school, ethnicity, gender, age, GPA, education level of mother, and education level of father?

Year in School. I conducted a one-way between-groups analysis of variance to explore the impact of year in school on self-efficacy for successfully completing college coursework. I divided participants into five groups according to their self-reported year in school (Group 1: Freshman; Group 2: Sophomore; Group 3: Junior; Group 4: Senior; Group 5 Other). There was not a statistically significant difference at the $p < .05$ level in self-efficacy scores for year in school groups: F (4, 179) = .385, p = .849. Year in school does not have an effect on levels of self-efficacy for completing college coursework. Table 5 includes means and

standard deviations for all grouping variables for self-efficacy for successfully completing college coursework.

Ethnicity. I conducted a one-way between-groups analysis of variance to explore the impact of ethnicity on self-efficacy for successfully completing college coursework. I divided participants into five groups based on self-reported ethnicity groups (Group 1: Hispanic; Group 2: White; Group 3: American Indian/Alaska Native; Group 4: Black or African American; Group 5: Asian; Group 6: Other). There was a statistically significant difference at the $p < .05$ level in self efficacy scores for the six ethnicity groups: F (5, 178) = 2.71, p = .022. The effect size, calculated using eta squared, was $\eta^2 = .07$ which is considered a moderate effect (Cohen, 1988). In other words, ethnicity explains 7% of the variance in self-efficacy levels for successfully completing college coursework for this sample.

Post-hoc comparisons using the Tukey HSD test indicated the mean score for Group 3: American Indian/Alaska Native (M = 74.37, SD = 17.90) was statistically higher than both Group 1: Hispanic (M = 63.31, SD = 15.08) and Group 2: White (M = 61.08, SD = 18.54), respectively. These results indicate that American Indian students have higher self-efficacy for successfully completing college courses than their Hispanic or White peers.

Gender. There are only two groups (male and female). There was only one individual that elected to "prefer not to say." My goal was to explore if there would be group differences based on gender but instead of using an analysis of variance I opted to conduct an independent samples t-test instead as there were only two groups. I conducted an independent

samples t-test to compare the self-efficacy scores for males and females. Levene's test was significant so equal variances were not assumed.

There was a significant difference in scores for males (M = 72.29, SD = 11.85) and females (M = 62.95, SD = 18.29); t (88.76) = 3.81, p = <.001, (two-tailed). For this sample, males had a significantly higher mean score on self-efficacy for successfully completing college coursework than females. The magnitude of the differences in the means (mean difference = 9.34, *95% CI*: 4.47 to 14.21) was a moderate effect (eta squared = .07) (Cohen, 1988). In other words, gender explains 7% of the variance in self-efficacy levels for successfully completing college coursework for this sample. For this sample, there was an effect of gender on self-efficacy scores for completing college coursework with males having higher self-efficacy than females.

Age. As reported in Table 4, the mean age of the sample was 26. The range in ages was from 18-61. With such a wide range in age, I divided the sample was divided into two groups. The first group were participants between the ages of 18-24 and were considered traditional students. The second group were any participant 25 years and older and were considered non-traditional students. There were 124 participants in group 1 and 60 participants in group 2. I conducted an independent samples t-test to compare the self-efficacy scores for traditional and non-traditional students. Levene's test was not significant so equal variances were assumed. There was no significant difference in scores for traditional (M = 63.35, SD = 17.14) and non-traditional students (M = 68.17, SD = 17.92); t (182) = -1.76, p = .080. In this sample there is not a statistical difference in self-efficacy scores between traditional and non-

traditional aged students. Age does not seem to have an impact on self-efficacy for successfully completing college coursework for this sample.

Grade Point Average (GPA). As reported Table 4, the mean self-reported GPA was 3.34 with a range of 0.00 – 4.30 for this sample. I conducted a one-way between-groups analysis of variance to explore the impact of GPA (achievement measure) on self-efficacy for successfully completing college coursework. UNM uses a fractionated grading system on a 0.00-4.33 scale (https://unm-student.custhelp.com/app/answers/detail/a_id/3461/related/1/session/). I divided the participants into four groups based on their GPA (Group 1: 0.00-2.00; Group 2: 2.33-2.99; Group 3: 3.00 – 3.66; Group 4: 3.67-4.33). There was not a statistically significant difference at $p < .05$ level in self-efficacy scores for the four groups: $F (3, 179) = .80$, $p = .498$. GPA does not seem to have an impact on self-efficacy for successfully completing college coursework.

Education Level of Mother. I conducted a one-way between-groups analysis of variance to explore the impact of education level of mother on self-efficacy for successfully completing college coursework. I conducted tests for assumptions such as homogeneity of variance using Levene's test and it was not significant, equal variances were assumed. I divided participants into five groups according to self-reported education level of their mother (Group 1: High School; Group 2: Vocational/Technical Degree; Group 3: Undergraduate/College Degree; Group 4: Graduate Degree). There was not a statistically significant difference at the $p < .05$ level in self-efficacy scores for the five groups: $F (4, 176) = 2.23$, $p = .068$. For this sample,

the education level of mother did not have an impact on the level of self-efficacy for successfully completing college coursework for the students.

Education Level of Father. I conducted a one-way between-groups analysis of variance to explore the impact of education level of father as measured by the self-efficacy for successfully completing college coursework scale. I divided participants into five groups according to self-reported education level of their mother (Group 1: High School; Group 2: Vocational/Technical Degree; Group 3: Associate's Degree, Group 4: Undergraduate/College Degree; Group 5: Graduate Degree). There was a statistically significant difference at the $p < .05$ level in self-efficacy scores for the five groups: F (4, 175) = 5.80, $p < .001$. I calculated the effect size using eta squared which was $\eta^2 = .0.12$ and is considered a large effect (Cohen, 1988). In other words, education level of father explains 7% of the variance in self-efficacy levels for successfully completing college coursework for this sample.

Post Hoc comparisons using Tukey HSD test indicated the mean score for Group 1 High School: (M =65.68, SD = 16.16) was significantly higher from Group 2: Vocational/Technical School (M = 45.65, SD = 26.60). Group 2 was also significantly lower from both Group 3 (Associate's Degree) (M = 75.91, SD = 14.32), and Group 5 (Graduate Degree) (M = 69.92, SD = 15.90), respectively. Group 3 was significantly higher from Group 4 (M = 56.91, SD = 18.52). Means and standard deviations are summarized in Table 5. These results suggest that students with fathers who graduated from high school have higher self-efficacy for successfully completing college courses than students whose fathers attended vocational or technical school. Students with fathers who earned associates degrees or graduate degrees scored higher on self-efficacy for successfully completing college courses

than those with fathers who attended vocational or technical school. Furthermore, students with fathers who earned associate degrees had higher self-efficacy for successfully completing college coursework than those with fathers who earned undergraduate degrees.

