

A Thematic Analysis of the Relationship Between Socioeconomic Status and Student Academic Resilience in Higher Education During the COVID-19 Pandemic

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Abstract

University and college students may face some of the most difficult and demanding challenges during their transition from adolescence to maturity (Katz, 2015). College students today experience increased housing prices, food poverty, financial challenges, lack of social connectedness, and anxiety about the future which all can be influenced by systemic inequalities and climate change etc. In addition, students' today face increased stress regarding academic performance and well-being as a result of the COVID-19 pandemic (Lederer et al., 2020). In December of 2019, the SARS-CoV-2 virus was first discovered in Wuhan, China where health officials and scientists classified the virus as pneumonia-like. Patients demonstrated symptoms of sore throat, dry cough, vomiting, loss of taste and smell, and irregular breathing etc (Li et al., 2020). On January 20, 2020, the World Health Organization (WHO) declared SARS-Co-V-2, otherwise known as COVID-19 and the Coronavirus, as a pandemic (Li et al., 2020). Thus, COVID-19, significantly affected social, environmental, and economic domains of life where all educational institutions either transitioned to remote learning or completely shut down (Mofijur et al., 2021).

With the transition to remote learning, students from all socioeconomic backgrounds have had to adjust and acclimatize to a world of uncertainty. It would be remiss to ignore the impact of socio-economic status as a contributing factor to academic resilience, and specifically how financial resources influence the well-being of students. As a result, it is critical to analyze the connection between socioeconomic status (SES) and individual academic resilience while factoring the social, familial, and educational situations of those who are quarantined (Sarmiento et al., 2021). This unexpected transition presented a unique opportunity to investigate further into

student motivation, well-being practices, and other stimulating aspects that molded the student experience (Daniels et al., 2021).

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Land Acknowledgement

I would like to begin with a land acknowledgement to recognize the Indigenous lands we are on today.

“Tufts University’s Medford/Somerville campus sits on the colonized homelands of the Massachusetts tribal people, who took their name from the Algonquian term describing the area visible from the Great Hill, now referred to as the Blue Hills that lie south of present-day Boston. The Massachusetts came into contact with the Nipmuc to the west, the Pawtucket to the north, and Wampanoag to the south, related peoples who shared mutually intelligible languages. As an institution that benefits from the ownership of land once inhabited and cared for by Indigenous communities, Tufts has a responsibility to recognize this history and engage with the descendants and nations who represent the original peoples of what is now eastern Massachusetts (Tufts, 2023).”

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Literature Review

Well-Being

In addition, this research looks into students' well-being, self-care practices, and any resources sought to aid individuals' overall mental and physical health during COVID-19. The pandemic triggered dramatic shifts and significant demands on college students both internally and externally, which may have resulted in unpleasant feelings such as stress while undertaking remote learning (Eva et al., 2020). An individuals' well-being consists of both subjective and psychological well-being.

Previous to the COVID-19 epidemic, digital technologies to boost student learning had been successfully introduced in schools. Students and instructors have benefited from technology's ability to provide efficiency, interactive learning, and tailored educational techniques (Dziuban et al., 2018). This is especially critical, during COVID-19, as educators and students shifted to a remote learning environment. All individuals had to quickly adapt to this new norm, placing an emphasis on individuals' mental well-being. In a study conducted by Lischer et al., (2021) 557 undergraduate students from a Swiss University indicated that women had significantly higher anxiety levels than men, students had concerns about economic impact of the pandemic, academic delays, and personal health issues related to the pandemic. Additionally, in the same study, it was revealed that students did not cope well with the abrupt shift to remote learning with the majority of students expressing that there was a lack of personal connection with other students.

To further understand individual well-being, subjective and psychological well-being comprise the overall emotional balanced state of individuals. Subjective well-being refers to how a person feels about and perceives different aspects of their lives (NCBI NIH, 2013). Psychological well-being refers to a combination of positive affective states and functioning with optimal efficacy in an individuals' social life (Deci & Ryan, 2008). Overall, well-being is a broad notion that incorporates the best possible experience and functioning of individuals (Deci & Ryan, 2008).

To better understand how the pandemic and shift to remote learning affected individual well-being, subjective experiences influence how one's mental and emotional state is. It is important to study subjective well-being and how stress and neurodevelopmental processes shift in times of distress and sudden life changes. In the study conducted by Engel de Abreu et al., it was determined that lower levels of subjective well-being resulted in female identifying individuals due to an increased level of stress regarding illness, difficulty of schoolwork, less social contact with peers, and a decrease in satisfaction with freedom. The study also concluded that individuals from low socio-economic statuses have a higher risk of suffering mental and psychological consequences due to increasing the pre-existing systemic inequalities at play.

Additionally, in a study conducted by Tetreault et al., concluded that in male identifying individuals who come from a higher socioeconomic background demonstrated increased levels of stress and anxiety and a disconnect between peers and friends from a lack of social connectedness. Current literature has demonstrated that female identifying individuals' subjective well-being has decreased drastically during the pandemic than male identified individuals. As supported by literature, in a study conducted with 229 Italian adolescent students, the main findings revealed that females had a significantly lower perceived well-being. The findings also

revealed that a lack of social support and a shift to a more individualistic lifestyle led to a decrease in connectedness and an increase in situational stress (Pepe and Farina, 2023).

In conjunction with subjective well-being, psychological well-being is crucial in understanding how individuals cope, behave, and adjust to external stressors that have a negative influence on the human psyche. While subjective well-being refers to the individual experience and their perceived notion of self in their day to day lives, psychological well-being assess positive mental states such as happiness, contentment, and satisfaction etc and how these states can be affected by external factors.

Academic Resilience

Academic resilience is defined as an individual's ability to persevere in the face of hardship regarding academic obligations (Munaroah et al. 2020). In current literature on academic resilience, researchers have found evidence-based elements that lead to student achievement. However, much literature is focused on specific clusters of students such as medical, graduate, and female/male individuals (Montas, 2019 and Morales, 2008). Furthermore, while scholarship has focused on undergraduate students' academic perceptions and motives as a result of the pandemic (Daniels et al. 2021), there has been little research on students' academic resilience during the pandemic. Understanding academic resilience is critical, especially in the COVID-19 era, as educators will be able to further improve academic curriculum to develop persistence, adaptability, and promote resilience in students (Beale, 2020). Upon further research, it is critical to understand how academic resilience is promoted in individuals by analyzing intrinsic factors, well-being practices, and the role of financial resources to better imply how students were supported during a time of uncertainty and universal hardship. This research will

contribute to the gap of understanding how COVID-19 impacted young adolescents developmental needs and how higher education institutions can better serve student populations.

Furthermore, resilience research is continuously being studied in diverse populations, however, as the capabilities and outcomes of individuals continue to change this adds to the growing body of knowledge. Empirical study reveals that the resources available in one's surroundings when confronted with risk factors are drivers of academic resilience (Liu & Platow, 2020). While some of these resources are material, research has shown that when dealing with academic expectations, social interactions, cultural views, and religious values might serve as a source of resilience and can influence academic outcomes of students (Masten and Coatsworth, 1998). Even in the face of adversity, such as COVID-19, these motivating characteristics have been connected to student performance. Despite the existence of stressful events and situations that put them at risk of performing poorly in school, resilient students maintain high levels of achievement, motivation and performance. As a result, underlying factors such as motivation may play a crucial role in educational resilience (Jowkar et al., 2014).

Academic resilience investigates such critical factors to better understand student persistence. Environmental, social, and human factors that disrupt the process from risk to pathology, in which resiliency develops, are referred to as promoters (Fergus and Zimmerman, 2005). Such promoters such as well-being practices, financial resources, and persistence will be analyzed in this study. These factors can be better understood by looking at psychological resiliency, which examines pupils' adaptability, hardiness, and tenacity.

