

**An Insight into the Mental Health of Low-Income Gifted Students: A Mixed Methods
Study**

Word Count: 5,238

Abstract

The investigation of gifted students from generational poverty has gone significantly unresearched. Though there are studies on the subjects individually, there are no studies that connect the two and investigate how these two factors might affect a person's well-being, that was until this present study. This study investigates how the mental health of gifted students from generational poverty who are in or graduated from college is affected by the pressures to break the cycle of poverty. By using a mixed-method design, the researcher created a survey that asked participants questions about pressure, stress, anxiety, and depression, relating to how it has been impacted by their gifted and economic status. This study included three open-ended questions that provided insight into what the participants themselves believe impacts their mental health. The study concluded that both college students who are gifted and from generational poverty, as well as just gifted students, experience higher levels of pressure, stress, anxiety, and depression in comparison to their non-gifted peers. Based on inferential statistical analysis, the researcher concludes with a medium degree of confidence that being a gifted student from generational poverty creates more mental strain in comparison to those who aren't gifted from a low-income background. This study does not have a high degree of confidence due to its sample size and participants, who are no longer current college students. Since they are recalling their past experiences, it is hard for the results from former college students to represent the well-being of current college students. Future researchers can build on this limitation by conducting a similar study on current college students.

Insight into the Mental Health of Low-Income Gifted Students: A Mixed-Methods Study

Throughout the history of the United States, poverty has been a significant barrier that limits both foundational and higher-education opportunities. As of 2023, 36.8 million people are living in poverty, 9.9 million of whom are children (Food Research & Action Center, 2023). Most of these children have grown up in what is considered “generational poverty,” which is when a family is affected by poverty for two or more generations (NCCAA, 2020). These children grow up in an environment where they are exposed to several stressors that impact their mental health, such as financial struggles, family quarrels, as well as the pressure to break the cycle of poverty (Najman et al., 2004). As they grow older, children born into generational poverty face several barriers in education and are often not granted the same opportunities as their wealthier peers. (NASSP, 2019). Barriers to education leave these students without proper stimulation of the mind, which not only negatively impacts a regular child born into poverty but can be even more detrimental to those who are born naturally gifted (Hair et al., 2015).

The American gifted student is defined as a “student who possesses or demonstrates a high level of ability in one or more content areas when compared to their chronological peers in the school district and who require modifications of their educational program if they are to achieve in accordance with their capabilities” (Gifted and Talented, n.d., p.1). Gifted students are usually placed in higher-level classes that stimulate their minds and allow them to thrive as students. Some of these children have an increased amount of pressure placed on them to perform academically because they are considered ahead of their peers (Baker, 1996). They are expected not only by their parents but by themselves to maintain high grades and strive for perfection, which significantly impacts their mental health (Parker & Mills, 1996). These

students continue to strive for perfection as they reach the age to apply to college, where they experience the stress of the real world.

Those who are born gifted and born into generational poverty grow up and experience the reality of college. Kids from generational poverty often remain in poverty until at least their late twenties or early thirties, causing them to face several challenges in affording college (Ratcliffe & McKernan, 2010; Wagmiller & Adelman, 2009). Although their gifted status may get them accepted into higher-level colleges, their lack of funding causes some of these students to have to settle for community colleges or opt out of college altogether. Scholarships and programs like FAFSA have been implemented to aid these students, but many low-income students are less likely to receive aid due to competition from higher-income students (National College Attainment Network, 2019). These limitations prevent these students from achieving all the skills necessary to break the cycle of poverty, which in turn can affect some students' mental health.

Generational Poverty

Growing Up in Generational Poverty

Students born into generational poverty face several barriers that most of their classmates do not. Normal school experiences like back-to-school shopping, dress-down days, school lunches, and field trips can be difficult for these children to experience due to a lack of income. Many students end up feeling isolated and embarrassed that they can't afford the same luxuries as their classmates (Horgan, 2009). This embarrassment is furthered by people around them telling them that they don't have what it takes to succeed because of their income (Weinger, 1998). Though these are only words, children still feel hopeless about their future and stress over

the fact that they most likely will not have the opportunity to attend a good school and receive top-tier education (Ferguson, 2007).

Low-Income Students in College

Though several students from generational poverty have not been able to pursue higher education, there are still many who attend community, state, or even Ivy League schools. However, these students still struggle to afford college as well as basic needs. A qualitative study by Andrea Moore and several other researchers examined the impact of financial needs on their overall mental well-being. This study revealed that these students struggle to purchase materials like textbooks which leads them to be behind in their studies. Students reported that their economic status impacted their relationship with others, their ability to focus on schoolwork, and overall caused them severe stress (2021). Further research conducted by the National Center of Education Statistics (NCES) reveals that there are several low-income college students who struggle with basic needs, especially food (2023). Building off of Moore's and the NCES's findings, many low-income college students have to work in order to keep up with tuition and take care of their needs. A challenging school-work balance has been shown to severely alter students' sleep patterns and promote mental health issues as stated in Jack S. Peltz's cross-sectional study on college students work hours and their connection to mental health (2020).

The Mental Health of The American Gifted Student

Gifted students commonly desire to be perfect and be the best in terms of academic achievement which can create several negative effects on their life and mental health. Several studies have reported that there is a high sense of perfectionism in gifted students, and they feel that they are not allowed to fail (Paker and Mills, 1996). One study conducted by Kimberly A.

Geddes revealed that for a gifted student, the desire to be perfect and continue to have good grades is so strong that they are more likely than other students to resort to cheating to keep their perfect average (2011). These expectations place numerous amounts of pressure on gifted students which can cause them to develop symptoms like depression (Wanpen Turakitwanakan et al., 2010).

Although there are several studies demonstrating how being a gifted student negatively affects mental health, there are several studies that disagree. Researcher Jean A. Baker examined both gifted and non-gifted students to determine the difference in stressors between the two. Baker found that gifted students did not have a higher stress level than non-gifted students (1996). Though this study is outdated in terms of data, several studies in recent years have supported Baker's findings. Maboobeh Fouladchang conducted a similar study that investigated both gifted and non-gifted students and their stress, anxiety, and depression levels which concluded that gifted students had lower levels of these illnesses than non-gifted students (2010).

The Mental Tolls of Gifted Students Born into Poverty

Several studies have determined that being born into low-income families as a gifted student positively affects their mental health. The study "Defying the Odds: Gifted and Talented Young People from Low Socioeconomic Backgrounds" examined gifted students through the use of surveys and interviews to investigate how being a gifted student from poverty affected their lives and mental health. The study found that the students' mental health was positively affected, and the students were more driven to succeed because of their financial barriers (Ballam, 2013). Researchers Szymanski and VanTassel-Baska produced similar results in their studies which concluded that low-income students benefited from interaction with fellow gifted students and had a significant increase in their mental health (Szymanski, 2021; VanTassel-Baska, 2004).

However, there is a significant lack of studies that investigate how factors like stress, anxiety, and depression in gifted students born into generational poverty are affected by the pressures to break the cycle of poverty. These students not only have to balance the pressures of being a gifted child and maintaining a perfect academic performance but also have to deal with the pressures that come with poverty. In college, these students have to focus on continuing their education while making sure they are able to make ends meet. This likely creates stress and anxiety over whether or not they have to sacrifice their education in order to limit financial struggles.

The present study investigates how low-income gifted college and former college students from across the U.S. perceive their mental health and how it has been affected by the pressures to break the cycle of poverty. Unlike previous studies, this one focuses on the stress, anxiety, pressure, and depression levels of these students which has previously been overlooked. The study employs a mixed-method design that relies on the self-reported answers of these students in order to shed light and acknowledge the existence of these issues. Acknowledgment of these issues can inspire further research and can implement programs to help these college students achieve their education.

Methodology

Research Design

The present study used an online survey methodology to create a mixed-methods design, a design commonly used among researchers to obtain data from a larger population to draw conclusions (Jones et al., 2013). This included quantitative-gear survey questions as well as three qualitative open-response questions. Open-response questions were coded with Braun and Clarke's (2012) process for thematic analysis. This methodology allowed participants to

self-report their interpretations of their mental health as well as write detailed accounts of their struggles with generational poverty and explain how their life experiences have influenced their well-being.