Table 5

Means and Standard Deviations for Self-Efficacy Scales by Year in School, Ethnicity, Gender, Age, GPA, Education Level of Mother, and Education Level of Father

	Self-Efficacy for Completing College Coursework		Self-Efficacy for Successfully Graduating from College	
Variable	*M*	*SD*	*M*	*SD*
Year in School				
Freshman (Group 1)	59.58	19.38	85.00	23.45
Sophomore (Group 2)	62.59	18.18	88.12	16.45
Junior (Group 3)	65.24	15.53	91.74	14.14
Senior (Group 4)	65.99	19.50	90.34	17.97
Other (Group 5)	67.25	12.18	95.57	11.28
Ethnicity				
Hispanic (Group 1)	63.31	15.08	90.39	17.35
White (Group 2)	61.08	18.54	91.47	11.35
American Indian/Alaska Native (Group 3)	74.37	17.90	90.11	16.63
Black or African American (Group 4)	71.00	19.37	92.00	10.33
Asian (Group 5)	70.29	17.77	95.00	12.25
Other (Group 6)	61.53	23.01	88.00	34.16
Gender				
Males	72.29	11.85	93.66	11.40
Females	62.95	18.29	89.58	17.27
Age				
Traditional (18-24 years)	63.35	17.14	91.43	15.87
Non-Traditional (25+ years)	68.17	17.92	88.52	16.98
GPA				
0.00 - 2.00	54.02	27.71	81.25	21.75

	Self-Efficacy for Completing College Coursework		Self-Efficacy for Successfully Graduating from College	
Variable	*M*	*SD*	*M*	*SD*
2.33 - 2.99	63.68	16.52	83.23	18.46
3.00 – 3.66	64.40	18.79	90.19	17.75
3.67 – 4.33	66.82	14.23	95.09	9.07
Mother Education Level				
High School (Group 1)	67.91	18.25	89.71	16.75
Vocational/Technical (Group 2)	58.21	12.10	85.00	21.79
Associate's Degree (Group 3)	61.86	13.72	91.76	16.99
Undergraduate Degree (Group 4)	57.41	17.62	93.58	14.32
Graduate Degree (Group 5)	64.46	17.22	89.50	16.26
Father Education Level				
High School (Group 1)	65.68	16.16	91.18	13.27
Vocational/Technical (Group 2)	45.65	26.60	73.33	40.83
Associate's Degree (Group 3)	75.91	14.32	95.31	10.87
Undergraduate Degree (Group 4)	56.91	18.52	89.10	20.21
Graduate Degree (Group 5)	69.92	15.90	90.33	16.74

Research Question 3: What is the level of self-efficacy for successfully graduating from college among undergraduate students during the COVID-19 pandemic?

In order to answer this research question, I calculated descriptive statistics for the participant responses to the Self-efficacy for Successfully Graduating from College item and are summarized in Table 4. The mean score for undergraduate self-efficacy for graduating college was M = 90.48, *SD*=16.25 on a scale of "0 (Completely Unconfident)" to "100 (Very Confident)". The 95% Confidence interval was 88.11-92.84. On average, undergraduate students have high levels of self-efficacy for successfully graduating from college.

This result is interesting because during the COVID-19 pandemic the educational context changed drastically. Students were forced to move to taking more online classes instead of face-to-face classes and the majority of students are still enrolled in online classes. However, students have high levels of self-efficacy for graduating from college. The cross-sectional nature of this research study does not allow us to draw comparisons to alternate time points but rather show us the current state of student evaluations of success for graduating college. The research literature also posits that higher self-efficacy is correlated with academic performance. In order to explore the relationship between Self-efficacy for graduating college and academic performance, I calculated a Pearson correlation coefficient between the two variables. Self-efficacy for graduating college and GPA demonstrated a small positive correlation (.240) at $p < .01$. This suggests the higher a student's self-efficacy for graduating college, the higher their GPA.

However, there were several extreme values on student's evaluations of self-efficacy for graduating college. Six-percent (n=11) of students rated a confidence level below 50 for successfully graduating from college. Eight of those 11 students self-reported as Hispanic or Latinx and the average GPA was 2.9. Future work might try to gather more information about why these students rated their confidence levels so low on this variable but is outside the scope of the present study.

Research Question 4: Are there group differences in self-efficacy for successfully graduating from college related to factors such as year in school, ethnicity, gender, age, GPA, education level of mother, and education level of father?

Year in School. I conducted a one-way between-groups analysis of variance to explore the impact of year in school on self-efficacy for successfully graduating from college. I divided

participants into five groups according to their self-reported year in school (Group 1: Freshman; Group 2: Sophomore; Group 3: Junior; Group 4: Senior; Group 5 Other). There was not a statistically significant difference at the $p < .05$ level in self-efficacy scores for year in school groups: F (4, 179) = .622, p = .648. Table 5 includes means and standard deviations for all grouping variables for self-efficacy for successfully graduating from college.

Ethnicity. I conducted a one-way between-groups analysis of variance to explore the impact of ethnicity on self-efficacy for successfully graduating from college. I divided participants into five groups based on self-reported ethnicity groups (Group 1: Hispanic; Group 2: White; Group 3: American Indian/Alaska Native; Group 4: Black or African American; Group 5: Asian). There was not a statistically significant difference at the $p < .05$ level in self efficacy scores for the six age groups: F (5, 178) = .727, p = .604. Ethnicity does not seem to have an effect on self-efficacy scores for successfully graduating from college.

Gender. My goal was to explore if there would be group differences based on gender on self-efficacy scores for successfully graduating from college. I conducted an independent samples t-test to compare the self-efficacy scores for males and females. Levene's test was not significant so equal variances were assumed. There was no significant difference in self-efficacy scores for successfully graduating from college between males (M = 93.66, SD = 11.40) and females (M = 89.58, SD = 17.27); t (181) = 1.38, p = .170, (two-tailed). Gender does not seem to have an effect on self-efficacy scores for successfully graduating from college.

Age. As reported in Table 4, the mean age of the sample was 26. The range in ages was from 18-61. With such a wide range in age, I divided the sample into two groups. The first group

were participants between the ages of 18-24 and are considered traditional students. The second group were any participant 25 years and older, who are considered non-traditional students. There were 124 participants in group 1 and 60 participants in group 2. An independent samples t-test was conducted to compare the self-efficacy scores for traditional and non-traditional students. Levene's test was not significant so equal variances were assumed. There was no significant difference in scores for traditional (M = 91.43, SD = 15.87) and non-traditional students (M = 88.52, SD = 16.98); t (182) = 1.14, p = .256. In this sample there is not a statistical difference in self-efficacy scores for successfully graduating from college between traditional and non-traditional aged students. Both groups have very high levels of self-efficacy for graduating from college whether they are considered a traditional aged or non-traditional aged student.

Grade Point Average (GPA). As reported Table 4, the mean self-reported GPA was 3.34 with a range of 0.00 – 4.30 for this sample. I conducted a one-way between-groups analysis of variance was conducted to explore the impact of GPA (achievement measure) on self-efficacy for graduating from college. UNM uses a fractionated grading system on a 0.00-4.33 scale (https://unm-student.custhelp.com/app/answers/detail/a_id/3461/related/1/session/). I divided participants into four groups based on their GPA (Group 1: 0.00-2.00; Group 2: 2.33-2.99; Group 3: 3.00 – 3.66; Group 4: 3.67-4.33). Levene's test was significant so equal variances were not assumed and I used the Brown-Forsythe F-ratio instead which is more robust to violations of homogeneity of variance assumptions. There was not a statistically

significant difference at $p < .05$ level in self-efficacy scores for graduating from college between the four groups: F (3, 179) = 2.97, $p = .074$.