Psychological Resilience

Waxman et al., (2003) suggests that academic resilience research should look at indicators of psychological resilience to see what processes might improve students' affective

and motivational outcomes. One such factor includes psychological resilience, which according to literature, refers to positive adaptability or the ability to maintain mental and physical health while being exposed to stressful events. Individual response and ability to cope with hardship are influenced by personality and environmental factors (Afek et al., 2021). Psychological, physiological, and neurobehavioral elements all influence resilience, which is linked to individual mental health and motivated behavior, all of which are important in everyday life. Self-efficacy, optimism, emotional intelligence, and emotional regulation are four components of psychological resilience that have been found to positively contribute to resilience (Afek et al., 2021). In a study of 16-19 year old students, Hamill (2003) identified self-efficacy as a key feature that divided those who are resilient from those who are not. Students with low adversity and poor competency exhibited greater levels of aggression and delinquency. Individuals' answers to the complexity of responses to tough situations were used to measure self-efficacy and resilience, and these findings also noted that personality traits are a crucial factor of resilience.

Second, optimism is a trait that has been consistently linked to psychological resilience in studies. Optimism refers to the common belief that positive things will happen in the future (Scheier and Carver, 1995). There are two types of optimism that researchers believe might help people have a more positive mentality. "Dispositional optimism" refers to an attitude of having high hopes for the future (Carver and Scheier, 2001). This kind of optimism is part of a personality characteristic that argues that behavior serves as an expression of desire to achieve certain objectives, states, or actions (Wigfield, 1994). Furthermore, "learned optimism" refers to an individual's explanation for results and justification for acts, as well as anticipation of future occurrences, which fosters a realistically positive view and long-term constructive striving.

(Mukund and Singh, 2015; Seligman, 1991; Seligman et al., 2005; Tenney et al., 2015; Tillich, 1952). While learned optimism isn't always connected with personality traits like dispositional optimism, it does set students up for success by allowing them to see tasks as feasible and shifting the general focus away from pessimism (Chadwick, 2019). Optimism is said to benefit students by assisting them in developing a positive outlook that allows them to tackle difficulties more successfully (Chang and D'Zurilla, 1996). Furthermore, because they have good aspirations for the future, optimistic people have less worry and daily concerns. Because the burden of COVID-19 causes anxiety for students in every element of their well-being, it is critical to consider optimism as a factor for academic resiliency in this study.

Salovey and Mayer (1990) describe emotional intelligence as “the ability to monitor one’s own and others’ feelings, to discriminate among them and to use this information to guide one’s thinking and action” (pp. 189). Additionally, emotion perception, facilitation, understanding, and regulation are four areas of emotional intelligence that were added to the concept in 1997. (Mayer and Salovey, 1997; Mayer et al., 2004). Emotional intelligence is a significant predictor of the subjective well-being of an individual; assessing interpersonal relationships, social support, and health (Sarrionandia et al., 2018). Empirical research proves that individuals with high emotional intelligence have better resilience. Armstrong et al., (2011) “revealed that persons with higher EI scores reported that fewer stressful events continued to distress them. Additionally, persons with high emotional intelligence typically fail to detect stress or deploy coping mechanisms until a stressor exerts its full impact” (pp. 334-225). It is notable that emotional intelligence can serve as a protective factor for individuals experiencing stressful events serving as an adaptive mechanism.

Lastly, Artuch-Garde et al., (2017) revealed that students with the ability to self-regulate their emotions were linked to high levels of resilience, according to the cross-sectional designed study. Furthermore, "coping, confidence, persistence, and adaptation to change, as well as tolerance of unpleasant conditions" are all qualities that lead to higher levels of resilience, but persons who had established goals for themselves had the greatest difference in resilience. In the process of self-regulating one's behavior, self-regulation models emphasize the necessity of planning and goal-setting (Zimmerman, 2008). In a similar study conducted by Tugade et al., (2004), it was found that resilient individuals were characterized by high positive emotionality and by the capacity to rebound from negative circumstances despite threats to the individual. Persons who experience positive emotions tend to benefit resilient individuals in obtaining rapid cardiovascular recovery after negative emotional arousal, as opposed to those with less resilience who experience comparatively fewer pleasant emotions, according to study 1. Positive emotions may also help with emotional regulation outside of the physiological realm (Tugade and Fredrickson, 2011). Positive emotions, for example, may aid resilient people in exploring various emotion regulation options by expanding their range of following thoughts and activities (Fredrickson, 2000).

Psychological resilience is promoted through four components including: self-efficacy, optimism, emotional intelligence, and emotional regulation. While these four psychological factors influence individual resilience and behavior, much of the contributing factors of academic resilience are at play. Environmental, social, and systemic factors that influence day to day lives, opportunities, and support for individuals all have great significance to individual resilience.

Socio-Economics Status

Prior research has found that a family's socioeconomic situation influences parents' ability to meet their children's needs and participate in their education (OECD, 2018).

Socioeconomic status is defined as a complex and multifaceted term that includes both objective (e.g., money or education) and subjective (e.g., people's assessments of their socioeconomic position) (Navarro-Carrillo et al., 2020) class of individuals. By certain studies, students from low socioeconomic status (SES) families had lower academic achievement than their more socially advantaged counterparts (Sandoval-Hernandez & Bialowolski, 2016). Higher socioeconomic position often correlates to more educational resources for students at home and at school, such as books and computers (OECD, 2018). Lower socioeconomic status, on the other hand, has been shown to constantly build students' self-efficacy, help students realistically appraise their own strengths and weaknesses, encourage help seeking tendencies, and provide clear links between academic success and future economic security, according to some literature (Morales, 2014).

With the shift to online learning in higher education, there has been a surge in interest in determining the link between socioeconomic position and student well-being. Low SES was previously believed to have a negative impact on mental health, with pupils regularly experiencing symptoms of despair and anxiety as a result (Hyun, 2017). It's crucial to note, however, that encouraging variables like social support, a greater feeling of coherence, and decreased negative affectivity were all linked to improved psychological well-being (Neiva da Silva et al., 2021). Other elements that affect students' well-being include employment, access to online educational resources, and psychological assistance (Neiva da Silva et al., 2021). These disparities raise questions about how remote education affects wellbeing and the psychological

impact it can have on university students. By functioning as a tool for educators, practitioners, and parents, this study will help to bridge the gap between research and practice.

Methods

Procedure and Sample

To help answer our research questions, the research team recruited students from select higher education institutions in the United States to help us answer the following questions:

1. What is the relationship between academic resilience of students in higher education (18-30 year olds) and socioeconomic status?
2. What well-being practices or promotive factors do students utilize to persist academically in relation to their socioeconomic status?
3. What is the impact of the COVID-19 pandemic on the academic success of students of various socioeconomic backgrounds?

As noted above, several studies have looked at the effects of socioeconomic status on student academic performance, but few have examined the relationship between academic resilience and socioeconomic status in higher education during COVID-19. More specifically, several studies have looked at specific demographics within socioeconomic status, such as low or high, to examine academic resilience within students, but there is a lack of research encompassing a randomized sample of students in higher education to address all backgrounds of socioeconomic status in relation to academic resilience. As such, this study contributes to the literature in three ways: (1) we explicitly explore the relationship between socioeconomic status and academic resilience; (2) we investigate the well-being strategies and promotive factors that students use to persist academically; and (3) we examine how COVID-19 impacted the academic

success of students from various socioeconomic backgrounds. Based on prior literature, we offer three hypotheses:

H1: Students of low and middle socioeconomic status will have higher academic resilience and personal resilience than students of high socioeconomic status.

H2: Well-being practices increase student academic resilience and personal resilience during COVID-19.

H3: Academic motivation will decrease among all students of socioeconomic backgrounds due to the negative implications of transitioning to remote learning.