Participants and Sampling

The study investigated, through a purposive sampling method, former and current college students from generational poverty who were labeled as a gifted student at some point in their adolescent life. Though it lacks true randomization, a purposive sampling method allowed the study to focus on the specifics of the research question and gain information on the exact population. A total of 139 participants attempted to complete the survey but only 117 responses were used in the final research. This is due to 22 participants who did not meet the qualifications of being at least 18 years old as well as not qualifying for financial aid.

The survey was originally meant for high school students at a Northeastern high school in the United States, but due to ethical and convenience concerns surrounding the investigation of minors, it was changed to former and current college students. Current college students demonstrated how widespread the problem currently is while former college students allowed a comparison between their younger years versus their adult years. The criteria for the study also changed from only allowing gifted students and generational poverty students to participate to allowing both non-gifted and gifted students, as well as students who were not from generational poverty. (See Appendix A). This choice allowed a comparison between groups and allowed for broader conclusions to be drawn.

Ethics

Since the research was aimed at investigating the self-reported mental health of gifted students in generational poverty, it was necessary to survey gifted and non-gifted students who

identified as low-income and ask them questions about their mental health. All questions about mental health were generalized and did not include the condition it was referencing (i.e., depression and anxiety) to avoid any stigma surrounding mental health as well as to ensure participant comfortability. Participants were given the option to opt out at any time as well as the option to skip any questions they felt uncomfortable answering. All identifying data was kept anonymous and is scheduled to be deleted at the end of the research process.

The study was approved by a school-based IRB following the presentation of proper safety measures like consent forms (see Appendix B) as well as a proper execution of the topic of mental health. Due to some feedback, the debrief at the end of the study included a description of how the data will be used as well as several resources to mental health websites.

Procedure

The survey itself was created online by the researcher using Google Forms (see Appendix A). The questions were split into four types: qualifiers, Likert scales, open responses, and demographics. Following IRB and teacher approval, participants were recruited through a social media post on several Facebook and Reddit pages through a link as well as a short paragraph that detailed the survey requirements. The survey link was posted at various times during a one-month span to several pages that were relevant to the study (i.e, college subreddits, financial aid subreddits, etc.). These forums were chosen due to their likelihood of including low-income gifted college students. Participants were not compensated for their participation, and all participation was voluntary.

The opening questions of the survey included the initial consent as well as qualifications for participation (Appendix A). The following section included nine 7-point Likert scale questions that were aimed to find characteristics associated with overall pressure, stress, anxiety,

and depression. Anxiety questions were inspired by the characteristics from the GAD-7 anxiety questionnaire (Spitzer et al., 2006). Depression questions were inspired by the questions from the PHQ-9 questionnaire (Kroenke et al., 1999). Both questionnaires are in the public domain, so no permission is necessary to use them. Open-ended responses were coded using Braun and Clarke's (2012) inductive thematic analysis technique.

Data Analysis

Demographics

The first set of questions, which are labeled as identifiers, were analyzed via Google Sheets to determine how many participants fell within each category. These categories are: Not Gifted and From Generational Poverty (A), Gifted and From Generational Poverty (B), Gifted and Not From Generational Poverty (C), and Not Gifted and Not From Generational Poverty (D). These categories were made based on their responses to questions 4 and 5 (see Appendix A). For analysis purposes, the researcher chose to label participants who answered "Not Sure" if they were from generational poverty as "Not From Generational Poverty" and combined all gifted criteria under the label "Gifted". These choices were made to simplify the analysis process and provide a larger sample size for each group.

Likert Scales

Each Likert Scale response was labeled 1-7, 1 for strongly disagree and 7 for strongly agree (See Tables 10-12). The questions were then sectioned into groups based on the mental terms they correlated with (i.e., pressure, stress, anxiety, and depression). The researcher recorded data from Google Forms to see how many responses there were for each label and then broke that down into how many people from each category responded to each label. Then, using Data Classroom, the researcher calculated the mean and standard deviation for all the responses

for each question, including the responses for each category. Then, they found the mean, standard deviation, and median for each identifier category under each group of questions. Each group of questions was then analyzed using an ANOVA statistical test to determine if there was a statistically significant difference between the identifier categories. Since there were four categories of participants, an ANOVA test was necessary to determine the difference in responses between each category.

Open-Ended Responses

Open-ended responses were printed out and annotated to determine an initial list of codes and then revisited to determine how many times these codes appeared. These codes were then generalized into major themes that existed across all three open-response questions: “[Have you ever felt pressured to break the cycle of poverty?] *Please explain why you feel this way in at least two sentences*; [Do you ever feel like you aren’t allowed to fail?] *If so, please explain why you feel this way in at least one sentence*; *Can you, if applicable, describe how your family’s financial situation has influenced your academic and emotional well-being?*”

Results

Demographics

The study collected a total of 117 participants who were current college students or former college students who considered themselves low-income. These participants were then sorted and labeled into categories as produced in Table 1.

Table 1: Survey Demographics

Academic Status of Participants	Identified as Being From Generational Poverty	% Identified as Being From Generational Poverty	Identified as Not Being From Generational Poverty	% Identified as Not Being From Generational Poverty	Identified as Not Sure	% Identified as Not Sure	Total
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Labeled as a Gifted Student in Both Elementary and Middle School	37	59.7%	24	58.5%	5	35.7%	n=66
Labeled as a Gifted Student in Elementary School Only	4	6.5%	2	4.9%	3	21.4%	n=9
Labeled as a Gifted Student in Middle School Only	5	8.1%	3	7.3%	1	7.1%	n=9
Not Labeled as a Gifted Student	16	25.8%	12	29.3%	5	35.7%	n=33
Total	n=62		n=41		n=14		n=117

n=117

As shown in the graph above, the present study included a total of 62 participants from generational poverty, 46 of whom were labeled as gifted students at some point in their lives, while 16 were not. The study consisted of 55 participants who were not from generational poverty, after combining both the “Not Sure” and the “Not from Generational Poverty” groups, 38 of whom were labeled as a gifted student at some point in their life and 17 who were not.

Likert Scales

Likert scale questions were grouped into overarching categories that were labeled as each mental health group they were meant to represent. For a full breakdown of each question, see Appendices C-F.

Stress

Participants were asked two questions about their stress levels in relation to their economic status. These questions were grouped together to find the mean, the standard deviation (SD), and the median of each category.

Table 2: Stress Likert Scale Descriptive Statistics

Status	Mean	Standard Deviation	Median
Gifted and From Generational Poverty	5.97	1.56	7.00
Not Gifted and From Generational Poverty	5.63	1.79	6.50
Gifted and Not From Generational Poverty	5.47	1.92	6.00
Not Gifted and Not From Generational Poverty	5.22	1.88	6.00

n=230

Note: “n” represents total participants across both questions

As shown in the table above, gifted students from generational poverty had an average response of 5.97 (SD=1.56), not gifted from generational poverty averaged 5.63 (SD=1.79), gifted and not from generational poverty averaged 5.47 (SD=1.92), and non gifted and not from generational poverty students averaged 5.22 (SD=1.88). The table also shows that the median response for participants ranged towards the higher sections on the Likert scale.

To determine if these findings were statistically significant, an ANOVA test was run on DataClassroom.

Table 3: Stress ANOVA

Effect	Degrees of Freedom (df)	F-statistic (MS / MS residual)	P-value	Interpretation of P
Status	3	1.9	0.13	A P-value of 0.13 means some indication that the groups might be different.
Error or Residual	226			

n=230

Note: “n” represents total participants across both questions

Table generated by *Data Classroom*

For further breakdown of ANOVA test see Appendix D.1. The ANOVA test revealed that there is a slight indication that the responses of all four groups are different, however due to the

P-value being above 0.05, it is likely that there are no real conclusions to be drawn from this data set.

Anxiety

Participants were asked three questions about how their economic status contributed to their academic abilities. These questions were grouped together to find the mean, the standard deviation, and the median of each category.

Table 4: Anxiety Likert Scale Descriptive Statistics

Status	Mean	Standard Deviation	Median
Gifted and From Generational Poverty	4.80	2.04	5.00
Not Gifted and From Generational Poverty	4.96	2.09	5.00
Gifted and Not From Generational Poverty	4.16	2.17	4.00
Not Gifted and Not From Generational Poverty	3.21	1.92	3.00

n=342

Note: “n” represents total participants across all three questions

The table demonstrates that gifted students from generational poverty had a mean answer of 4.80 (SD=2.04), non gifted generational poverty students had a mean of 4.96 (SD=2.09), gifted and non generational poverty students had a mean of 4.16 (SD=2.17), and non gifted non generational poverty students had a mean of 3.21 (SD=1.92). The table shows that the median responses for all three questions ranged towards the mid-to-lower sections on the Likert scale.