Education Level of Mother. I conducted a one-way between-groups analysis of variance to explore the impact of education level of mother on self-efficacy for graduating from college. Homogeneity of variance assumption was tested using Levene's test and was not significant. I divided the participants into five groups according to self-reported education level of their mother (Group 1: High School; Group 2: Vocational/Technical Degree; Group 3: Undergraduate/College Degree; Group 4: Graduate Degree). There was not a statistically significant difference at the p <.05 level in self-efficacy scores for the five groups: F (4, 176) = .43 p = .785. For this sample, the education level of mother did not have an impact on the level of self-efficacy for successfully graduating from college.

Education Level of Father. I conducted a one-way between -groups analysis of variance to explore the impact of education level of father as measured by the self-efficacy for successfully completing college coursework scale. I divided participants into five groups according to self-reported education level of their mother (Group 1: High School; Group 2: Vocational/Technical Degree; Group 3: Associate's Degree, Group 4: Undergraduate/College Degree; Group 5: Graduate Degree). Levene's test was significant so equal variances were assumed and I used the Brown-Forsythe F-ratio instead which is more robust to violations of the homogeneity of variance assumption. There was not a statistically significant difference at $p < .05$ level in self-efficacy scores for graduating from college between the five groups: F (4, 175) = .94, $p = .476$. For this sample, the education level of

father did not have an impact on the level of self-efficacy for successfully graduating from college.

Research Question 5: What is the perceived utility value for achieving high grades in college courses during the COVID-19 pandemic?

In order to answer this research question, I calculated descriptive statistics for the participant responses to the utility value for achieving high grades scale. The mean score is $M = 3.79$, $SD = 1.02$ on a 5-point Likert scale from "1 (Very Unimportant)" to "5 (Very Important)". On average, undergraduate students rate the utility value of achieving high grades as important for accomplishing future goals during the COVID-19 pandemic. In this exploratory cross-sectional study, these numbers help to establish a baseline profile of motivation for undergraduate students during the pandemic. In general, for this sample of undergraduates, levels of utility value for achieving high grades (an extrinsic or performance goal) is relatively high. The lowest mean score across the 12 items in this scale was for the item that asked students to rate how important achieving high grades was for "Making many friends" at $M = 2.90$, $SD = 1.39$. The highest mean score was for how important achieving high grades was for "Reaching your goals" at $M = 4.41$, $SD = 1.06$ followed by "Getting a good job" at $M = 4.30$, $SD = 1.09$. This factor is important to understand because the research literature has shown that higher levels of utility value for a task correlates with positive learning outcomes and academic achievement.

Research Question 6: What is the perceived utility value for learning course content in college courses during the COVID-19 pandemic

I calculated descriptive statistics for the participant responses to the utility value for learning course content scale. The mean score was $M = 3.83$, $SD = 0.85$ on a 5-point Likert

scale from “1 (Very Unimportant)” to “5 (Very Important)”. On average, undergraduate students rate the value of learning course content as important for accomplishing future goals while taking college courses during the COVID-19 pandemic. Similar to the utility value scale for achieving high grades, the lowest mean score across the 12 items in this scale was for the item that asked students to rate how important achieving high grades was for “Making many friends” at $M = 2.90$, $SD = 1.39$. The highest mean score was for how important achieving high grades was for “Reaching your goals” at $M = 4.49$, $SD = .98$ followed by “Getting a good job” at $M = 4.47$, $SD = 95$. This motivational factor is important to understand because the research literature has shown that higher levels of utility value for a task correlates with positive learning outcomes and academic achievement.

In general, this sample of undergraduates rated their utility value for learning course content (an intrinsic motivation goal) as important for future goals. During the pandemic when the learning context had changed from face-to-face classes to online instruction, students’ high levels of these two factors are important for understanding their overall levels of academic motivation for their college coursework.

Open-ended Research Questions Using Qualitative Analysis

Research Question 7: What are current challenges undergraduate students are experiencing related to their college courses?

One strength of utilizing a mixed method approach is to gather information in order to come to a “thick description” of the participants within a specific setting or context (Rudestam & Newton, 2014, p. 113). In order to better understand the current challenges undergraduate students are experiencing in their college coursework, I included an open-ended question on the survey. For this research question, I analyzed the narrative responses

from the participants using qualitative analysis techniques. I used an inductive open coding approach to analyze the 187 responses to the survey question. I developed a coding frame to create organizational structure of themes. Initially, a total of 28 codes resulted from the initial coding analysis. I developed groups from the 28 codes to form broader categories, and then grouped those categories to form three overarching themes. I explore the three themes and provide examples of each theme in the following sections.

Theme 1: Students outline many challenges associated with online courses during the pandemic. Fifty-eight percent (n=109) of participants spoke to a wide range of challenges they encountered related to doing college coursework online. Some of the challenges students included in their responses was the perception that engaging in online coursework resulted in a higher workload than if the classes were offered in-person. Students felt they were getting assigned more assignments in the online environment and that they had to learn the reading and course materials on their own during online instruction. One student said, "I feel like I have to teach myself and like I don't have any help with school work".

Additional challenges students encountered with online courses were with their instructors transitioning from face-to-face to online classes. One student shared, "Not a lot of my professors were prepared for online so that made it hard." Similarly, another student related, "Teachers were disorganized because they had to switch online. Doing a lab online was very hard." Other students felt they lost valuable instruction time with their professors, had lower level of quality instruction for online courses, and mentioned experiencing barriers to communicating with their instructors due to moving online. One student illustrated this challenge in their response,

> During the pandemic the shift to completely online work limited my access to my professors. Since we are spending less time in class one of the hardest things is getting questions answered. Email is fine and all however, it does not compare to being able to ask your teachers questions in person.

Additional student responses spoke to challenges with technology due to being online, both their own struggles with using software/platforms and with their instructors struggling with online software and information technology (IT). One student said,

> I feel like I had to learn how to do online classes. I feel a lot of teachers also had to adapt to online courses and I was often met with 'ask IT' and IT would be like, 'ask your professor, we can't fix that'.

Other challenges students faced were restrictions to their online learning environment versus being in-person. Students felt isolated from their peers and were not able to socialize, study with, or make connections to their fellow course mates or instructors. One student shared, "Not having the face-to-face communication with my peers in a class was hard. I never had online classes until the pandemic hit which was a tough adjustment for me." It is clear from the number of challenges that were mentioned in the participant responses that making the adjustment to taking courses completely online was challenging for students and was a common experience in the sample. Participants shared many personal experiences about the types of feelings, challenges, and adjustments they had to make while taking college courses during the COVID-19 pandemic. One student said,

> The isolation when school was online was absolutely awful for me. I'm a people-person, and I need the stimulation from socializing to mentally function well. The uncertainty of how long the COVID-19 Pandemic would last gave me a sense of

> anxiety. I even took a semester off during 2020 because I was hoping to avoid more online school. Eventually, I had to accept fate and continue forward with online school anyway.