Sample

This is a qualitative analysis study. Students from select United States accredited higher education institutions were invited to complete a Qualtrics survey for demographic purposes and will be asked to participate in interviews that explore their experiences throughout the COVID-19 pandemic on their academic resilience. This method will help researchers understand how students experienced the sudden abrupt changes in academic instruction, which may have triggered negative emotions (Eva, 2021; Parameitha, 2021; & Farah, 2021).

With IRB (Institutional Review Board) approval, the research team recruited students by providing anonymous survey links and QR codes via classroom, social media, and word-of-mouth recruitment. All students are actively enrolled in higher education institutions, and recruitment took place during the 2021-22 school year. Participants were asked to answer questions regarding their familial socioeconomic status, academic resilience, and personal resilience.

Sociodemographic Variables

We asked participants to report their *gender* (male, female, non-binary, prefer not to say, or other), *identify as transgender* (yes, no, prefer not to say), *racial identity*, *higher education institution of attendance*, *field of study*, *year of current program* (first year undergraduate student, second year undergraduate student etc.) and *level of education pursuing* (Associates, Bachelors, Masters, PhD, MD/DO, JD, or Other).

Qualifications of Participants

Human subjects are students aged over 18 who are currently enrolled in a United States accredited college or university. The students represent a variety of socio-economic backgrounds as well as racial, gender, and ethnic backgrounds.

Consent

The Qualtrics survey includes consent language, with the participant opting into the study by clicking “yes”. At the end of the survey, they were invited to share their email address or telephone number if they are interested in participating in an interview. For the interview, participants were to read the oral consent document out loud (see oral consent) and will be asked “Do you consent to participate in this interview? Please state ‘yes’ or ‘no’.” And “Do you consent to recording of the interview so that your words can be transcribed by the research team? Please state ‘yes’ or ‘no’.”

Qualtrics Survey

Furthermore, through the Qualtrics survey, the demographics of students distinguished the socio-economic statuses from which the relationship between income and academic resilience can be determined. Methods of data collection included semi-structured qualitative interviews completed by student participants.

Interviews

The 30 minute semi-structured interview focused on the challenges students faced throughout remote instruction as well as the resources that were utilized by students throughout the pandemic. The interview provided insight as to the adjustments students had to make throughout the uncertainties of online instruction (See list of Interview Questions pg. 40). Students were given the opportunity to discuss how their socio-economic status influenced their academic resilience during the transition to remote education. The interviews were recorded via Zoom and transcribed by the research team. The Zoom recording had a unique password only available to the research team. The recording was deleted after the transcription process occurred. Any identifying data was stored in a secure server separate from the transcribed documents, which will also be stored on laptops with password protection enabled. Pseudonyms are used in place of educator names in transcriptions, and analysis.

Variables

Independent Variable

To measure socio-economic status, three questions were asked of the participant.

1. *What occupation(s) do your parent(s) have?*
2. *What is the highest level of education your parent(s) have?*
3. *In what zipcode do your parents reside?*

This information will be translated into a scale which gives a SES score. SES is consistently one of the stronger predictors of student academic outcomes. The research study will determine if income status had an effect on academic resilience during the COVID-19 pandemic.

Dependent Variables

Academic resilience is defined “as an individual's ability to persevere in the face of hardship when it comes to academic obligations” (Munaroah et al., 2020). In this study, academic resilience has been understood with people having increased perseverance, increased reflective and adaptive help-seeking, and increased avoidance of negative affect and emotional response (Cassidy, 2016). Academic resilience has been understood as the students' adaptive cognitive-affective and behavioral reactions to adversity in education (Cassidy, 2016).

Interview questions were developed regarding resilience theory which will describe an individual’s persistence to hardship. Questions will be asked regarding student academic experiences, support from higher education administrators, and what well-being practices aided as a protective factor.

Control Variables

In this study, COVID-19 was used as the control variable. Socioeconomic status as well as academic resilience were analyzed during this time since all students had to adapt to remote and online learning.

Analysis Plan

To analyze the data, the independent variable, socioeconomic status or income level, will be analyzed and scaled with the information provided. The research team used the US Census Bureau database to determine whether families fell under low, middle, and high income accounting for their occupation and education level. The interviews were transcribed, coded and developed to determine themes and suggestions to answer our research questions.

Results

The following are themes generated from the eight interviews conducted. Individual responses were transcribed and coded into themes to answer our research questions. All responses recorded below are anonymous and have the consent of the individual to be used in research purposes.

To answer our first research question, *“What is the relationship between academic resilience of students in higher education (18-30 year olds) and socio-economic status?”* We had originally hypothesized that, *“Students of low and middle socioeconomic status will have higher academic resilience and personal resilience than students of high socioeconomic status.”* Our hypothesis was proved. We found that students expressed educators’ attitudes, and financial stress or stability as variables that aided in their resilience. The interviews provided students with a safe space to share their experiences and stories which supported our conclusions. The following are themes generated from student responses to answer our first research question.

Theme #1

Educators’ attitudes towards academic capacity of students

We found that educators' attitudes towards the academic capacity of students promoted academic resilience during the COVID-19 pandemic. The majority of students expressed the importance of how educators perceived, supported, and facilitated relationships. Our data found that a positive attitude from educators’ towards the academic capacity of their students enhanced learning in the classroom, promoted resiliency in students and reassured individuals of their academic capabilities. Especially during COVID-19, most students expressed a decreased sense of belonging on campus, increase in isolation and an overall abrupt decline in their social interactions with other students. It is critical during this time period to have the support of

faculty, staff, and educators' to better promote academic resilience where students feel confident in their abilities to persist through academic demands. For example, throughout my conversation with Interviewee #1, the inherent belief that students are able to achieve academically highlighted the academic COVID-19 experience of this student. As noted from Interviewee #1:

“Yeah, so I think one answer is I really didn't have anyone that like was against my aspirations of going to college. So that's just the environment I grew up in. Even starting from elementary school, all the way up to high school. Teachers and mentors always kind of, they wouldn't say it like everyday, but you know they would always be like, yeah you, college. One day you guys will all go to college, you know something of that nature” (Interviewee #1).

Additionally, Interviewee #9 stated:

“Seeing my theater teacher and the way she interacted with us and the way that she really like poured her out to us like. I mean she didn't really have a healthy work-life balance, but still like, it - it - like I could tell that she like loved us, and she literally gave 110%. And I was like - so like that was when I kind of decided like “Oh I wanna be a theater teacher, like that's what I wanted to do” (Interviewee #9).

As stated by the above Interviewees, their educators' implicit attitude towards them promoted an unconditional positive and affirmative frame of mind. The students comfortably shared that their educational experience was guided by the belief that everyone will go to college. This implicit belief directly influenced how the student perceives their own academic capabilities where the underlying thoughts of doubt were no longer in question. In addition, one must take into consideration the academic climate of a student's academic experience.

Interviewee #1 emphasized that their educator would always say, *“One day you guys will all go to college.”* One can imply through this statement that positive reinforcement and dialogue between students and educators regarding the future posed optimism and capability in students. Early academic dialogue between educators and students can be a factor of healthy developing relationships through positive conversations of encouragement. Increased psychosocial support

promotes resilience in individuals, especially those who come from at-risk and low-socioeconomic backgrounds. The students expressed their gratitude towards the relationships they were able to curate with their educators and views them as a means of support and encouragement through their academic careers.