An ANOVA test was run to determine statistical significance.

Table 5: Anxiety ANOVA

Effect	Degrees of Freedom (df)	F-statistic (MS / MS residual)	P-value	Interpretation of P
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Status	3	8.6	<0.01	A P-value of <0.01 means extremely strong confidence that the groups are different.
Error or Residual	338			

n=342

Note: "n" represents total participants across all three questions

Table generated by *Data Classroom*

For further breakdown of the ANOVA, see Appendix E.1. The test revealed that there is a strong statistical significance that there is a difference in the responses between groups. Since the P-value is less than 0.05, there is a real conclusion to be drawn from this data set.

Depression

Participants were asked two questions about how their economic status contributed to feelings of depression. These questions were grouped together to find the mean, the standard deviation, and the median of each category.

Table 6: Depression Likert Scale Descriptive Statistics

Status	Mean	Standard Deviation	Median
Gifted and From Generational Poverty	5.35	1.95	6.00
Not Gifted and From Generational Poverty	4.53	2.51	5.00
Gifted and Not From Generational Poverty	4.47	2.03	5.00
Not Gifted and Not From Generational Poverty	4.47	2.34	5.00

n=228

Note: "n" represents total participants across both questions

The table shows gifted students from generational poverty had a mean answer of 5.35 (SD=1.95), non gifted generational poverty students had a mean of 4.53 (SD=2.51), gifted and non generational poverty students had a mean of 4.47 (SD=2.03), and non gifted non

generational poverty students had a mean of 4.47 (SD=2.34). The table shows that the median responses for all three questions ranged towards the medium-high sections on the Likert scale.

To determine statistical significance, an ANOVA test was used.

Table 7: Depression ANOVA

Effect	Degrees of Freedom (df)	F-statistic (MS / MS residual)	P-value	Interpretation of P
Status	3	3	0.03	A P-value of 0.03 means strong confidence that the groups are different.
Error or Residual	224			

n=228

Note: “n” represents total participants across both questions

Table generated by *Data Classroom*

For further breakdown of ANOVA, see Appendix F.2. The test revealed that there is strong statistical confidence that there is a difference between the groups. Since the P-value is less than 0.05, there is a real conclusion to be drawn from this data set.

Thematic Analysis

Participants were asked to respond to the following questions: [Have you ever felt pressured to break the cycle of poverty?] *Please explain why you feel this way in at least two sentences;* [Do you ever feel like you aren’t allowed to fail?] *If so, please explain why you feel this way in at least one sentence;* *Can you, if applicable, describe how your family’s financial situation has influenced your academic and emotional well-being?* Listed below are themes, subthemes, and codes prominent in all three responses:

Table 8: Thematic Analysis

Pressure	105	Mental Tolls	38	Work	41	Parents	63	Future	28	Social Comparison	22	Money Struggles	82
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Pressure	105	Mental Tolls	38	Work	41	Parents	63	Future	28	Social Comparison	22	Money Struggles	82
Self Pressure	29	Anxiety	10	Success=Work Mentality	13	Do Better Than Parents	18	Financial Freedom	9	Isolated	13	Struggle With Basic Needs	22
Pressure to Break the Cycle of Poverty	17	Depression	7	Forced to Work	16	Repay Parents	12	Children	19	Wealthy Peers	9	Sacrifice	21
Academic Pressure	15	Stress	21	School and Work Balance	12	Take Care of Them	11					Loss of Opportunities	13
Feeling Like They Can't Fail	17					Parental Struggle	22					Giving Up Dream College	15
Believing They Have No Safety Net	5											Money over everything	11
Parental Pressure	29												
High Expectations	13												

n=247 *total responses of all three Likert scales*

Note: Title=theme, Bold=subtheme, Regular Text=Codes

The main themes represented within these responses are: (1) Pressure, (2) Mental Tolls, (3) Work, (4) Parents, (5) Future, (6) Social Comparison, and (7) Money Struggles. Sub Themes and codes include a frequency of how many times they appeared in responses across all three questions. In Table 9, there is a codebook with definitions and examples of all themes and codes.

Table 9: Codebook

Theme	Sub-Theme	Code	Definition	Example
Pressure			Respondents reported feeling various measures of pressure	
	Self-Pressure		Respondents reported pressuring themselves.	
		Pressure to	Respondents felt like they	"I have felt pressure to break the cycle because I have felt the

	Break the Cycle of Poverty	had to work to get out of poverty.	effects of it my entire life. My mother specifically pushed her problems onto me and I was a child worrying about only things adults should be.” (Participant 52)
	Academic Pressure	Respondents felt like their academic and perfectionist tendencies when it came to education put a lot of pressure on them.	“The stakes have always been very high for me. I am already a perfectionist. Succeeding in school and my career didn’t feel like an option. It was an imperative.” (Participant 7)
Feeling Like They Can’t Fail		Due to their economic status many respondents felt like they couldn’t fail and were forced to succeed.	
	Believing They Have No Safety Nets	Respondents used the term “safety nets” to express that they had nothing to fall back on.	“I realized early on there was no one to catch if I fell-no safety nets.” Participant 23).
Parental Pressure		Many participants claimed their parents pressured them into working hard.	
	High Expectations	Respondents explained how their parents had a set of expectations of them, mostly in relation to jobs or education.	“Parents would and still do expect me and my other older siblings to get a job that gets us money. In my opinion it feels like they would rather us prioritize money over passion but I understand their concern since money is important especially in today’s society and economy.” (Participant 92)
Mental Tolls		Participants reported several mental tolls that impacted their well beings	
Anxiety		Many participants reported feeling overwhelmed and stressed	“Our financial situation is always on the back of our minds, which maybe involuntarily affects everyday choices. Worrying about not being able to afford college was stressful too. All that lead to anxiety issues.” (Participant 16).
Depression		Respondents reported several feelings of overall sadness and depression	“My family didn’t have anyone who went to college so I had to learn as I went how to navigate the entire process. I felt very isolated. I knew my parents couldn’t really afford it and didn’t know about all the loans available to me. That and trying to keep up with students who had everything handed to them made me incredibly stressed and depressed. I wasted a lot of time and energy trying to save money, like using books at the library instead of buying them, which wasn’t really feasible. My depression led to me dropping out.” (Participant 29).
Stress		Many participants reported feeling stressed about their economic status	“I genuinely don’t remember a time in my life when I wasn’t stressed about money or worried about my parents making ends meet. If they were stressed I was stressed, and if they weren’t I still was because I knew when bills were due it would be a problem for everyone again. This plays into my academic

		performance as well because when tension in the household is high, school is ultimately prioritized less.” (Participant 52).	
Work		Many respondents included work as a factor in their lifestyles.	
	Success=Work Mentality	Many participants, especially their parents, push the idea that in order to have a good life then you need to have a good job.	“...My mom always told me to go to college so I could get a good, stable job. I always knew college wasn’t just an option—it was a must. There was a lot of pressure to succeed, not just for myself, but to make my family proud.” (Participant 34).
	Forced to Work	Due to their economic status, many participants were forced to find jobs.	“Lack of finances meant I started working more hours than I should have in high school to help my family. Also work too much in college with decreased time for studying.. This leads to having more stress than more affluent peers and being able to spend less time on relaxing endeavors exacerbates the stress (Participant 97).
	School and Work Balance	Many participants reported struggling to balance work and college.	“A lot of planning has to go into my education because of the cost. I chose to go to a state school so the tuition was lower. I also worked throughout college to make sure I could cover all my expenses. Balancing all of this on top of my classes took a toll.” (Participant 14).
Parents		Respondent's parents had a significant impact on their lifestyles.	
	Do Better Than Parents	Participants reported wanting to work hard so they don’t end up like their parents.	“I was always told I needed to go to college and get a great job so I can make more money and stop living like this/ I was always pressured from a young age by everyone around me saying things like, ‘Don’t’ be like your parents. Be better. You have to get good grades and get out of here.’” (Participant 8).
	Repay Parents	Many respondents felt like they owed their parents for all their sacrifices.	
	Take Care of Them	Respondents felt like they needed to help take care of their parents as a way to repay them.	“I was always aware that my parents didn't have a lot of money and any unexpected expense stressed everyone out. I knew being able to get a better job than them one day was the best way to have a better life and help them.” (Participant 29).
	Parental Struggle	Several respondents noted witnessing parental struggles had an impact on their lives.	“Because i have seen my parents living in poverty for a long period of time. Since I was 9-10 ig, my father lost his job and then he tried alot to make money and make ends meet. So all of the things that my parents has done for me, I wanna give them a good life. All of the things that they truly deserve. They have been very supportive in my studies and has always make sure i get all the resources to receive a good education.” (Participant 80).