These student narratives provide richer information and a better level of understanding of what it is like to be a college student during the pandemic.

Theme 2: Students experienced loss of motivation and increases in stress and anxiety.

Fifty-two percent (n = 92) of the open-ended responses talked about loss of motivation, having challenges with organization and time management, keeping track of assignments, difficulty focusing, and increased levels of stress, anxiety, and depression. One student shared, “My motivation was really low and I was unable to complete my coursework. I struggled with time management and I was also struggling with being organized.” Another student talked about how the pandemic impacted their motivation and ultimately their college experience:

> During the pandemic, I have found myself lacking a lot of motivation I used to have. I think a lot of that is personal but I also know that I am very affected by my surroundings and I don't feel like the general public is very motivated to get important things done. I have found that teachers and students alike are both in a period of not knowing which is intimidating for both parties. That being said, I felt quite frustrated my freshman year with myself as I felt as though I wasn't getting the hang of college as a whole.

This finding is consistent with the few studies in the literature that have found increased levels of stress in undergraduate students (Kecojevic et al., 2020). The written student responses suggest a lack or loss of academic motivation during the pandemic along with

increased levels of stress and anxiety. Future work could be done to explore the relationship of stress on academic motivation indicators.

Theme 3: Students experienced challenges related to COVID-19 impacts. The third theme that emerged from the student responses about challenges were related to the impacts of COVID-19 restrictions. Forty-eight percent (n = 90) of student responses mentioned getting sick with COVID-19, family members getting sick, effects of social isolation and quarantine, mask mandates, and challenges juggling work outside of school. One student shared, “Teachers and programs are not being accommodating to my work schedule. I was not able to take a break from coursework even when sick.” Another student said, “The pandemic has left the company I work for very short-handed, so I'm having to work more hours than usual. On average I work between 50-60 hours a week and it's been that way since April of 2020.” Several more students spoke of the added stress and worry of family members getting sick, or family who were considered high risk, and the effects of isolation and quarantine. One student wrote, “[A challenge] was watching those close to me get sick and not be able to do anything. Another was being forced to stay inside and isolated from all of my love ones and not being able to travel or do anything outside of my house.”

Other students spoke of financial stresses or challenges due to the pandemic, increased cost of living, and worry about scholarships and/or financial aid. It is clear from the responses that many students felt real impacts not only in the coursework but in their personal lives from COVID-19. These narrative responses contribute to our understanding about how students were personally impacted by the pandemic. Students shared personal details about loved ones passing away and the emotional toll of worrying about getting sick or worry for loved ones who were at risk. These concerns are hard to quantify and the value

of including personal narratives came through in the level of details the students provided in their responses.

Aside from these three themes, one interesting trend was for some students to highlight some of the positive outcomes of completing coursework during the COVID-19 pandemic. One student explained, “I honestly think that the pandemic was entirely beneficial to me as a college student. I was able to take more courses online and therefore still work to support my family.” Future research work might look at what some of the positive impacts, lessons learned, or beneficial aspects of the COVID-19 pandemic on college students. There may be more lessons learned on best practices or positive outcomes that resulted from the COVID-19 pandemic that should be continued forward.

Research Question 8: What are some strategies students are using to promote their own well-being during the ongoing COVID-19 pandemic?

For this research question, I tabulated frequency counts for the question on the survey that asked students to indicate “Yes” or “No” for what strategies they are using to promote their sense of well-being. A frequency table of well-being strategies used by undergraduates in the sample are presented in Table 6.

The frequencies suggest that students are more likely to engage in well-being strategies that involve their family and friends (social relationships) during the pandemic. The majority of students 86% (n = 161) reported they are spending time with family and 82% (n = 154) of students reported they are spending time with friends.

The next highest strategy was engaging in exercise which 81% (n = 152) of the participants reported they are using. Seventy-six percent of participants (n = 143) indicated social media (e.g., YouTube, TikTok) was a strategy to promote their well-being. Students

also cited sending time outdoors (73%) and using mindfulness (71%) as common strategies for promoting their well-being. Twenty-eight percent of the sample (n = 52) reported they were working with a counselor or therapist. Interestingly, only 8% (n =15) of participants reported they were attending a support group.

Table 6

Frequencies and Percents for Well-being Strategies used by Undergraduate Students

Well-being Strategies	Yes *n* (%)	No *n* (%)	Missing *n* (%)
Meditation	77 (41)	102 (55)	8 (4)
Mindfulness	132 (71)	46 (25)	9 (5)
Prayer	101 (54)	78 (42)	8 (4)
Time with Friends	154 (82)	29 (16)	4 (2)
Time with Family	161 (86)	24 (13)	2 (1)
Exercise	152 (81)	30 (16)	5 (3)
Healthy Eating	123 (66)	59 (32)	5 (3)
Getting Adequate Sleep	111 (59)	71 (28)	5 (3)
Spending Time Outdoors	137 (73)	44 (24)	6 (3)
Cultural/Indigenous Ceremony	41 (22)	136 (73)	10 (5)
Attending Religious Services	66 (35)	113 (60)	8 (4)
Social Media (Tik Tok, YouTube)	143 (76)	40 (21)	4 (2)
Art	74 (40)	104 (56)	9 (5)
Working with a counselor/therapist	52 (28)	126 (67)	9 (5)
Attending a Support Group	15 (8)	161 (87)	10 (5)

Note: Frequency count of participant responses; percentage in parenthesis.

In addition to the frequency of well-being strategies, I analyzed narrative responses from the participants using qualitative analysis techniques. I used an inductive open coding approach to analyze the 187 responses to the survey question, “What is the impact of these

[well-being] strategies on your motivation for completing your college education?". Initially, a total of 30 codes resulted from the initial coding analysis. Those 30 codes were then grouped together to form broader categories, and then those categories were further grouped to form four overarching themes. I examine the four themes and provide examples from the student responses in the following sections.

Theme 1: Students use well-being strategies to stay motivated for their coursework.

Over half (52%) of the respondents used language in their open-ended responses that spoke to well-being strategies helping to keep them focused, stay motivated, enhance performance, remain balanced, and maintain a positive outlook about their studies. One participant shared, "Being able to take a step back and taking time to myself…this allows for having a clear mind and work on school work without that much stress." Another student offered, "These [strategies] have kept me grounded and motivated. They help me stay focused and keep me driven." This theme speaks to the importance of using well-being strategies for sustaining motivation for college academic work throughout the COVID-19 pandemic.

Theme 2: Well-being strategies help students with emotional regulation and wellness.