However, many Interviewees reiterated that their educators had a negative perceived notion towards their academic capabilities. Students shared that their educators often spoke to them in a vain manner, dismissed their aspirations, and demonstrated a lack of support towards their students. Interviewee #2 expressed:

*“Um I had teachers who were very like... I don't know I always felt like I was stupid. Um like teachers constantly talked down to me, especially when I was younger. And it's like, poor kids, like how can you like tell a kid that they're stupid! Like of course they're stupid, they don't know what they're doing, they're a kid *laughs*. So that was like a lot of my experience” (Interviewee #2).*

Additionally, Interviewee #8 also stated:

“And I remember that teacher had told me like oh you didn't get an award because he came at the middle of the year, like. He totally just disregarded all of my accomplishments and just said, since I don't know you know, since you weren't here like they're not going to get anything you're not going to be acknowledged, for your hard work, and I remember feeling like wow” (Interviewee #8).

Some research suggests that experiencing challenges and adversity can promote resilience in students, as it gives them an opportunity to develop coping mechanisms and problem-solving skills. In this sense, negative attitudes from educators may be a part of the challenges that students face, and can contribute to the development of resilience. While both of these Interviewees have described having negative experiences with their educators who failed to meet the fundamental needs of their students this can result in a lower likelihood of interpersonal interactions. Especially, during a time of universal crisis due to COVID-19, it is critical for students to feel a sense of belonging and comfortability. It is also important to acknowledge that

negative attitudes from educators can have detrimental effects on student self-esteem and wellbeing. Negative comments or feedback can lead students to believe that they are not capable of success, and can contribute to feelings of stress, anxiety, and depression.

So while there may be some benefits to experiencing challenges and adversity in developing resilience, it's important for educators to provide constructive criticism and support rather than solely relying on negative attitudes. By fostering a positive and supportive learning environment, educators can help students develop resilience and achieve their full potential, while also promoting their overall wellbeing.

Theme #2

Financial stress or stability as a motivating factor for resilience

We found that individuals of all socio-economic backgrounds (low, middle, and high) were all academically resilient. Financial stress refers to the emotional and physical strain that individuals experience due to their financial situation. Financial stability, refers to the state of having enough financial resources to meet one's needs and achieve financial goals.

When individuals face financial stress, they may struggle to focus on their academic pursuits, as their attention is often diverted to financial worries. This can lead to a decrease in academic performance, as well as a decrease in overall motivation and engagement in academic activities. Financial stress can also contribute to feelings of hopelessness and helplessness, which can further exacerbate the negative effects on academic resilience. As Interviewee #6 stated:

"My thought process was about just moving around a lot honestly, it was not pretty good there was just no stability in my life, and this is something that i'm like searching for like even though in as an adult like just anything that means stability like I want that, and I crave it" (Interviewee #6).

Most Interviewees mentioned that financial stability within their families and nuclear circles aided as protective factors. Students stated that this reality didn't really settle in until they went off to college and noticed the influence financial stability or instability had on their academic resilience. As Interviewee #5 mentioned:

“And I remember, because everyone had quit I would have to go to the coffee shop from opening to closing every single day like. But my grades were just dropping. I was just not attending school, like all my energy and all my work was going towards working” (Interviewee #5).

While this is an excerpt from when Interviewee #5 was in high school, they mentioned in the interviewee that having to work upwards of thirty hours a week during school which negatively impacted their mental health. Also, they mentioned that having to sacrifice participating in social interactions with other peers made them feel left out from school activities and made their relationship with school feel transactional as they had no sense of belonging with other educators or peers. Upon telling this story, the Interviewee's nostalgic tone reiterated the gratitude they felt. They go on to state:

“I really did not like this time of my life... my parents were struggling financially which is why I was constantly working. I missed out on so much regular teenage experiences. But I am so thankful because its taught me so much about time management, I am able to get all my work done, and even throughout COVID, I continuously remember how this experience honed my skills in adaptability” (Interviewee #5).

This Interviewee expressed that their parents were of lower socioeconomic status and high school was a period of financial crisis for them. However, we continuously analyzed, through the interviewee responses, that students from lower and middle socioeconomic status persisted through financial hardship and equated this to their academic resilience. In other responses, we heard how financial hardship paved their mentality to succeed in school. Additionally, Interviewee #7 stated,

“Um, if– if there wasn’t like FAFSA– if like the government giving money there’s no way I’d be going to college like straight up there’s no way like my family would’ve been able to afford it” (Interviewee #7).

They go on to say:

“I need to keep my grades up or else I lose my FAFSA scholarship... while the pandemic has made it difficult for me to adjust, the financial aspect of college has motivated me to persist thorough” (Interviewee #7).

Additionally, students of lower socioeconomic importance emphasized the lack of technological resources and support they received from their higher education institutions. As reported by Interviewee #4:

“It was hard during the pandemic, sometimes when our wifi wouldn’t be working, I had to go to the nearest cafe or Panera to be able to access my schoolwork and of course indoor seating wouldn’t be an option so I would sit outside with additional sound distractions such as sirens, cars, and other people talking. While all of this posed as barriers to me succeeding in school, I was not deterred from doing well and pushing myself. Life was on hold and I would look forward to school since it kept me busy (Interviewee #4).

Additionally, Interviewee #4 also went on to describe their support from their high education institution.

“I wish the school would have helped with my wifi problems or even when my siblings would need to borrow my computer, it would have been nice to have had a loaner laptop from the school. I understand that those were unprecedented times and the school wanted to keep everyone safe but if they are expecting us to still succeed in our academic course load... I think they should provide the students necessary resources to be able to do so” (Interviewee #4).

Many students who the research team and I interviewed suggested that academic rigor and school work became a motivating factor for them. While this may not be generalizable, students of middle and higher socio-economic status also reported to have been motivated to do well in their studies. As Interviewee #1 stated,

“And even then, even if I had to take loans out, I grew up in a or I guess a mindset that I would have no problem taking on some debt, you know, to just pay off um because

my parents had a fund for me so it would've cushioned a lot of the debt that I would have gotten so. During the pandemic, when everything shifted to a remote learning platform, my parents made it clear to me that any type of resource I needed such as space, technology, and online tutoring, it would be available for me if I needed it" (Interviewee #1).

Additionally, Interviewee #9, who identified as middle socioeconomic status stated:

"I support my myself financially, like they don't - they - they don't have like the resources for that, but they're so supportive and they will help me out in any way that they can. Which I'm super grateful for, and especially with something like theater, like that's not something that you come into contact with a lot - is like parents who are supportive of that, so yeah (Interviewee #9).

In contrast, financial stability can provide a sense of security and a foundation upon which academic pursuits can be built. When individuals have enough financial resources to meet their basic needs, they are more likely to feel a sense of control over their lives and their academic goals. This can lead to increased motivation, engagement, and persistence in academic pursuits.

Moreover, financial stability can enable individuals to access additional resources that can further support their academic resilience. For example, with financial stability, individuals can afford to purchase textbooks, pay for tuition fees, and access additional learning resources such as tutoring services. These resources can provide additional support for academic success, which can further strengthen academic resilience.

We found that students of lower socioeconomic status were more willing to speak on their experiences, especially how finances influenced their academic aspirations and resilience. However, students from more affluent backgrounds were more reserved when it came to speaking about how their familial socioeconomic status influenced the type of education they received. While some individuals expressed concern over the lack of resources and aid from higher education institutions and barriers in accessibility of education, others explained that their

familial financial stability provided them with resources and a sense of ease to be able to learn. We had no students express concerns over wanting to take a leave of absence during this time period, a decline in grades, nor a decline in their intrinsic motivation to do well academically.

To answer our second research question, *“What well-being practices or promotive factors do students utilize to persist academically in relation to their socioeconomic status?”* We had originally hypothesized that, *“Well-being practices increase student academic resilience and personal resilience during COVID-19.”* Our hypothesis was proved. We found that students expressed parent support, peer relationships, and time spent on leisure activities to be protective factors in their well-being and promote resilience in their academic capacities. The following are themes generated from student responses to answer our first research question.