Future		Many respondents wanted to break the cycle of poverty for a better future	
	Financial Freedom	Participants reported wanting to be able to have money to spend and not have to worry about making ends meet.	“I would not say my parents are necessarily in poverty but I do want to be better financially than my parents. There are times where they struggle with things and I want to break that cycle. I want financial freedom.” (Participant 101).
	Children	Many respondents wanted to break the cycle of poverty so their future children don’t have to go through it as well.	“You see the way poverty affects the people around you, and the kinds of sad, difficult lives they live and you feel that this isn’t what you want for your children. The only way to break the cycle of poverty is to get as far from it as you can, and then give your children the skills and financial support to go even farther.” (Participant 65).
Social Comparison		Several participants compared themselves to their peers who weren’t going through poverty.	
	Isolated	Many respondents felt alone going through poverty and felt that no one understood what they were going through.	
	Wealthy Peers	Respondents felt frustrated and isolated compared to their wealthy peers.	“I was surrounded by richer kids and learned early that money protected them from consequences and their mistakes or failures wouldn’t hurt them the way it would for me. If I broke something at home, it wasn’t getting replaced. If I couldn’t get scholarships for college, I just wouldn’t be able to go.” (Participant 29).
Money Struggles		Respondents reported a number of money struggles that affected their lives.	
	Struggle with basic needs	Many respondents explained how they could hardly afford basic needs like food or pay bills.	“...I got zero (literally zero) money from my family, and lived off of student loans and work study. In between semesters I would run out of food money because my on campus job would shut down. I remember once having \$20 that had to last 2 weeks of Christmas holidays. My grandmother sent me \$20 in a card for a Christmas gift, and without that, I think I would have starved.” (Participant 65).
	Sacrifice	Participants reported giving up a lot due to their financial status.	
	Loss of Opportunities	Respondents explained how they missed out on several opportunities, usually related to education, due to their	“As a child there were often missed opportunities to attend programs or make social connections due to my family’s financial status. Although I was eligible for scholarships and financial aid, there were times in both high school and college when I was told I’d likely not continue my education at those

	economic status.	institutions due to not having enough funds. This caused stress and anxiety. While I was very fortunate to have support and friends who were able to help, it made me feel inadequate to have to depend on others and disappointed that I could not rely on my own family.” (Participant 4).
Giving Up Dream College	Many participants who got accepted into good colleges had to decline them because of their parent’s financial situations.	“...I was accepted into Ivy league schools, but wasn't able to attend for financial reasons. I'm not a current student, and the financial aid policies at Ivy schools was as generous then as it is now, but even simple things like getting together the money to make the trip to school would have been difficult. I went to a local state school for my undergrad because it was cheap...” (Participant 65).
Money Over Everything	Many participants reported feeling like they had to put their own passions on the back seat in order to pursue a steady income.	“I give myself less time to consider what I want to do/what school I want to go to/ etc/ because personal preference takes a backseat to making sure I reach all the checkpoints that set me up for financial success.” (Participant 82).

Discussion

The present study aimed to determine if gifted students who come from generational poverty experience pressure that impacts their anxiety, stress, and depression levels. Based on the findings of both the descriptive and inferential statistics, it is suggested that gifted students from generational poverty experience more stress than their non-gifted, non-generational poverty peers, and it is strongly indicated that they experience more anxiety and depression levels than their non-gifted, non-generational poverty peers. This contrasts the findings of studies from Ballam, Szymanski, and VanTassel-Baska who reported that being gifted and from generational poverty had a positive impact on students’ mental health (2013; 2021; 2004).

Likert scales

Stress

Due to an ANOVA statistical analysis with a P-value of greater than 0.05, see Table 3, it is likely that the results from the Likert scale in regards to stress are not statistically significant;

however, the trends recorded among responses are worth mentioning. Table 10 includes a breakdown of all responses to these questions.

Table 10: Stress Likert Scale Breakdown

Survey Question	Identifier	Strongly Disagree 1	Disagree 2	Somewhat Disagree 3	Neutral 4	Somewhat Agree 5	Agree 6	Strongly Agree 7	Mean	Standard Deviation
Do you ever feel like you aren't allowed to fail?		4	5	5	11	11	21	58	5.74	1.70
	Gifted and From Generational Poverty	1	2	3	5	2	7	26	5.83	1.70
	Not Gifted and From Generational Poverty	1	2	1	1	1	3	7	5.25	2.14
	Gifted and Not From Generational Poverty	2	1	1	3	2	9	19	5.84	1.72
	Not Gifted and Not From Generational Poverty	0	0	0	2	6	2	6	5.75	1.12
Do you think your economic status affects your stress levels?		7	6	4	6	21	16	55	5.57	1.84
	Gifted and From Generational Poverty	2	0	0	1	9	8	26	6.11	1.40
	Not Gifted and From Generational Poverty	0	0	1	1	4	1	9	6.00	1.32
	Gifted and Not From Generational	2	5	2	3	7	2	16	5.11	2.07

Poverty										
Not Gifted and Not From Generational Poverty	3	1	1	1	1	5	4	4.69	2.33	

n=230

As shown in the table above, it is significant to report that gifted students from non-generational poverty experience more stress due to their economic and educational status in comparison to their peers. Similarly, gifted students in general were reported to have more stress levels due to their mean score of 5.11. This contrasts findings of other research like Jean A. Baker determined that gifted students do not have more stress than their non-gifted counterparts (1996). It is clear that a gifted student, whether from generational poverty or not, feels like they cannot fail in certain aspects of their life as well as feel immense stress and pressure from their economic status. Based on these findings, it can be suggested that economic status combined with academic pressure can create stress on students.

Anxiety

With a P-value of less than 0.01, as shown in Table 5, as well as the numerous responses corresponding to the highest Likert scale option, it can be concluded that these findings strongly suggest significant statistical significance, as seen in Table 11.

Table 11: Anxiety Likert Scale Breakdown

Survey Question	Identifier	Strongly Disagree 1	Disagree 2	Somewhat Disagree 3	Neutral 4	Somewhat Agree 5	Agree 6	Strongly Agree 7	Mean	Standard Deviation
Are you afraid that you will continue the cycle of poverty?		20	11	14	17	17	12	22	4.10	2.11
	Gifted and From Generational Poverty	5	4	6	6	6	9	9	4.49	2.02

	Not Gifted and From Generational Poverty	3	1	1	2	1	0	8	4.81	2.51
	Gifted and Not From Generational Poverty	7	3	4	7	7	3	5	3.92	2.02
	Not Gifted and Not From Generational Poverty	5	3	3	2	3	0	0	2.69	1.54
Do you feel that your educational opportunities are limited because of your economic status?		14	11	11	11	19	16	33	4.65	2.12
	Gifted and From Generational Poverty	3	6	3	2	8	8	16	5.04	2.04
	Not Gifted and From Generational Poverty	0	1	2	3	3	2	5	5.13	1.67
	Gifted and Not From Generational Poverty	7	2	5	5	5	3	10	4.30	2.23
	Not Gifted and Not From Generational Poverty	4	2	1	1	3	3	2	3.88	2.28
Does the thought of limited educational opportunities make you feel overwhelmed?		18	9	13	14	18	10	32	4.43	2.18
	Gifted and From Generational Poverty	5	2	5	5	8	5	15	4.87	2.06
	Not Gifted and	2	1	0	3	3	1	6	4.94	2.14

From Generational Poverty									
Gifted and Not From Generational Poverty	6	4	6	4	3	3	11	4.27	2.28
Not Gifted and Not From Generational Poverty	5	2	2	2	4	1	0	3.06	1.81

n=342

As demonstrated in the table above, gifted students from generational poverty reported several high levels of anxiety, except for the first question (Means: 4.49, 5.04, 4.87). These results suggest that gifted students from generational poverty, as well as gifted students from non-generational poverty, feel strong levels of anxiety in relation to their educational opportunities and how they may be limited because of a lack of funds and opportunities. With support from the ANOVA test, the researcher can draw the conclusion that in comparison to their peers, those who are gifted and from generational poverty are exposed to high levels of anxiety from their gifted abilities as well as the setbacks of living through poverty, which supports findings from Mahboobeh Fouladchang (2010).