Forty-five percent of the participants (n = 85) spoke about how engaging in well-being strategies helped them with their emotional regulation and overall wellness. Fifty-one participants specifically mentioned in their responses that the strategies helped them to cope with stress, calm anxiety, and relax or unwind. Additional responses in this theme spoke to these strategies as helping them to take a break from their coursework. One student shared, "These strategies allow me to get a break from college work so that I don't get burned out, thus keeping up my motivation." Another student mentioned, "All of these [strategies] are helpful techniques for dealing with stress. But I find exercise, meditation and mindfulness, to

be the most helpful. Meditation helps to center me when I feel overwhelmed." Many students spoke to experiencing increases in stress and anxiety during the pandemic. The need for good emotional regulations strategies seems central to students for managing stress and anxiety.

Theme 3: Family and Support Systems are important for well-being and motivation. A third theme that emerged from the responses related to the importance of family, friends, and community as a support system. A total of 31 students mentioned family, friends, or perceived support from their community as important to their well-being and academic motivation. One student shared, "The impact of these strategies that are my motivation for completing my college education are my family as they are the ones that push me to keep going." Another student said, "I think community and emotional connection are what I do to help myself get over the stressful time. It has changed the pandemic into a time for me to reflect on my life, my goals, and how I should manage my time and money." Students perceive their social support systems as being important for their continued motivation for accomplishing their goals. One student shared, "My biggest impact is being surrounded by friends and family that encourage me and push me to want to succeed."

This theme is important because it frames the importance of non-cognitive factors and highlights how integral environmental and social factors are for an individual's academic motivation (as postulated by Bandura's social cognitive theory of motivation). During COVID-19, there were many mandates that were instituted across the state of New Mexico for social distancing and limiting gatherings across households. The previous section highlighted that one of the major challenges for students was the social isolation from family and friends. The abounding comments from students illustrate how the social isolation mandates impacted them not only on a personal level but also in their academic experiences.

Theme 4: Future Goals and perspective help students with their academic motivation.

The fourth theme that emerged from the open-ended responses was that students' future goals and future expectations of success contribute to their academic motivation. Twenty-seven students (14%) of the participants referenced that their well-being strategies helped them to remember their goals for school, or a future goal such as obtaining a well-paying job after graduation. Other students shared these goals helped them overcome barriers and maintain their focus on their goal of obtaining their degree. One student shared, "These strategies have helped me deal with the unforeseen tragedies and roadblocks that have occurred in my life. They have helped me stay on track to finish college." Another student said, "These strategies help me stay motivated to continue to reach my ultimate goal of graduating and becoming a future [professional]." Another student spoke of having a larger perspective helped them remember their overall goal, "[These strategies] help me gain a better understanding of my purpose of completing my education." From these responses, maintaining a future time perspective and keeping future goals in mind (e.g., such as degree attainment, or getting a well-paying job after college) contribute to student motivation for their college coursework. This finding aligns with the research literature around subjective task value, and speaks to the real world impacts of having a utility value of education for student motivation (Bong, 2001).

One last trend that emerged in the responses were some of the negative outcomes associated with engaging in well-being strategies. Twenty participants shared that wellness strategies could become distracting, were time consuming, or they felt they did not have enough time for their wellbeing. One student shared, "I do not have time to consistently implement most of these strategies as I am taking 23 credit hours and working 40-50 hours a

week to support myself". Another student said, "I do not really have time to put my well-being first, school always comes first." Another participant spoke about the push and pull they felt for taking the time to devote to wellbeing, "[The strategies] have a positive impact by inspiring me to learn more about everything I can, however they take time and that has a negative impact because I have less time for study". This trend in the responses was interesting because the participants shared they know the benefits of participating in well-being strategies for their mental and emotional health but that benefit comes at a cost and can have "negative impacts" due to constraints on their time. Students in this sample may have had some understanding of the benefits of engaging in well-being strategies due to coursework assignments in a few of the educational psychology courses that have focused on well-being. More information is needed to better understand student perspectives on well-being. However, this finding aligns with expectancy-value theory in that individuals assess a cost when evaluating the value of a task (Eccles, 1987). One student mentioned that in order to balance friends, hobbies, and school work they have to sacrifice sleep, "I lose lots of sleep, but I'm okay with that".

The narrative responses provided by students reflect theoretical constructs and mechanisms covered in the current literature around self-efficacy (Bandura, 1977) and subjective task value (Wigfield & Eccles, 1992, 2000). While the quantitative scales used in the present study focused on future utility value, the results from the narratives suggest that more work is needed to measure and better understand how students evaluate the cost associated with academic tasks and college coursework.

Chapter V: Discussion

The purpose of this cross-sectional study was to explore academic motivational constructs in college undergraduate students within the context of the ongoing COVID-19 pandemic. I grounded the study in social cognitive theory and examined self-efficacy for completing college coursework, utility value for achieving high grades, and utility value for learning course content for future goals. Participants were 187 college students enrolled in educational psychology courses at a southwestern university in the spring 2022 and summer 2022 semesters. Students completed an online survey that included demographics, evaluations for self-efficacy for college courses, self-efficacy for graduating college, and rated the utility value for achieving high grades and learning course content for future life goals.

In addition to the quantitative analysis, I employed qualitative data analysis techniques on the open-ended responses to survey questions to understand student well-being, strategies that promote well-being, and challenges students have faced while completing college coursework during the pandemic. For the rest of the chapter, I review key findings and frame results of this study within the existing literature. I also outline study implications, potential limitations, and recommendations for future research.

Review of Key Findings from the Quantitative Analysis

One of the goals of the study was to understand self-efficacy, an important motivation construct for academic motivation, for college students during the COVID-19 pandemic. Results from this study showed that undergraduate levels of self-efficacy for successfully completing college coursework were fair (mean scale score was 64.91 on a 0–100-point scale). In a sample of 397 undergraduate students taking educational psychology courses at a

southwestern university, researchers Shell and Husman (2008) reported a mean score of *M* = 82.94 and *SD* = 11.99 on the self-efficacy scale (p. 450). Shell and Husman (2008) interpreted these scores to indicate high levels of self-efficacy for their sample. Due to the cross-sectional nature of the present study, it is impossible to make any comparisons of the self-efficacy scores for the present sample to determine if there has been a change in levels of self-efficacy for these students. Ideally, a measure of self-efficacy would have been measured prior to the onset of the pandemic and then compared to the results of this study to determine if there are statistical differences in self-efficacy scores between the two time periods. It is possible that student levels of self-efficacy have decreased since the onset of the pandemic. Many students spoke in their open-ended narratives about the difficulties they encountered with adjusting to online coursework (for themselves and for their instructors). It is also possible there are characteristics of this sample that resulted in lower scores on self-efficacy than expected. This sample included more Hispanic and American Indian students which helps to build a motivational profile for these ethnic groups for self-efficacy than in the existing literature. More work needs to be done in this area to understand the current evaluations of student self-efficacy for this student population.

Another important goal of this study was to explore potential group differences in self-efficacy for successfully completing college coursework. For this sample, males had a significantly higher mean score on self-efficacy for successfully completing college coursework than females. Gender differences in self-efficacy have been explored in the research literature. Some of these effects have been illustrated in the existing literature and researchers believe gender differences in self-efficacy begin with middle school children, where girls show lower self-efficacy (Wigfield et al., 1996). Theories that are somewhat

dated have postulated that one factor could be that students categorize some subjects as being more male domains (i.e., math, science, engineering, technology), while language arts and social sciences are more considered female domains (Eccles, 1987). More work will need to be done to see if these effects are consistent with other student populations.