Theme #1

Parent(s) negative and positive attitudes towards student academic capacity and educational values promoted academic resilience

We found that parental attitude towards education heavily influenced students’ own perception of their academic capacity and ultimately promoted resiliency. Some of our students’ expressed negative attitudes towards the views their parents instilled in them regarding education, we found that students identified these barriers and used them as a motivating factor to promote their academic persistence. While there is limited research around how parents’ negative attitudes support student academic motivation it is important to consider familial cultural background, expectations, and values which can all aid in support of academic resilience. In addition, we found that parents who reaffirmed a positive and open mindset towards education or emphasized the importance of receiving education aided as a part of an intrinsic motivating factor for students to persist academically. The juxtaposition of having both

positive and negative experiences with parents, especially those who identified with coming from an unstable nuclear family, demonstrated high levels of adaptability and persistence through academic hardship.

For example, Interviewee #7, expressed having parents who demonstrated a negative outlook on their child's capabilities of academic achievement. Interviewee #7 stated:

“On this honestly I would say that I didn't really have supportive people. My father he would just say like oh transferring is so hard like it's going to be so difficult to go like Maybe she just joined the navy. All like it's going to be so embarrassing for our family if you don't get in if you don't become a transfer student so in a way, I don't know if you consider that support” (Interviewee #7).

Additionally, Interviewee #7 provided more information on the relationship they had with their parents:

“So things got so bad, to the point where I had to live with my dad and I had never lived with my dad. Living with him was better. However, I was not used to his way of parenting and it was very tough on me just like mentally and things like that, and I was just like yeah like I can't live with either parents, like the only thing I can do to get out of this is to transfer so” (Interviewee #7).

Interviewee #7's persistence through education is portrayed through this quote:

“Transferring is like my goal like transferring I gotta get through it, I have to get the grades up, I have to do this to transfer, so the whole time my motivation was not like Oh, I had to do it it's like I need to do it um so that was that, and here I am at a top public university, yeah” (Interviewee #7).

Interviewee #7's experience with their parents' negative involvement in their academic trajectory can be defined by achievement goal theory. Achievement goal theory is an academic motivation based theory that demonstrates that student performance in academic tasks will direct their cognitive activity, emotions, and behaviors (Duchese & Ratelle 2010). The Interviewee's motivation to do well academically was in part influenced by the desire to perform to negate the preconceived notions their parents had. Education was seen as the only option to a better future. In this sense, the goal setting of transferring to a four-year university from community college

acted as the driving factor to achieve academically, however having cultural and familial beliefs on academic misachievement bringing *embarrassment and shame* to the family name and reputation served as the motivating factor to do well. This can have detrimental effects on mental well-being, potentially catalyzing anxiety, depression, or other negative mental health outcomes in individuals.

Additionally, some of our Interviewees expressed unconditional support from their parents which promoted stability and reassurance in this uncertain time period of the pandemic. Many of our participants expressed that they would not have been able to adapt and succeed academically if it were not for the guidance and set educational values that their parents had instilled in them. Interviewee #1 expressed:

“But my parents put me there because they wanted a better education for me. I think, it’s called a Choice program in San Diego, but basically the schools that they found in Scripps Ranch had better, higher test scores from the students so they decided to put me into the Scripps Ranch um schools” (Interviewee #1).

Interviewee # 2 expressed:

“So yeah and my parents are really, really supportive. My parents are like a huuuge - like honestly - like I couldn't be more grateful for my parents” (Interviewee #2).

Interviewee #9 stated:

“While my parents couldn’t necessarily support me financially at times... their emotional support helped me a lot. Education was always the goal. They’re really supportive” (Interviewee #9).

Interviewee #5 stated:

“Um, conversations... it was just like an expectation. Like it was, it wasn’t like a “you should go to college and this why”. It was just like um, “go to college” (Interviewee #5).

Interviewee #1 went on to state the following about their parents:

“So, yeah both of my parents were college grads. I especially looked up to my dad because he was a first generation college student. He, like, even in his family he is the only one of the only college grads and so yeah he really made it like he came from a even lower, you know, socioeconomic level and so yeah he really came out from that I guess barrier that is a barrier that exists for a lot of people” (Interviewee #1).

The consistent support and affirmative care that students receive from a parental figure is imperative to academic resilience. In the case of Interviewee #1, having a parent with a low-income background who has overcome academic hardships and is consistently demonstrating support to their child’s academic needs promotes stability and resiliency. The Interviewee consistently saw from a young age, the extent their parents were willing to go in order for them to receive the best possible education. As an adult now, the Interviewees reflect on the effort their parents upheld which further promotes their ability to persist through academic hardships. Having the emotional or financial support of parents provided the Interviewees with stability and reassurance to be able to focus on their schoolwork and develop healthy habits and mindsets towards their own academic capacity.

Additionally, some of the Interviewee’s expressed the importance of continuing higher education from their parents. This inherent belief that their child will succeed and attain a higher education degree positively reinforces their ability to persist academically which promotes their own perception of their academic capacities. It is especially critical for parents to promote the success and aspiration of their children as their needs to be reassured and emotionally validated aids in their resilience.

This nurturing support contributes to the mental well-being of the students and poses as a protective factor during a time of universal hardship and need. We consistently observed throughout our interviewees that students who expressed healthy emotional support from their parents had a more positive outlook on the pandemic and shift to remote learning. Even through

a difficult period of uncertainty, these students had the mindset and motivation to persist through and believed that they were able to get through academically. Many of them turned to their parents for emotional support due to being quarantined with immediate family during the pandemic. The physical distance from universities and school made students adapt to being at home and having more parental guidance and support being offered. Additionally, most educators, peers, and faculty all had to transition to remote learning as well, where all parties experienced a learning curve to adapt to their new reality of education. It is especially important to recognize the consistent support of parents and the relationship that is fostered throughout the learning developmental processes of their children.

Theme #2

Peer relationships and leisure activities positively promoted academic resilience

We found that students who have positive peer relationships and spent time on leisure activities outside the remote learning environment had greater academic resilience. Interviewees expressed that having an outlet of creative or emotional support greatly influenced their ability to persist through adapting to remote instruction and aided in their mental well-being. Some individuals found new hobbies, aspirations, and most were able to work on figuring out their own identities throughout this period. Below are the results from the interviews.

Interviewee #4 stated:

“Honestly, it went really well. For me, it like gave me a lot of time outside of school. I wasn’t like physically in school, so like yeah I had class and everything, but I could– I just multitask. Like I did my work and then like since I had free time I just did whatever I wanted to do so it was really during quarantine and online school where I like had time for a bunch of my hobbies. Like I got into embroidery. I started picking up sewing and then I got into skateboarding just ‘cause I had time for everything. And I like I wasn’t confined to school physically” (Interviewee #4).

Interviewee #1 stated:

“Yeah so I mean I’ll be honest like I hung out with friends when COVID hit and you know and looking back it probably wasn’t the most smart, it’s probably looked down upon but I had a little group of friends that we all just kind of always hung out. In between going online for weeks I can go out, or not go out, I can hang out with my friends and just chill out on the weekends or whatnot and that was a good break from being all online so. Yeah, friends, definitely friends got me through that” (Interviewee #1).

Interviewee #5 stated:

“And I think it also could be like the friends that I made, especially in junior high where we were all very hard -working for our education like we always would. Study together and things like that, so I really think it's the people that you surround yourself with that maybe motivate you to do better in school or things like that (Interviewee #5).