Depression

The several responses associated with the highest level on the Likert scale as well as the ANOVA P-value being less than 0.01 (see Table 7) it can be concluded that the results from the depression Likert scales are statistically significant. The responses are broken down in Table 12.

Table 12: Depression Likert Scale

Survey Question	Identifier	Strongly Disagree 1	Disagree 2	Somewhat Disagree 3	Neutral 4	Somewhat Agree 5	Agree 6	Strongly Agree 7	Mean	Standard Deviation
Does your economic status		21	18	18	12	16	11	18	3.78	2.09

make you feel hopeless about your future?										
	Gifted and From Generational Poverty	6	5	5	7	7	5	11	4.37	2.10
	Not Gifted and From Generational Poverty	5	2	2	1	1	1	4	3.63	2.50
	Gifted and Not From Generational Poverty	5	8	9	2	7	4	1	3.39	1.73
	Not Gifted and Not From Generational Poverty	5	3	2	2	1	1	2	3.13	2.16
Does the thought of academic failure make you feel down?		4	6	0	7	15	22	60	5.89	1.62
	Gifted and From Generational Poverty	0	2	0	0	4	13	27	6.33	1.14
	Not Gifted and From Generational Poverty	2	0	0	1	2	1	9	5.44	2.25
	Gifted and Not From Generational Poverty	1	3	0	4	7	5	16	5.56	1.73
	Not Gifted and Not From Generational Poverty	1	1	0	2	2	3	8	5.81	1.68

The results from the table show that gifted students from generational poverty responded highly with responses on the higher end of the Likert scale. Though responses for the first question are more widespread, it can be suggested that gifted students in general feel depressive symptoms in relation to economic status. In regards to academic failure, it is once again gifted students in general that correlate with the responses on the highest end of the Likert scale (27 out of 60 participants). It can be concluded that gifted students from both generational poverty and not generational poverty experience high levels of depression in regards to their academics and poverty status; however, these results are similar to their non-gifted, non-generational poverty counterparts. These findings contrast research done by Nina P. Bartell and William M. Reynolds, who determined that gifted students felt less depressed than their non-gifted counterparts (1986).

Thematic Coding

Seven main themes appeared during thematic coding (See Tables 8 and 9).

Pressure

105 respondents all responded with the keyword “pressure” or other similar words to describe what motivates them. Based on the number of respondents, it can be concluded that self-pressure and parental pressure were the biggest factors in the pressure these participants experienced. Participants experience parental pressure in regards to their school and work life where they were encouraged to find good jobs and work hard so they wouldn’t continue the cycle of poverty. They also reported pressuring themselves into working hard to get good grades, a good job, as well as break the cycle of poverty. One participant reported:

Growing up seeing and experiencing financial struggles was impactful. I felt a need to work harder in order to help myself, my family, and my future family so this doesn’t need to be experienced anymore. (Participant 89).

This response in particular also represents the code of “Children” from the theme “Future” as well as the code “Parental Struggle” from the theme “Parents.” Much like other participants, Participant 89 described how witnessing poverty around them has pressured them to work harder for their family but also for their future family so they do not continue the cycle. This finding is similar to the conclusion that witnessing poverty significantly impacts a child’s mental health (Najman et al., 2004).

Mental Tolls

The theme “Mental Tolls” tracked mental health words (stress, anxiety, and depression) across all three responses. The most prominent responses had to do with stress since several participants were stressed about their finances as well as their ability to afford school and necessities. This is similar to the results of a study conducted by the NCES, which revealed that students struggle with basic needs like food, (2023). Respondents also reported feeling anxious about their ability to attend school and receive the best opportunities possible. Many participants said all these factors led to them feeling depressed, like this participant:

...I worry about money as things cost a lot like food (sometimes I skip meals on class days), transportation and classes even though I do have fafsa helping. Emotionally I would say that I’ve tried to be positive but I can be quite the pessimistic type of person and I do get mood swings where sometimes I’m really down in the dumps. Lack of money just gets me even more stressed out during college semesters... (Participant 92).

This participant in particular describes feelings that are associated with depression like feeling down and mood swings (Mayo Clinic Staff, 2022). Similar to other participants, Participant 92 reported feeling stressed about affording basic necessities and has shown how this has contributed to their mental health.

Money Struggles

82 participants reported having money struggles that impacted how they lived their lives. The most prevalent response within this theme had to do with sacrifice. Participants reported having to sacrifice basic necessities, like Participant 92, who didn't eat food on some days to save money, as well as having to give up their dream colleges and other opportunities due to the lack of funds. One participant reported:

My family was exceedingly poor. I rarely even had lunch money in high school, and wasn't allowed to apply for free lunch because of social stigma. I was accepted into Ivy league schools, but wasn't able to attend for financial reasons. I'm not a current student, and the financial aid policies at Ivy schools was as generous then as it was now, but even simple things like getting together the money to make the trip to school would have been difficult. I went to a local state school for my undergrad because it was cheap. I got zero (literally zero) money from my family, and lived off of student loans and work study. In between semesters I would run out of food money because my on campus job would shut down. I remember once having \$20 that had to last 2 weeks of Christmas holidays. My grandmother sent me \$20 in a card for a Christmas gift, and without that, I think I would have starved. (Participant 65).

This participant details their experience with poverty and how it has affected their academic pursuits, much like other participants who reported having to choose state schools or community colleges so they can save money. This also correlates with the code "School and Work Balance" under the theme "Work" because this respondent had to do a campus job while studying, much like other participants who had no choice but to get a job to support themselves through college.

This supports findings from Jack S. Peltz's studies that reported on the mental health implications of working in college (2020).

Limitations

The present study did not include questions about demographics, which significantly affected the population and the conclusions that could be drawn from them. The sample only included 117 people from around the United States, which is a strong sample to draw suggestions from but not strong enough to form a definitive conclusion. The participants themselves were also not diverse enough to draw conclusions about the present-day climate of poverty. The researcher asked for both former and current college students, but based on the open-ended responses, it is safe to assume that the majority of the participants had either graduated or dropped out of college.

Typical responses used keywords like "my children" (27, 47, 96), "drop out of college" (27, 17), and "graduated" (63, 28). This limits the study as it does not factor in the current environment of college and new opportunities like better financial aid and other programs that might improve the mental health of gifted students from generational poverty rather than hurt it.

Implications

Since previous studies have not been conducted with these exact factors, population, and methodology, future researchers can use this study to create larger-scale studies that can confirm these findings. Future researchers may use a randomized controlled sample by giving a questionnaire like this one to college students in general and see how many low-income gifted students they receive and how their responses differ from the responses in this survey. They could also expand their population and abandon the college student criteria in general; much like the first draft of this research project, they could examine high school students and see how

being gifted and from generational poverty directly affects their mental health as well as how it affects how they think of their future.

This study has revealed numerous trends that adhere to the idea that gifted students from generational poverty struggle with their mental health. One specific finding was that both gifted and non-gifted low-income students struggled with balancing work and school, which caused levels of stress and anxiety. This recent revelation can create programs for working college students that allow them to have flexible college hours so that they can focus on work but still prioritize school. These programs can allow students to make more time for studying and have better sleep schedules that allow them to focus on their classes. It can also be further examined by other researchers to determine how balancing work and school can create stress as well as other mental health factors. This study could employ a quantitative approach in order to get first-hand accounts so researchers can back up their findings.

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Appendix

Appendix A

Research Survey: Examining How the Pressures of Generational Poverty Influence the Self-Reported Mental Health of American Gifted Students

Please read before you start the study

Hello I am an AP research student who is looking to find the impact that generational poverty has on the self-reported mental health of gifted students.

This study consists of 22 questions that will provide me with a deeper understanding of your economic status, giftedness status, and a report on your self-reported mental health. All information mentioned in the survey will be kept confidential and any personal details (name, personal details, grades, etc.) will be kept private. **At any point during this survey you can choose to opt out and close the survey. You are allowed to skip any question that may make you feel uncomfortable.**

Data I obtain from this study will be password protected and destroyed once my research is completed. All data will be used in my research study and will be included in my research paper. This paper will be shared with the College Board. Please be honest with your responses. Thank you so much!