Another interesting finding was the group differences in self-efficacy based on ethnicity for this sample. Students who identified as American Indian/Alaska Native had statistically higher self-efficacy scores for successfully completing college coursework than both their Hispanic and White peers. The scale asked questions about how confident students were for performing various academic tasks such as studying effectively for course exams, time management, and taking effective notes over course lectures. The results from this sample suggest that Native students have higher confidence, or higher self-efficacy for successfully performing these important learning tasks. This finding is important because Native student populations have historically been characterized in the research as being at higher risk for college dropout and lower academic achievement (*Status and Trends in the Education of American Indians and Alaska Natives*, n.d.).

Eccles, (2006) argues that students from underrepresented groups may experience discrimination at school which might negatively affect their expectancies to succeed to in school and ultimately impact their motivation for learning. It could be a possibility that the unique characteristics of the general student population at this university (minority majority) could serve as a protective factor for Native students. It is also possible that these Native student's cultural or family background have contributed to their higher levels of self-efficacy. It is also possible that these Native students in particular have had to learn the skills and study strategies necessary for college coursework through their past learning

experiences. Mosholder and Goslin (2013) found that skill development, support from family and friends, having role-models, and a "culturally sensitive school environment" were key for supporting Native American student post-secondary persistence (p. 321). One of the strengths of the social cognitive framework for motivation is that there could be environmental or cultural factors at play that need to be further explored. While the quantitative motivation literature is very sparse for Native college students, this finding is encouraging and more work needs to be done to understand self-efficacy in Native students and the underlying social and cognitive mechanisms at work.

Along a similar vein to ethnic differences in self-efficacy for successfully completing college coursework were the significant differences in scores based on the education level of the students' fathers. Participants with father's who had an associate's degree had higher self-efficacy scores than students with fathers who had a vocational/technical degree or an undergraduate degree. A surprising result from the post-hoc group comparisons were that self-efficacy was higher for students with fathers who had a high school diploma than for students with fathers who had a vocational/technical degree. Another result was that students whose fathers had an associate's degree had higher self-efficacy than students whose fathers had an undergraduate degree. Bandura's social cognitive theory explains one of the sources of self-efficacy evaluations are vicarious learning experiences. It is possible that fathers perhaps help their students navigate the educational system or are more involved with their student's education (social persuasion). However, the findings are mixed and provide an example of how quantitative research cannot exist in a vacuum and that although statistical tests can be significant, the interpretation and practical application of the results are what is important (Vogt, 2007). These findings are perplexing and generate new questions that

warrant additional research into understanding the underlying mechanisms at work. Generating new questions from the data however is an important part of the exploratory data analysis cycle (Grolemund, 2017).

Despite having lower than expected self-efficacy scores for successfully completing college coursework, this sample had high self-efficacy for successfully graduating from college (mean score was 90.48 on a scale from 0-100). I teste for group differences on mean scores of self-efficacy for successfully graduating from college for year in school, ethnicity, gender, GPA, education level of mother, and education level of father. There were no significant group differences on mean scores for any of the factors. The demographic and achievement variables do not seem to influence self-efficacy for successfully graduating from college for this sample.

Another important result was the correlation between student achievement and self-efficacy for graduating from college. Student self-reports of GPA had a positive relationship with self-efficacy for graduating from college, $r = .24$, $n = 183$, $p < .01$. In other words, the higher the expectancy for graduating college, the higher the GPA. These findings are consistent with the literature that has shown the importance of self-efficacy for positive student performance and achievement (Choi, 2005; Honicke & Broadbent, 2016).

Key Findings from Qualitative Analysis

In this sample, undergraduate students reported feeling overwhelmed and frustrated by their coursework during COVID-19. Difficulty with online classes was the challenge that students identified most frequently. Students shared challenges related to making the sudden transition to online courses, struggle with technology and online platforms, a decrease in access to instructors, and missing important connections with their instructors and peers

during the pandemic. Some of these challenges students are facing during the pandemic can be addressed. The university may be able provide faculty with more training to try to mitigate the difficulties with providing instruction in an online environment. Instructors can try to implement more interactive learning activities with their students online to foster connection with their students and among each other. A strength of qualitative research is being able to obtain rich data and to hear directly from the participants themselves about what their experiences have been as a college student during a pandemic.

Another finding from the qualitative analyses was that students spoke to negative impacts to their academic motivation during the COVID-19 pandemic which is consistent with findings from other studies on undergraduate students (Browning et al., 2021; Daniels, Goegan, and Parker, 2021). In the open-ended responses in this study, most students reported a loss of motivation to complete their course assignments. This finding may help interpret the self-efficacy scores for successfully completing college coursework in the sample. This result also illustrates how quantitative and qualitative research methods can complement one another. For quantitative research, statistically testing for changes in a construct like academic motivation requires careful research design that involves collecting data across several time periods (repeated measures design). For the present study, it was not possible to measure these motivational constructs prior to the onset of the pandemic to test for significant differences during the pandemic. Obtaining narratives from students directly from the open-ended survey questions facilitated data collection about student self-perceptions of how their levels of academic motivation had been impacted by the pandemic.

In addition to lower levels of motivation, students also reported increases in stress levels and anxiety during the COVID-19 pandemic which is consistent with the burgeoning

literature on the impacts of the pandemic on student mental health and well-being (Browning et al., 2021; Wang et al., 2020). There is very little research in the United States that examines well-being in tandem with academic or achievement motivation. Most of the existing research has been conducted internationally (Daniels et al., 2021; George & Thomas, 2021). Social cognitive theory purports that an individual's mood and emotional state are important factors that can impact motivation and self-efficacy in particular (Bandura, 1977). In addition, Bandura's theory also emphasizes the importance of environment and contextual factors on motivation. The question is not if the pandemic has had an impact on students but *how* and *why* the pandemic has impacted undergraduate students. The present study is one of the few studies that examines motivational factors in students in tandem with student well-being. Results from the present study and other works are starting to shed light on how and why considering an individual's background, environment, and historical context is important to examine in terms of academic motivation. More research needs to continue to better understand how well-being impacts student motivation for learning and achievement.

Future work could also look closer at identifying students with lower levels of self-efficacy for graduating from college and target interventions and supports to assist those students. What are some of the barriers these students perceive to earning their degrees? Some students spoke about the demands on their time including caring for family members and working a full-time job outside of school. Other students reported they had financial concerns and worried about how they were going to continue to pay for both school and living expenses. This is an area that could be explored with further qualitative research.

While the scope of the current study was to gain a better understanding of motivational factors within the context of COVID-19. My goal was to gain a better

understanding of what adaptive behaviors or coping strategies students self-reported as using during this stressful time and how those strategies impacted their motivation. Students reported spending time with family and friends as important for promoting their well-being. The next strategy to promote well-being students used was getting exercise followed by social media.