The pandemic has created numerous challenges for students, including remote learning, increased academic demands, and a lack of social connection. From our interviews we found that engaging in leisure activities can help students manage these challenges and improve their academic performance. From our data, we concluded that leisure activities can promote academic resilience and aid in mental well-being during the COVID-19 pandemic. Firstly, the improvement of focus and productivity through exercise, meditation, or creative pursuits. Secondly, we found that peer relationships promoted stress management by having emotional needs met through peer support. The pandemic has created significant stress for students, and engaging in leisure activities can provide a break and promote stress management, leading to better academic persistence. Thirdly, we noticed that a sense of control was added into the daily lives of our participants. Having leisure activities that one looks forward to completing in their day to day lives promotes ownership, a set rigid routine, and a sense of purpose throughout this period of uncertainty. Students were able to focus time on an activity that promoted their resilience and required them to reflect on their own identity by finding something that could spark interest and passion in them. Lastly, we found that students’ were improving their time management skills. Students were utilizing their time in a more efficient manner by creating a set schedule for themselves to follow. By finding hobbies and leisure activities that were of interest, some students prioritized completing these activities to maintain healthy well-being.

In summary, leisure activities can promote academic resilience and aid in mental well-being during the COVID-19 pandemic by improving focus and productivity, promoting stress management, enhancing creativity and problem-solving skills, providing a sense of control, and improving time management skills. Encouraging students to engage in leisure activities can be a helpful strategy for promoting academic success and overall well-being during these challenging times.

To answer our third research question, “*What is the impact of the COVID-19 pandemic on the academic success of students of various socioeconomic backgrounds?*” We had originally hypothesized that, “*Academic motivation will decrease among all students of socioeconomic backgrounds due to the negative implications of transitioning to remote learning.*” Our hypothesis was disproved. The research team found that intrinsic motivation aided individuals in times of adversity. While the pandemic had harsh implications of transitioning to remote learning, we found that students were able to adapt and were extremely motivated and successful in their studies regardless of their socio-economic background. The desire to receive high marks in courses were not weakened throughout transitioning to remote instruction. Students demonstrated grit and perseverance by contacting their professors more frequently, establishing a set-schedule of when school tasks were to be completed, and students took the opportunity to unit stack (take more courses) during remote instruction.

Students’ intrinsic motivation influenced their academic resilience

From the interview results, we concluded that intrinsic motivation was the primary factor for academic resilience in students of all socio-economic backgrounds. Numerous individuals stated that their own academic drive towards success did not hinder their ability to perform well during the pandemic. Below are some possible effects of COVID-19 on students' intrinsic motivation:

1. Increased motivation: All students reported during the interviews that they feel more motivated than ever to succeed academically during COVID-19. They may see this as an opportunity to demonstrate their resilience and adaptability, or they may be inspired by the importance of education in times of crisis.

This was demonstrated through the following responses:

“One class in particular CSE 100 it was pretty rough. It was my first upper division CSE course for my major. So it was it was challenging. Long hours, you know, late into the night, up to the deadline. But then COVID hit and um everything transitioned online obviously and so in that regard, naturally it kind of got easier in that sense. Um, I think the exams and whatnot kind of, you know it was hard for teachers to adapt so a class I got I was able to pass the class and I think it was just because you know the class wasn't the same as in person and so it got a little easier” (Interviewee #1).

“I took five ques- classes during winter quarter - which, their community college classes - but um I took five classes during winter quarter, and then four classes during the summer - or uh spring quarter. And uh I don't think I would have been able to do that in person” (Interviewee #2).

“I was also very much an academically driven student 'cause that was what I was good at. So it's like no one really needed to push me to do anything. I just did it because one, it was there, and two, it was just kinda easy for me to do. Or I like challenging myself and like academics is the way for me to challenge myself” (Interviewee #3).

“Academically it wasn't something to worry about because it was my first time doing online classes, but I think, because it was so new for everyone, I didn't feel like I was alone” (Interviewee #6).

From these results, we concluded that there was a shift in motivation focus. The pandemic may have shifted students' motivation focus from external factors (such as grades or praise from teachers) to more intrinsic factors (such as personal growth and learning for the sake of knowledge). This shift in focus may lead to a deeper sense of purpose and intrinsic motivation towards academic achievement. Additionally, there were changes in motivational strategies. The pandemic may have forced students to adopt new strategies to stay motivated and engaged in their studies. As previously noted, the use of leisure activities and finding hobbies aided in the

mental well-being of students. Students have had to learn how to self-motivate, set goals, and manage their time effectively in order to succeed in a remote learning environment. Overall, the pandemic has had a significant impact on students' intrinsic motivation towards their academic capacity, and these effects may vary widely depending on individual circumstances. Educators and parents can help support students' intrinsic motivation by creating a supportive and engaging learning environment, providing opportunities for autonomy and self-direction, and helping students find meaning and purpose in their academic work.

Limitations

There are limitations to this study. Firstly, this study was conducted during the COVID-19 pandemic where stress and anxiety were already variables that impeded on this study. With the pandemic, individuals may already have feelings of distraught that may have influenced the personal and academic resilience scales that were used in the study. From this research, there is a possibility that the relationship between academic resilience and financial well-being could have been driven by the stress of the pandemic. With this limitation in mind, it is important for researchers and practitioners to take into account the universal widespread anxiety that people are going through. It is apparent to recognize outside factors such as disease, natural disasters, and economic standing as variables to be considered when conducting a study, especially regarding individual well-being. Secondly, future research should examine and include an individual's cultural background and socio-economic status to further insight a holistic study. Cultures and religions, especially between Eastern and Western countries, view the role of education and financial well-being differently, and it would further provide data as to the attitude of individuals towards mental well-being. One's perceptions of mental health can

greatly impact and alter how well-being practices can aid in mental and physical health.

Another limitation of this study is the participant sample. All students that took part in this study were enrolled in University of California schools where this specific sample may not be generalizable to other university students. Along with this, the small sample size may have resulted in students forming connections with one another that could have caused discussion regarding this topic. Since this survey was mostly distributed in classes, open discourse both in person and on social media sites could have taken place regarding the study. In addition, this study took account only students that are a part of California higher education institutions which cannot make this study generalizable in regard to other students and majors represented at other universities/colleges. Future research should aim for representation in all majors, ages, and backgrounds to gain a better perspective on the topic of academic resilience. Even though these limitations are valid to our study, there are strengths within this research that can contribute to literature regarding mental, physical, and psychological well-being.

Implications and Conclusions

This study can pose as a tool and resource for faculty, researchers, educators, and practitioners. Individuals throughout the past two years have experienced some of the most traumatic accounts within their lives, due to the pandemic, where uncertainty, loneliness, and anxiety may have been at an all time high. Within the realm of research, this can be used to further support low-income and diverse individuals who are struggling with their mental health. Additionally, this study can be implied within the university and higher education setting to further aid students in their academic and emotional well-being. Regardless of students, it is especially critical to examine student health from a holistic approach where resilience can be a

resource for individuals to utilize. Leisure participation and mindful based practices can be a source of comfort, belonging, and security where having a sense of purpose and grounding can contribute to fulfillment and better mental health. With the rise of online learning and the advancement of technology, people have felt lonelier than ever before. This research adds onto empirical evidence that well-being practices have the ability to improve mental and physical well-being in students.

With regard to the implication of this study, it has highlighted the importance of maintaining adequate mental health and support. Researchers, practitioners, and policy makers/analysts can further use this research to implement change within the community. This change can further allow public areas, institutions both in the private and public sector, and schools to allow social-emotional and well-being based practices. Qualitative studies have illuminated the intensiveness of connecting people with hobbies and leisure activities, and the multi-faceted ways in which resilience contributes to the work associated with managing mental health conditions, particularly in times of crisis (Brooks et al., 2018). The research of Brooks, highlights and encompasses the essential findings of our study which shows the benefits of having mindful-based practices to improve and aid with mental health.

There has been a growing amount of research on academic resilience and its relationship with mental and physical well-being. From our study, we found that academic resilience had a positive effect and self-perceived notions of success in academic performance and financial well-being. However, our study found that socio-economic status did not affect academic resilience of students in higher education during the COVID-19 pandemic. With the ever changing world we live in, it would be remiss to ignore the influences resilience and online learning may have on humans. The implications of our study provide aid and an

understanding to further help researchers conduct studies on student academic resilience and financial wellbeing.