* Indicates required question

Consent Form

Title of Study: The Investigation of the Pressures of Escaping Generational Poverty and Their Impact on the Self-Reported Mental Health of American Gifted Students

Investigator:

Introduction:

You are being asked to participate in a research study to identify the self-reported mental health effects that are associated with the pressures of being born into generational poverty.

Purpose of Study:

The purpose of the study is to find out how the pressures of being born into generational poverty affect a gifted student's mental health. It is commonly assumed that gifted students already have high levels of anxiety, stress, or depression, what I want to explore is how being born into generational poverty can either increase or decrease this level of stress, anxiety, or depression.

Ultimately, this research will be submitted to the College Board in the form of a paper and presentation for scoring as a part of the AP Research class to receive the AP Capstone diploma.

Description of the Study Procedures:

If you decide to participate in this study, you will be asked to do the following things:

- Fill out a survey that should take between 10 and 15 minutes.
- This will be a one-time obligation.
- The survey has 22 questions
- These questions ask about your economic status, the economic status of your family, your status as gifted/non-gifted students, and your mental health status.
- Mental health questions will be generic and ask about your stress levels and any anxiety you might be experiencing in relation to their economic status.

Risks/Discomforts of Being in this Study:

There are no reasonably foreseeable risks, although there may be unknown risks. These questions may be too personal for you to answer. If you feel at any point that you are uncomfortable with this survey then you can choose to opt out.

Opt-Out:

At any point during the survey, you can skip any questions you may feel uncomfortable answering or opt out of the survey entirely. You will not be forced to answer any questions and can choose to skip as many questions as you want during the survey.

Benefits of Being in the Study: The benefits of participation are the contributions that participants will make to a subject area that has not been studied extensively. The results of this study can shine new light on the mental health of gifted students from generational poverty and create new programs in order to manage and support any mental health issues that these students might have.

What Will Happen to Your Information:

I am not collecting any defining information about you, so things like your name, age, gender,

ethnicity, etc. will not be recorded in this study. The answers to the survey questions will be seen by me and only me. This data is password-protected, anonymous, and will be destroyed once I write my research paper. No personal information about you will be shared in my research paper.

Right to Refuse or Withdraw:

The decision to participate in this study is entirely up to you. You may refuse to take part in the study at any time without affecting your relationship with the investigator of this study. You have the right to withdraw completely from the study at any point during the process.

Right to Ask Questions and Report Concerns: You have the right to ask questions about this research study and to have those questions answered by me before, during, or after the research. If you have any further questions about the study, feel free to contact me, at

If you have any other concerns about your rights as a research participant that have not been answered by the investigators, you may contact _____ AP Research teacher at

_____ If you have any problems or concerns that occur as a result of your participation, you can report them to _____ at the email above.

1. Are you 18 years old or older?*

Mark only one oval.

☐ Yes

☐ No

2. Do you agree to participate in this study?*

Mark only one oval.

☐ Yes *Skip to question 3*

☐ No *Skip to section 8 (Thank You For Your Time!)*

Educational Status

This section includes basic information about your education status. Please answer honestly, all responses will remain anonymous.

3. Were you labeled as a gifted student throughout elementary or middle school? *
(Were you in a gifted/hope/advanced class?)

Mark only one oval.

- ☐ Yes elementary school only
☐ Yes middle school only
☐ Yes both elementary and middle school
☐ No I was not labeled as a gifted student

Economic Status

This section includes basic information about your economic status. Please answer honestly, all responses will remain anonymous.

4. Are you currently/have ever been eligible for financial aid? *

Mark only one oval.

- ☐ Yes
☐ No *Skip to section 8 (Thank You For Your Time!)*

Family Economic Status

This section includes basic information about your economic status. Please answer honestly, all responses will remain anonymous.

5. Do you feel like you are considered to be from generational poverty? *
- Generational Poverty: A pattern of poverty that affects two or more generations
 Ex: you currently live in poverty, your parents lived in poverty, and your grandparents lived in poverty

Mark only one oval.

- ☐ Yes
- ☐ No
- ☐ Not Sure

Mental Health

This section includes questions that examine your self-reported mental health on a scale and includes two open-ended questions so I can better understand your reasoning behind your responses. All responses to these questions will remain anonymous. Free response questions may be quoted in my research paper. **You are allowed to skip any question that makes you feel uncomfortable/do not want to answer.**

6. Have you ever felt pressured to break the cycle of poverty?

Mark only one oval.

	1	2	3	4	5	6	7	
No I	☐	☐	☐	☐	☐	☐	☐	Yes I have felt extreme pressure

7. Please explain why you feel this way in *at least* two sentences.

8. Has this pressure pushed you to work harder in your academic career?

Mark only one oval.

[illegible]

9. Do you ever feel like you aren't allowed to fail?

Mark only one oval.

[illegible]

10. If so, please explain why you feel this way in at least one sentence.

11. Are you afraid of that you will continue the cycle of poverty?

Mark only one oval.

[illegible]

12. Do you think your economic status affects your stress levels?

Mark only one oval.

[illegible]

13. Do you feel that your educational opportunities are limited because of your economic status?

Mark only one oval.

[illegible]

14. Does the thought of limited educational opportunities make you feel overwhelmed?

Mark only one oval.

[illegible]

15. Does your economic status make you feel hopeless about your future?

Mark only one oval.

1 2 3 4 5 6 7

No r ☐ ☐ ☐ ☒ ☐ ☐ ☐ Yes very much

16. Does the thought of academic failure make you feel down?

Mark only one oval.

	1	2	3	4	5	6	7	
No r	☐	☐	☐	☐	☐	☐	☐	Yes very much

17. Have financial challenges had an affect on your ability to pursue your academic goals?

Ex: not being able to take a class because you weren't able to afford tuition

Mark only one oval.

☐ Yes

☐ No

☐ N/A

18. Can you, if applicable, describe how your family's financial situation has influenced your academic and emotional well-being?

Additional Background Questions

These questions provide me more insight on your economic status. You may not have a lot of knowledge on these questions so feel free to respond with "Not Sure" or you could skip the question.

19. Is your current household income less than \$35,000 USD?

Mark only one oval.

- ☐ Yes
☐ No
☐ Not sure

20. What class would you consider yourself?

Mark only one oval.

- ☐ Upper class
☐ Middle class
☐ Working class
☐ Lower class
☐ Below the poverty line
☐ Not sure

21. What class would you consider your parents when they were growing up?

Mark only one oval.

- ☐ Upper class
☐ Middle class
☐ Working class
☐ Lower class
☐ Below the poverty line
☐ Not sure

22. What class would you consider your grandparents when they were growing up?

Mark only one oval.

- ☐ Upper class
- ☐ Middle class
- ☐ Working class
- ☐ Lower class
- ☐ Below the poverty line
- ☐ Not sure

Debrief

You have now completed the survey. Provided below is a debrief of how your information will be used in the survey and what findings might be determined.

The Data

This survey was aimed towards gifted students who come from a cycle of poverty. I wanted to discover if the pressure to break this cycle can create any negative mental health effects on these students. Specifically I aim to discover if these students feel stressed, anxious, or depressed. I will examine these survey responses and see if I can find common themes from your likert scales and free responses.

Privacy

This research will be used in a research paper submitted to the College Board for my AP Research Class. There are no defining factors that will tie you to this study, you will remain completely anonymous.

Any data I use will be generalized and you will be labeled as Participant 1, 2, 3, etc. Your free responses might be quoted in my paper. An example of how I will quote them:
Participant 1 said, "....."

This data will be stored on my personal computer and will be password protected. Once my paper is completed I will destroy the data completely.

Mental Health

Since this study includes questions about sensitive topics regarding mental health I have provided you with different help resources if you ever want to talk to someone or if any of these questions have made you feel uncomfortable/caused emotional distress.

Here is a list of mental health resources:

[7 Cups](#)

[mental health literacy](#)

[BeMe](#)

[Breathe2Relax](#)

[Crisis Text Line](#)

[Mental Health College Guide](#)

Thank You For Your Time!

Congratulations you have been brought to this page for one of two possible reasons:

1. You Did Not Qualify For My Survey

Unfortunately you are not what I am examining in this survey. Still, I thank you for your time and effort :)

2. You Finished My Survey

Congratulations you reached the end of my survey. Thank you for your time and effort :)

This content is neither created nor endorsed by Google.