One interesting result was that 6% of students reported using these coping strategies in order to take a break or "get away" from the stress of coursework and the pandemic. Prasath et al. (2021) posit that coping strategies such as distraction or denial are more often associated with negative emotions or distress and do not help with resolving the underlying emotion. Ultimately Prasath and colleagues explain, "These strategies can be harmful and unhealthy with regard to coping with stressors. Researchers have recommended coping skills training for university students to modify maladaptive coping strategies and enhance pre-existing adaptive coping styles to optimal levels" (Prasath et al., 2021, p. 47). There is more work that could be done to more closely examine the types of coping strategies to discern which strategies are most adaptive and beneficial for boosting student motivation and well-being.

Implications of the Study

Student self-efficacy for successfully completing college coursework was fair for this sample. This is a concern because the research literature emphasizes that high self-efficacy is correlated with academic achievement. The lowest mean score was for the self-efficacy item that asked students to rate their level of confidence for "Keep[ing] your attention focused while reading the text or readings". Interventions could be implemented to improve student self-efficacy for tasks relating to successfully completing college coursework starting with

teaching skills or strategies for reading course texts. Bandura's (1977) self-efficacy construct provides several mechanisms educators can use to positively influence a student's self-efficacy evaluations. First, educators could facilitate and provide more mastery experiences related to these important skills needed to be successful for college coursework. According to Bandura, mastery experiences are critical for developing strong self-efficacy and can serve as a potential protective factor against future failures. Furthermore, mastery experiences are one of the most powerful sources of self-efficacy and have longer lasting effects than other sources such as vicarious experiences or social persuasion (Bandura, 1977).

Student self-efficacy for successfully graduating from college was high for this sample. For some students, this long-term goal was something they mentioned in the open-ended responses as goals that were being supported by family members which aligns with social persuasion of Bandura's self-efficacy framework (Bandura, 1977). However, many students also reported in the open-ended narratives that their academic motivation had decreased and feelings of stress, anxiety, and depression had increased. These indicators align with Bandura's self-efficacy model in that emotions and physiological indicators have an impact on self-efficacy evaluations (Bandura, 1977). More research needs to be conducted to better differentiate impacts from the pandemic on long-term goals and accomplishing more short-term learning tasks. Students may need to be supported and given strategies to help them stay on track to accomplishing their college coursework in real time.

In the qualitative analysis, the majority of students spoke to a wide range of challenges associated with online courses during the pandemic in their open-ended narratives. Future steps may be to develop a questionnaire to obtain more data with a wider sample to get a better understanding of how pervasive this issue may be in the student

population. As the world's workforce and economy continues to change and as the threat of new COVID-19 variants persist, it is hard to estimate if or when the pandemic will be considered concluded. Moreover, it is hard to predict what the "new normal" will look like for higher education as universities, students, and faculty continue to grapple with the ongoing challenges of the pandemic. For this sample, the majority of students reported they were enrolled in online courses as well as face-to-face courses. It is likely that future course offerings will continue to offer online instructional format. Supports could be put in place to assist students with developing skills and using strategies to be successful for taking online courses. Similarly, there may be supports also offered to online course instructors such as strategies for encouraging more social interaction between and with their students. Now is the time to build mastery experiences for both students and instructors when it comes to teaching and learning through online courses.

Limitations

There are several limitations to consider related to the study design and generalizability of results for this study. First, this study is cross-sectional and surveys perceptions of undergraduate students on motivation and well-being variables at a single point in time. Comparisons cannot be made between time points to see impacts of variables over a longer time period. Future work could employ a repeated measures design and collect pre- and post-measurements to test for significant differences in variables across the different time periods. As the COVID-19 pandemic continues to impact higher education institutions across the globe, more longitudinal research could be conducted to see how the educational experiences and motivational constructs continue to change with the learning environment for college students.

Another limitation of the study was related to the sampling technique used. For this study, the participants were made up of a convenience sample of undergraduate students enrolled in educational psychology courses at a southwestern university. It is highly likely there are some common factors about students who are enrolled in educational psychology courses that make it difficult to generalize these findings to a wider undergraduate student population.

Last, one consideration regarding the qualitative analysis is that there are multiple interpretations that could be applied to the personal narratives provided by the study participants. The thematic codes were generated through the lens of a single researcher and the resulting meaning constructed from the qualitative data reflects this researcher's own perspectives and interpretations. Additional work may involve several researchers engaging in the open coding process and building consensus for the categories and themes developed. Having more than one researcher generate the codes, categories, and themes would provide a way to increase interrater agreement and perhaps increase trustworthiness for the qualitative analysis.

Recommendations for Future Work

Future work could utilize longitudinal research methods to look at the long-term effects of the COVID-19 pandemic on college student self-efficacy and utility value. Employing a repeated measures design can look directly at any significant changes in variables such a self-efficacy scores for graduating college measured across multiple time periods.

Additional research work might extend the theoretical underpinnings of these motivational constructs. For example, are there predictive models that could be built based

on motivational factors for undergraduate students? Do undergraduate student evaluations of their self-efficacy for graduating from college predict actual graduation rates? Do future utility value of learning course content scores and utility value for achieving high grades scores predict academic achievement outcomes? Future work could utilize multiple regression techniques or structural equation modeling to test these constructs with motivation theory.

There are also additional questions that qualitative research work might help address. More data is needed to gain a better understanding of why some of the students in this sample rated themselves lower on the self-efficacy for successfully graduating from college scale. What are the perceived barriers and challenges students encounter in their pursuit of obtaining their college degree? How might the university or educators mitigate some of those barriers?

In addition, future studies might look at how COVID-19 has impacted (both personally and professionally) the lives of faculty in higher education. How have faculty dealt with the sudden transition to online and hybrid teaching environments? Have the teaching and learning conditions of the pandemic impacted faculty motivation for teaching? How have teaching expectations and teaching loads been impacted over the pandemic? What trainings and/or instructional supports have colleges and universities provided faculty? It may be beneficial to explore what supports faculty found useful as they transitioned to online courses, ascertain best practices for delivering instruction, and strategies for effectively communicating with students using technology. There may be some positive practices that have arisen out of the pandemic that should continue to be implemented as both students and faculty press forward in a new post-pandemic era of higher education.

Conclusion

The aims of this study were to examine student motivation and to explore the challenges and coping strategies students are employing while pursuing college coursework during a pandemic. The results of this study provide higher education institutions and researchers with important information about student motivation, self-efficacy for graduating college, and challenges while pursuing college coursework during a pandemic.

Results from the quantitative analysis indicate that undergraduate students in general have high ratings of self-efficacy for graduating from college. This result was interesting because the levels of self-efficacy for successfully completing college coursework were only fair. There are important group differences in self-efficacy scores based on gender, ethnicity, and education level of fathers. These findings speak to the multi-faceted nature of academic motivation and the need for continued research to better understand how these factors impact college student motivation.