Table 1
Descriptive Statistics for Sample (n=9)

Variable	Definition	Mean (SD)	Min	Max
Gender	Gender identity of participants			
Female		.67		
Male		.23		
Queer		.12		
Age	Average age of participants in years	20.6 (1.42)	18	23
Class status	Credit requirements fulfilled towards degree conferral			
First-year		.12		
Second-year		.23		
Third-year		.33		
Fourth-year		.33		
Race	Racial identity of participants			
Asian		0.45		
Mixed-race		0.23		
White		0.23		
Hispanic		0.12		
Socio-Economic Status	Familial income status accounting for parent education, occupation, and residential zip code			
Low income		0.34		
Middle income		0.34		
High income		0.23		
Did not specify		0.12		

Note: Percentages may not add to 100% due to rounding

Table 2*Key Interview Questions and Related Resilience Constructs*

Questions	Resilience Constructs
1. Describe the [school] community(ies) you grew up in. What aspects of your early learning environments do you think most impacted your journey to (or during) college? (e.g., community, family relationships, friends, trauma, etc.)	<ul style="list-style-type: none">● Impact of life events● Exposure to risks● School and community resources● Financial resources or constraints
2. What or who inspired you to pursue college? What motivates you to stay in college now?	<ul style="list-style-type: none">● Autonomy● Future orientation● School and community resources
3. Do you feel like you have had supportive people in your academic career? (teachers, mentors, parents, friends, etc). (If yes: who were they, and in what ways were they supportive? If no: can you say more about why not?)	<ul style="list-style-type: none">● Family support● Educator support● Self-efficacy● Agency
4. Please describe how school went for you during COVID-19. Follow-up: What helped you stay on track? What were the major barriers to succeeding in school?	<ul style="list-style-type: none">● Adverse life events● Protective factors and processes● Sense of belonging and connectivity
5. In what ways did you practice self care or attend to your well-being throughout the online school year? Did you feel that this practice contributed to your academic resilience?	<ul style="list-style-type: none">● Self-efficacy and agency● Self-esteem● Love and connectivity
6. If you're comfortable, can you describe your family's socio-economic status? In what ways do you think their financial resources, or lack of resources, impacted your academic trajectory?	<ul style="list-style-type: none">● Financial resources or constraints● Impact of life events● Operation of protective processes

References

- Afek, A., Ben-Avraham, R., Davidov, A., Cohen, N., Yehuda, A., Gilboa, Y., & Nahum, M. (2021, January 20). Psychological Resilience, Mental Health, and Inhibitory Control Among Youth and Young Adults Under Stress. *Frontiers in Psychiatry*. 10.3389/fpsyt.2020.608588
- Armstrong, A. R., Galligan, R. F., and Critchley, C. R. (2011). Emotional intelligence and psychological resilience to negative life events. *Pers. Individ. Differ.* 51, 331–336. doi: 10.1016/j.paid.2011.03.025
- Artuch-Garde, R., González-Torres, M. D. C., de la Fuente, J., Vera, M. M., Fernández-Cabezas, M., and López-García, M. (2017). Relationship between resilience and self-regulation: a study of spanish youth at risk of social exclusion. *Front. Psychol.* 8:612. doi: 10.3389/fpsyg.2017.00612
- Beale, J. (2020). *Academic resilience and its importance in education after covid-19*. Eton Journal for Innovation and Research in Education, Issue 4, on The Future of Education after Covid-19.
- Carver, C. S., & Scheier, M. F. (2001). Optimism, pessimism and self-regulation. In E. Chang (Ed.), *Optimism and pessimism: implications for theory, research and practice*, (pp. 31–51). American Psychological Association. <https://doi.org/10.1037/10385-002>
- Cassidy S (2016) The Academic Resilience Scale (ARS-30): *A New Multidimensional Construct Measure*. *Front. Psychol.* 7:1787. doi: 10.3389/fpsyg.2016.01787
- Chadwick, M. (2019, December). A Reflection on Harnessing Learned Optimism, Resilience and Team Growth Behaviour in Order to Support Student Groups. *Student Success*, 10(3), 104-111. 10.5204/ssj.v10i3.1410

- Chang, E. C., & D'Zurilla, T. J. (1996). Relations between problem orientation and optimism, pessimism, and trait affectivity: A construct validation study. *Behaviour Research and Therapy*, 34(2), 185–194. [https://doi.org/10.1016/0005-7967\(95\)00046-1](https://doi.org/10.1016/0005-7967(95)00046-1)
- Chen, C. The Role of Resilience and Coping Styles in Subjective Well-Being Among Chinese University Students. *Asia-Pacific Edu Res* 25, 377–387 (2016).
<https://doi.org/10.1007/s40299-016-0274-5>
- Daniels, Lia M., Lauren D. Goegan, and Patti C. Parker. “The Impact of COVID-19 Triggered Changes to Instruction and Assessment on University Students’ Self-Reported Motivation, Engagement and Perceptions.” *Social Psychology of Education* 24.1 (2021): 299–318. *Social Psychology of Education*. Web.
- Deci, E. L., & Ryan, R. M. (2008). Facilitating optimal motivation and psychological well-being across life's domains. *Canadian Psychology/Psychologie canadienne*, 49(1), 14–23.
<https://doi.org/10.1037/0708-5591.49.1.14>
- Duchesne, S., & Ratelle, C. (2010). Parental behaviors and adolescents' achievement goals at the beginning of middle school: Emotional problems as potential mediators. *Journal of Educational Psychology*, 102(2), 497–507. <https://doi.org/10.1037/a0019320>
- Dziuban C, Graham CR, Moskal PD, Norberg A, Sicilia N. Blended learning: The new normal and emerging technologies. *International Journal of Educational Technology in Higher Education*. 2018;15(1):3. doi: 10.1186/s41239-017-0087-5.
- Eldeleklioğlu, J., & Yıldız, M. (2020, May 24). Expressing Emotions, Resilience and Subjective Well-Being: An Investigation with Structural Equation Modeling. *International Education Studies*, 13(6). 10.5539/ies.v13n6p48

- Engel de Abreu PMJ, Neumann S, Wealer C, Abreu N, Coutinho Macedo E, Kirsch C.
Subjective Well-Being of Adolescents in Luxembourg, Germany, and Brazil During the
COVID-19 Pandemic. *J Adolesc Health*. 2021 Aug;69(2):211-218. doi:
10.1016/j.jadohealth.2021.04.028. Epub 2021 Jun 3. PMID: 34092475; PMCID:
PMC8460548.
- Eva, Nur et al. "Academic Resilience and Subjective Well-Being amongst College Students
Using Online Learning during the COVID-19 Pandemic." *KnE Social Sciences* (2021): n.
pag. *KnE Social Sciences*. Web.
- Feather, N. T. (1989). Reported changes in behaviour after job loss in a sample of older
unemployed men. *Australian Journal of Psychology*, 41(2), 175–185.
<https://doi.org/10.1080/00049538908260081>
- Fergus S, Zimmerman MA. Adolescent resilience: A framework for understanding healthy
development in the face of risk. *Annual Review of Public Health*. 2005;26:399–419.
- Furrer, Carrie & Skinner, Ellen & Pitzer, Jennifer. (2014). The Influence of Teacher and Peer
Relationships on Students' Classroom Engagement and Everyday Resilience.
- Gerardi, S. (1990). Academic self-concept as a predictor of academic success among minor-ity
and low-socioeconomic status students. *Journal of College Student Development*, 31,
400–417. doi:10.1080/00219266.1990.9655141
- Hamill, S. K. (2003) Resilience and self-efficacy: The importance of efficacy beliefs and coping
mechanisms in resilient adolescents. *Colgate University Journal of the Sciences*, 35,
115-146. http://groups.colgate.edu/cjs/student_papers/2003/Hamill.pdf
- Hyun, Haerrem (2018) "The Impact of Low Socioeconomic Status on the Mental Health and
Self-Efficacy of College Students," *Proceedings of GREAT Day: Vol. 2017* , Article 5.