Google Forms

Appendix B

IRB Determination

- ☐ Research proposal is **approved** to begin data collection pending principal signature.
Checkboxes in each section are all marked YES or N/A. Any comments are suggestions, not requirements.
- ☒ **Revise and resubmit** for approval prior to starting data collection with human subjects.
1 or more "Small Revisions Needed," "Missing" elements, or "Clarification needed." See notes in each section.
- ☐ Research proposal is **rejected**; propose a new topic or method that does not involve human subjects.
The research poses significant concerns that are not addressed in the proposal.

Note: Passing our schools' IRB committee review is a requirement for all AP Research projects prior to collecting data. However, the committee is not a registered IRB that is compliant with all federal HHS regulations. If you seek to publish your research in the future, this review may not be sufficient for some journals and publications.

Revise and Resubmit Tracking

If Submission #1 is approved, this section will be left blank.

Submission #2

Date Resubmitted: 12/16/25

IRB Determination: ☒ Approved

Date of Determination: 12/16/25

☐ Revise and resubmit

Comments on Submission #2

Describe any further or inadequate revisions needed in **separate bullet points** for the student to address.

Submission #3

Date Resubmitted: _____

IRB Determination: ☐ Approved

Date of Determination: _____

☐ Rejected

If Submission #3 is rejected, the student must propose a new topic or method that ~~does~~ not involve human subjects.

School Administrator Approval

Data collection may **only** begin with the principal's signature below.

Principal Signature: Barbara Medella

Date: 1/29/25

Appendix C.1

Pressure Likert Scale Responses

Survey Question	Identifier	Strongly Disagree 1	Disagree 2	Somewhat Disagree 3	Neutral 4	Somewhat Agree 5	Agree 6	Strongly Agree 7	Mean	Standard Deviation
Have You Ever Felt Pressured to Break the Cycle of Poverty?		9	9	4	5	23	12	52	5.35	2.00
	Gifted and From Generational Poverty	0	1	0	1	8	6	30	6.35	1.08
	Not Gifted and From Generational Poverty	0	1	0	0	3	3	9	6.13	1.36
	Gifted and Not From Generational Poverty	4	5	2	3	8	3	11	4.64	2.15
	Not Gifted and Not From Generational Poverty	5	2	2	1	4	0	2	3.31	2.15
Has this pressure pushed you to work harder in your academic career?		10	4	1	4	18	21	56	5.66	1.88
	Gifted and From Generational Poverty	1	1	0	2	6	7	29	6.22	1.35
	Not Gifted and From Generational Poverty	2	0	0	0	3	2	9	5.75	2.02
	Gifted and Not From Generational Poverty	4	2	0	2	6	8	14	5.33	2.03
	Not Gifted and	3	1	1	0	3	4	4	4.69	2.30

Not From
Generational
Poverty

n=228

Appendix C.2

Pressure ANOVA

Effect	Sum of Squares (SS)	Degrees of Freedom (df)	Mean Squares (MS = SS/df)	F-statistic (MS / MS residual)	P-value	Interpretation of P
Status	153.5	3	51.16	16	<0.01	A P-value of <0.01 means extremely strong confidence that the groups are different.
Error or Residual	703.5	224	3.141			

Note: Table generated by *Data Classroom*

Appendix C.3

Pressure ANOVA Explanation

Pair	Mean diff	P-value	Interpretation of P
C - B	-1.3	<0.01	Means: extremely strong confidence that the groups are different
A - B	-0.345	0.78	Means: no evidence that the groups might be different
D - B	-2.28	<0.01	Means: extremely strong confidence that the groups are different
A - C	0.951	0.06	Means: some confidence that the groups are different
D - C	-0.986	0.05	Means: strong confidence that the groups are different
D - A	-1.94	<0.01	Means: extremely strong confidence that the groups are different

Note: A=not gifted and not from generational poverty, B=gifted and from generational poverty, C=gifted and not from generational poverty, D=not gifted and not from generational poverty

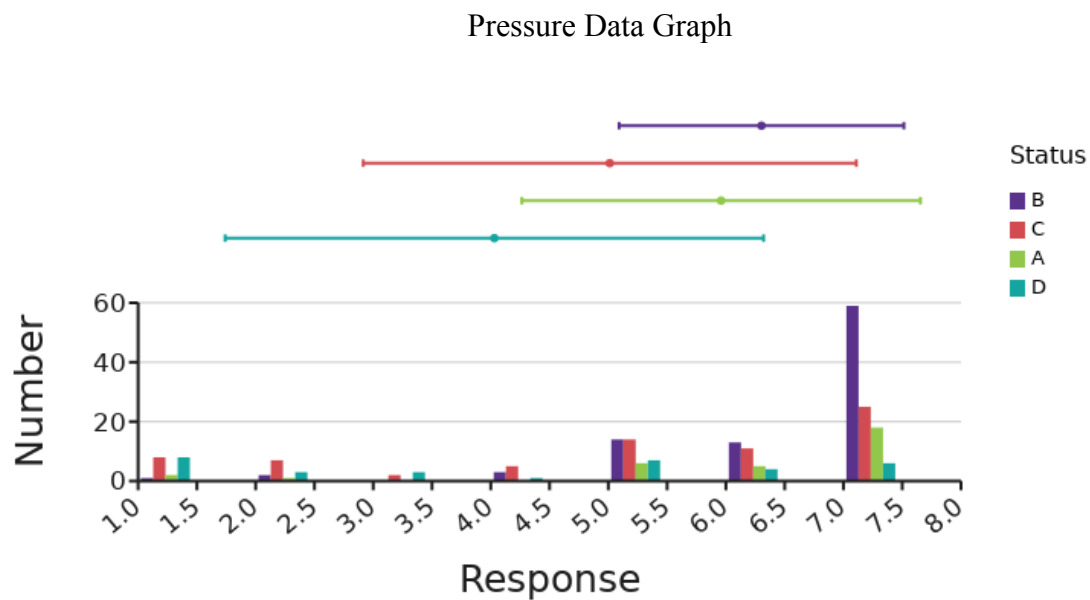
Table generated by *Data Classroom*

Appendix C.4

Pressure Likert Scale Descriptive Statistics

Status	Mean	Standard Deviation	Median
Gifted and From Generational Poverty	6.29	1.22	7.00
Not Gifted and From Generational Poverty	5.94	1.70	7.00
Gifted and Not From Generational Poverty	4.99	2.11	5.50
Not Gifted and Not From Generational Poverty	4.00	2.30	5.00

Appendix C.5



Note: Dot shows the mean. Error bars to the left and right show Standard deviation.

Note: A=not gifted and not from generational poverty, B=gifted and from generational poverty, C=gifted and not from generational poverty, D=not gifted and not from generational poverty
 Graph generated by *Data Classroom*

Appendix D.1

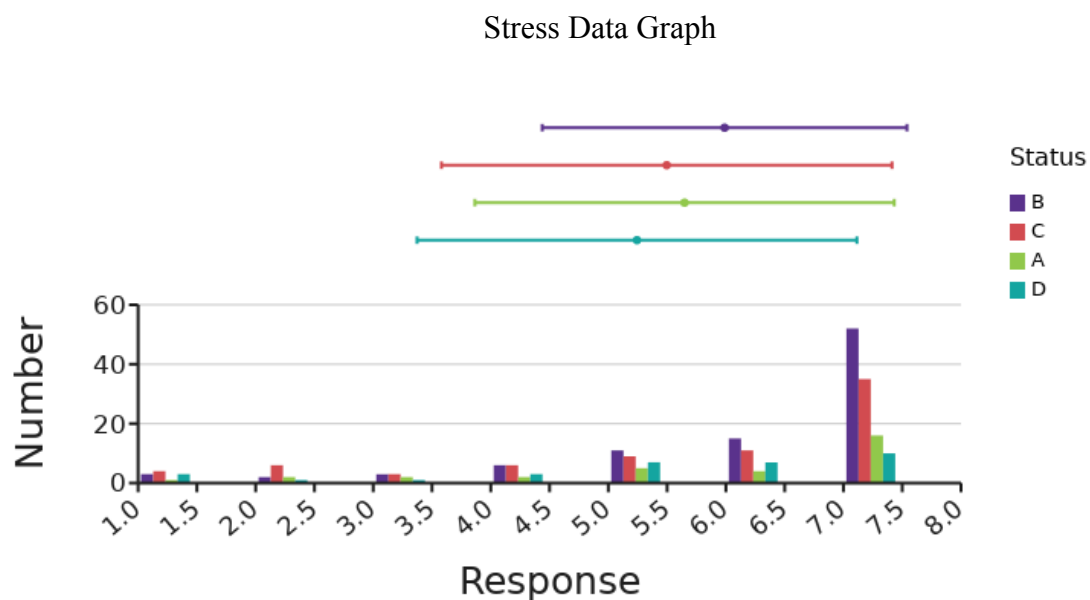
Stress ANOVA Explanation

Pair	Mean diff	P-value	Interpretation of P
C - B	-0.494	0.28	Means: little to no indication that the groups might be different
A - B	-0.342	0.78	Means: no evidence that the groups might be different
D - B	-0.749	0.17	Means: some indication that the groups might be different
A - C	0.152	0.98	Means: no evidence that the groups might be different
D - C	-0.254	0.90	Means: no evidence that the groups might be different
D - A	-0.406	0.79	Means: no evidence that the groups might be different