The present study provides a first look at feedback from students themselves about what they currently perceive as challenges of engaging in college coursework and learning during the pandemic. In this sample, many students voiced that being able to form a connection with both their instructors and their peers helps with their learning. Any initiatives or efforts to encourage and promote these social interactions in an online or hybrid learning environment should become a priority for educators and educational leaders within higher education. A big takeaway from the results of this study is that the learning context matters for student motivation and student achievement. When speaking about the situated and contextual nature of motivation, Linnenbrink and Pintrich (2002) said, “This provides hope for teachers and school psychologists and suggests that instructional efforts and the

design of classrooms and schools can make a difference in motivation students for academic achievement" (p. 314).

Furthermore, it is important to recognize the diverse strategies students are employing to help maintain their well-being while also continuing to strive to complete their college coursework. Higher education institutions and faculty can continue to advocate for more supports for undergraduate students and encourage students to utilize existing campus resources. This research should serve as a call to action for colleges and universities to prioritize understanding of how the ongoing pandemic may be impacting the everyday experiences of students and how to better support them in their efforts to ultimately meet their goal of earning a college degree.

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Appendix A

Demographic Questionnaire

Instructions: Please complete the following demographic information. Note: All information will be kept completely confidential.

1. What year in school are you? (Please select one)
   Freshman Sophomore Junior Senior
2. What is your major? _____
3. How many classes are you taking **online** this semester?
4. How many classes are you taking **face-to-face** this semester? _____
5. Please provide your estimated GPA _____
6. What is your ethnicity? Please choose the one you most identify with.
   _____ American Indian
   _____ Asian
   _____ Black or African American
   _____ Hispanic
   _____ Hawaiian – Other Pacific Islanders
   _____ White
   _____ Other_____
7. What gender do you most identify with?
   _____Male ___Female _____ Other ___Prefer not to say
8. What is your age? _____
9. What is the highest education level of your **mother**?
   _____High School _____Undergraduate/College Degree _____Graduate Degree
   _____Associate's Degree _____ Vocational/Technical Degree
10. What is the highest education level of your **father**?
    _____High School _____Undergraduate/College Degree _____Graduate Degree
    _____Associate's Degree _____ Vocational/Technical Degree
11. Do you have a reliable computer in your home? ___Yes ___No
12. Do you have access to a reliable internet connection at home? ___Yes ____No

13. What strategies do you use to promote your sense of **wellbeing** as a college student?

Meditation	Yes___ No ____
Mindfulness	Yes___ No ____
Prayer	Yes___ No ____
Time with Friends	Yes___ No ____
Time with Family	Yes___ No ____
Exercise	Yes___ No ____
Healthy Eating	Yes___ No ____
Getting Adequate Sleep	Yes___ No ____
Spending time outdoors	Yes___ No ____
Cultural/Indigenous Ceremony	Yes___ No ____
Attending Religious Services	Yes___ No ____
Social Media (YouTube, TikTok)	Yes___ No ____
Art	Yes___ No ____
Working with a counselor/therapist	Yes___ No ____
Attending a Support Group	Yes___ No ____
Other	_____

14. What is the impact of these strategies on your motivation for completing your college education?

15. What are three (3) challenges you have experienced while completing college coursework during the COVID-19 pandemic?

Appendix B

Self-Efficacy Scales

Part 1: Self-Efficacy for Successfully Completing College Coursework

Students differ in how confident they are about being able to do the various assignments, activities, and strategies related to learning the content in their courses. **Please rate how confident you are about <u>your ability to do each of the following in the courses you are taking this semester</u> on a scale from 0 (Completely Unconfident) to 100 (Completely Confident).** The scale descriptors (e.g., Very Unconfident, Somewhat Confident, etc.) are provided as general descriptors only. Except for "Completely Unconfident" and "Completely Confident" which represent 0 and 100 respectively, the descriptors are not tied to a specific number on the numeric scale. You may put down any number between 0 and 100.

0	**10**	**20**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**
Completely Unconfident	Very Unconfident		Unconfident	Somewhat Unconfident		Somewhat Confident	Confident	Very Confident		Completely Confident

1. _____ Recognize what is important to remember from the text or readings.
2. _____ Take effective notes over the course lectures.
3. _____ Keep your attention focused while reading the text or readings.
4. _____ Learn the important information and concepts from the text or readings.
5. _____ Study effectively for the course exams.
6. _____ Summarize the important information from the lectures or other class presentations.
7. _____ Take effective notes over the course text or readings.
8. _____ Study the text or readings effectively.
9. _____ Manage time well enough to have ample study time for the class.
10. _____ Learn the important information and concepts from the lectures or other class presentations.
11. _____ Summarize the important information from the text or readings.
12. _____ Understand the course text or readings.
13. _____ Keep from being distracted by others while studying for the class.
14. _____ Recognize what is important to remember from the information given in the class.

Part 2: Self-Efficacy for Graduating from College

0	**10**	**20**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**
Completely Unconfident	Very Unconfident		Unconfident	Somewhat Unconfident		Somewhat Confident	Confident	Very Confident		Completely Confident

How confident are you that <u>you will successfully graduate from college</u>? _____

Appendix C

Utility Value Instrument

Part 1: Value of Achieving High Grades

People differ in their feelings about the importance of achieving high grades (e.g., A's) in school. Using the scale given below, **please rate how important you think <u>achieving high grades (A's)</u> in YOUR COLLEGE COURSES** is for accomplishing each of the following.

	1 Very Unimportant	**2** Somewhat Unimportant	**3** Neither Unimportant Nor Important	**4** Somewhat Important	**5** Very Important
1.	Getting a good job.	1	2	3	4	5
2.	Solving life's problems.	1	2	3	4	5
3.	Learning new things.	1	2	3	4	5
4.	Improving how well you could do your job.	1	2	3	4	5
5.	Getting accepted into graduate school.	1	2	3	4	5
6.	Making many friends.	1	2	3	4	5
7.	Having a good marriage.	1	2	3	4	5
8.	Being a good citizen.	1	2	3	4	5
9.	Being a creative person.	1	2	3	4	5
10.	Reaching your goals.	1	2	3	4	5
11.	Having an enjoyable social life.	1	2	3	4	5
12.	Being able to help other people.	1	2	3	4	5

Part 2: Value of Learning Course Content

People also differ in their feelings about the importance of the things they learn in their classes. Using the scale given below, **please rate how important you think <u>learning and understanding the content and materials covered</u> in YOUR COLLEGE COURSES** is for accomplishing each of the following.

1 Very Unimportant	**2** Somewhat Unimportant	**3** Neither Unimportant Nor Important	**4** Somewhat Important	**5** Very Important

13.	Having a good marriage.	1	2	3	4	5
14.	Reaching your goals.	1	2	3	4	5
15.	Improving how well you could do your job.	1	2	3	4	5
16.	Having an enjoyable social life.	1	2	3	4	5
17.	Getting accepted into graduate school.	1	2	3	4	5
18.	Being able to help other people.	1	2	3	4	5
19.	Being a creative person.	1	2	3	4	5
20.	Solving life's problems.	1	2	3	4	5
21.	Getting a good job.	1	2	3	4	5
22.	Learning new things.	1	2	3	4	5
23.	Making many friends.	1	2	3	4	5
24.	Being a good citizen.	1	2	3	4	5