- Jowkar, B., Kojuri, J., Kohoulat, N., & Hayat, A. A. (2014). Academic resilience in education: the role of achievement goal orientations. *Journal of advances in medical education & professionalism*, 2(1), 33–38.
- Katz, Shoshana, and Cheryl L. Somers. “Individual and Environmental Predictors of College Adjustment: Prevention and Intervention.” *Current Psychology*, vol. 36, no. 1, 2015, pp. 56–65., doi:10.1007/s12144-015-9384-0.
- Kong, Kimberley. (2020). Academic Resilience of Pupils from Low Socioeconomic Backgrounds Academic Resilience of Pupils from Low Socioeconomic Backgrounds.
- Lederer, A. M., Hoban, M. T., Lipson, S. K., Zhou, S., & Eisenberg, D. (2021). More Than Inconvenienced: The Unique Needs of U.S. College Students During the COVID-19 Pandemic. *Health Education & Behavior*, 48(1), 14–19.
<https://doi.org/10.1177/1090198120969372>
- Li, H., Liu, S.-M., Tang, S.-L., & Tang, C.-K. (2020, March 19). Coronavirus Disease (COVID-19): Current Status and Future Perspectives. *International Journal of Antimicrobial Agents*. <https://doi.org/10.1016/j.ijantimicag.2020.105951>
- Lischer, S., Safi, N. & Dickson, C. Remote learning and students’ mental health during the Covid-19 pandemic: A mixed-method enquiry. *Prospects* (2021).
<https://doi.org/10.1007/s11125-020-09530-w>
- Liu, B., & Platow, M. J. (2020, February 28). Chinese adolescents’ belief in a just world and academic resilience: The mediating role of perceived academic competence. *School Psychology International*, 41(3), 239-256. 10.1177/014303432090800

- Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist*, 53, 205–220. doi:10.1037/0003-066X.53.2.205
- Montas, Mackenson et al. “Relationship of Grit and Resilience to Dental Students’ Academic Success.” *Journal of Dental Education* 85.2 (2021): 176–186. *Journal of Dental Education*. Web.
- Morales, E. E. (2014). Learning from Success: How Original Research on Academic Resilience Informs What College Faculty Can Do to Increase the Retention of Low Socioeconomic Status Students. *International Journal of Higher Education*, 3(3), 92-102.
<https://eric.ed.gov/?id=EJ1067580>
- Mukund, B., & Singh. T.B. (2015). Positive psychology and mental health. *Indian Association of Health, Research, and Welfare*, 6(2), 197-202.
- Munawaroh, Eem et al. “College Student Academic Resilience Profile.” *International Journal of Scientific and Technology Research* 9.2 (2020): 5116–5117. Print.
- Navarro-Carrillo, G., Alonso-Ferres, M., Moya, M., & Valor-Segura, I. (2020). Socioeconomic Status and Psychological Well-Being: Revisiting the Role of Subjective Socioeconomic Status. *Frontiers in psychology*, 11, 1303. <https://doi.org/10.3389/fpsyg.2020.01303>
- OECD (2018), "Resilience and the socio-economic status of students with an immigrant background", in *The Resilience of Students with an Immigrant Background: Factors that Shape Well-being*, OECD Publishing, Paris,
<https://doi.org/10.1787/9789264292093-9-en>.
- Panel on Measuring Subjective Well-Being in a Policy-Relevant Framework; Committee on National Statistics; Division on Behavioral and Social Sciences and Education; National

- Research Council; Stone AA, Mackie C, editors. Subjective Well-Being: Measuring Happiness.
- Pepe, A., Farina, E. A mixed-method study on adolescents' well-being during the COVID-19 syndemic emergency. *Sci Rep* 13, 871 (2023).
<https://doi.org/10.1038/s41598-022-24007-w>
- Ryan RM, Deci EL. On happiness and human potentials: a review of research on hedonic and eudaimonic well-being. *Annu Rev Psychol.* 2001;52:141-66. doi: 10.1146/annurev.psych.52.1.141. PMID: 11148302.
- Sandoval-Hernández, A., Białowolski, P. Factors and conditions promoting academic resilience: a TIMSS-based analysis of five Asian education systems. *Asia Pacific Educ. Rev.* 17, 511–520 (2016). <https://doi.org/10.1007/s12564-016-9447-4>
- Salovey, P., & Mayer, J. D. (1990). Emotional Intelligence. *Imagination, Cognition and Personality*, 9(3), 185–211. <https://doi.org/10.2190/DUGG-P24E-52WK-6CDG>
- Salovey, P., and Mayer, J. D. (1990). Emotional intelligence. *Imag. Cogn. Personal.* 9, 185–211. Doi: 10.2190/dugg-p24e-52wk-6cdg
- Seligman, M. E. P. (1991). *Learned optimism*. New York, NY: Knopf. Seligman, M. E. P. (with Reivich, K., Jaycox, L., & Gillham, J.). (1995). *The optimistic child: A revolutionary program that safeguards children against depression and builds lifelong resilience*. New York, NY: Houghton Mifflin.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14. doi:10.1037//0003-066X.55.1.5

- Seligman, M. E. P., Steen, T.A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, *60*(5), 410-421. doi: 10.1037/003-066X.60.5.410
- SerranoSarmiento, Á.; Sanz Ponce, R.; González Bertolín, A. Resilience and COVID-19. An Analysis in University Students during Confinement. *Educ. Sci.* **2021**, *11*,533. <https://doi.org/10.3390/educsci11090533>
- Silva, A., Guedes, C. R., Santos-Pinto, C., Miranda, E. S., Ferreira, L. M., & Vettore, M. V. (2021). Demographics, Socioeconomic Status, Social Distancing, Psychosocial Factors and Psychological Well-Being among Undergraduate Students during the COVID-19 Pandemic. *International journal of environmental research and public health*, *18*(14), 7215. <https://doi.org/10.3390/ijerph18147215>
- Suffering, and Other Dimensions of Experience [Internet]. Washington (DC): National Academies Press (US); 2013 Dec 18. 1, Introduction. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK179225/>
- Tenney, E. R., Logg, J.M., & Moore, D.A. (2015). (Too) optimistic about optimism: The belief that optimism improves performance. *Journal of Personality and Social Psychology*, *108*(3), 377-399.
- Tetreault E, Teferra AA, Keller-Hamilton B, Shaw S, Kahassai S, Curran H, Paskett ED, Ferketich AK. Perceived Changes in Mood and Anxiety Among Male Youth During the COVID-19 Pandemic: Findings From a Mixed-Methods Study. *J Adolesc Health*. 2021 Aug;69(2):227-233. doi: 10.1016/j.jadohealth.2021.05.004. Epub 2021 Jun 7. PMID: 34112599; PMCID: PMC8316306.
- Tillich, P. (1952). *The courage to be*. New Haven, CT: Yale University Press.

Tugade, M. M., and Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *J. Pers. Soc. Psychol.* 86, 320–333.

doi: 10.1037/0022-3514.86.2.320

Waxman, H. C., Gray, J. P., and Padron, Y. N. (2003). *Review of Research on Educational Resilience: Research Report*. Washington, DC: Institute of Education Sciences.

Wigfield, A. (1994). Expectancy–value theory of achievement motivation: a developmental perspective. *Educational Psychology Review*, 6(1), 49–61.

<https://doi.org/10.1007/BF02209024>.