Note: A=not gifted and not from generational poverty, B=gifted and from generational poverty, C=gifted and not from generational poverty, D=not gifted and not from generational poverty

Table generated by *Data Classroom*

Appendix D.2



Note: Dot shows the mean. Error bars to the left and right show Standard deviation.

Note: A=not gifted and not from generational poverty, B=gifted and from generational poverty, C=gifted and not from generational poverty, D=not gifted and not from generational poverty
 Graph generated by *Data Classroom*

Appendix E.1

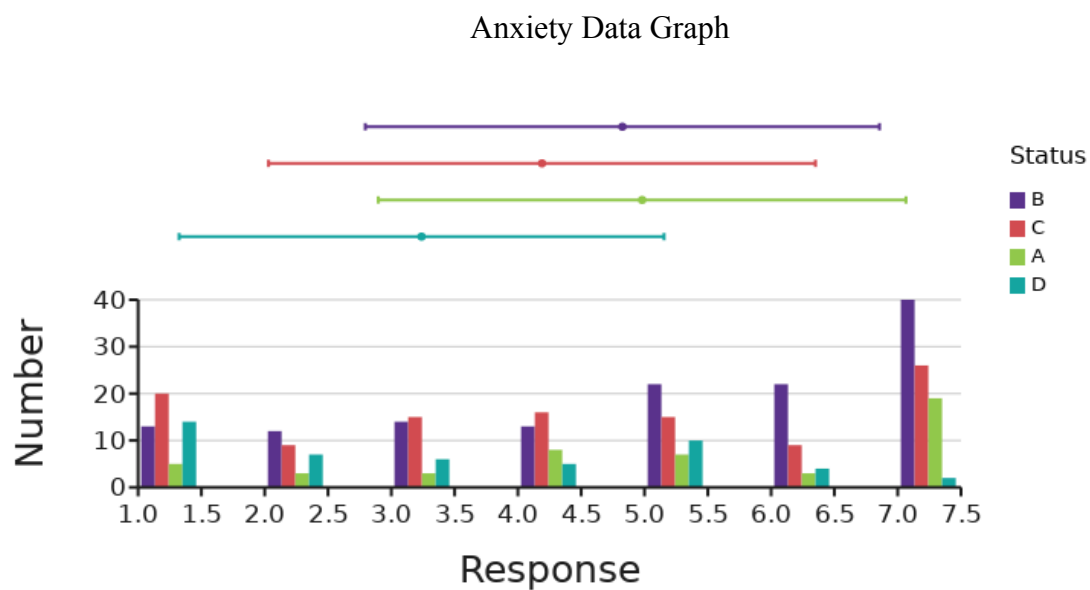
Anxiety ANOVA Explanation

Pair	Mean diff	P-value	Interpretation of P
C - B	-0.638	0.08	Means: some confidence that the groups are different
A - B	0.157	0.97	Means: no evidence that the groups might be different
D - B	-1.59	<0.01	Means: extremely strong confidence that the groups are different
A - C	0.795	0.12	Means: some indication that the groups might be different
D - C	-0.955	0.04	Means: strong confidence that the groups are different
D - A	-1.75	<0.01	Means: extremely strong confidence that the groups are different

Note: A=not gifted and not from generational poverty, B=gifted and from generational poverty, C=gifted and not from generational poverty, D=not gifted and not from generational poverty

Table generated by *Data Classroom*

Appendix E.2



Note: Dot shows the mean. Error bars to the left and right show Standard deviation.

Note: A=not gifted and not from generational poverty, B=gifted and from generational poverty, C=gifted and not from generational poverty, D=not gifted and not from generational poverty
 Graph generated by *Data Classroom*

Appendix F.1

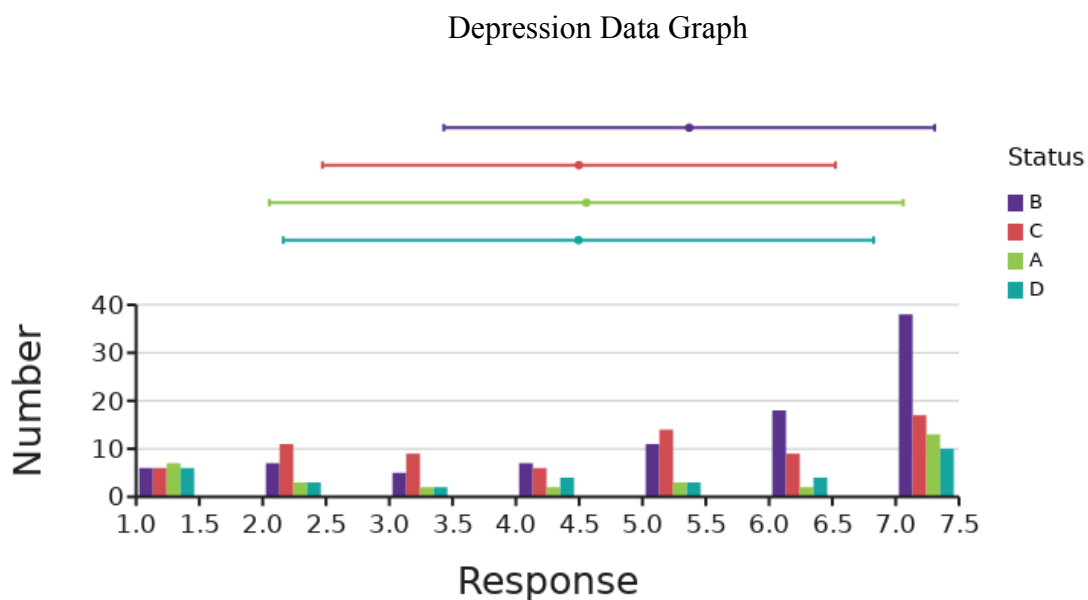
Depression ANOVA Explanation

Pair	Mean diff	P-value	Interpretation of P
C - B	-0.876	0.05	Means: strong confidence that the groups are different
A - B	-0.817	0.24	Means: little to no indication that the groups might be different
D - B	-0.879	0.18	Means: some indication that the groups might be different
A - C	0.059	1.00	Means: that the groups are NOT different
D - C	-0.00347	1.00	Means: that the groups are NOT different
D - A	-0.0625	1.00	Means: that the groups are NOT different

Note: A=not gifted and not from generational poverty, B=gifted and from generational poverty, C=gifted and not from generational poverty, D=not gifted and not from generational poverty

Table generated by *Data Classroom*

Appendix F.2



Note: Dot shows the mean. Error bars to the left and right show Standard deviation.

Note: A=not gifted and not from generational poverty, B=gifted and from generational poverty, C=gifted and not from generational poverty, D=not gifted and not from generational poverty
 Graph generated by *Data Classroom*

Appendix G

Financial Challenges and Its Impact on Academic Pursuits

	Yes	No	Not Applicable
Have financial challenges had an effect on your ability to pursue your academic goals?	59	41	13
Gifted and From Generational Poverty	33	11	2
Not Gifted and From Generational Poverty	7	6	2
Gifted and Not From Generational Poverty	14	15	7
Not Gifted and Not From Generational Poverty	5	9	2

n=113

Note: Gifted students are all grouped together. Those who identified as “Not Sure” if they are from Generational Poverty are included in “Not From Generational Poverty” in this table.