Correlating Anxiety and Risk Perceptions of Future Academic Prospects Among High-Achieving Students

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ABSTRACT

The twenty-first century is redefining the boundaries of adolescent mental health with its “epidemic of anxiety.” As a psychologically vulnerable demographic, academically intensive high school students are as unrivaled in their anxiety levels as they are in their ambition, which inflates their fear factors and undermines their personal values as well. In this paper, I expand on this subject by specifically exploring high-achieving students’ risk perceptions of their future academic prospects and how they correlate with symptoms of generalized anxiety disorder (GAD). This study dives into the inquiry by utilizing quantitative survey research followed by a mixed cross-examination analysis. A total of 47 Advanced Placement high schoolers responded to the survey, and, based on the final numerical values assigned to their anxiety and risk perception levels, I calculated several correlation coefficients to interpret the results. My findings demonstrated that there was a strong positive correlation between anxiety and risk perceptions of academic prospects among high-achieving students. Despite their superlative academic statistics, results showed that many of the participants not only had high anxiety levels but also perceived a substantial amount of risk for their future success. This target population comprises only a fraction of teenagers who experience such symptoms, but this study presents how they uphold negative trends in anxiety-related disorders that require more attention and research in the field of psychology as a whole.

Introduction

Anxiety is an inherent part of life. Presenting in front of a class, sneaking a glance down from a balcony, or waiting for the results of an important competition are all situations that can incite an anxious response from a person. The feeling of anticipation one gets after asking a peer out to homecoming or requesting an extension from a teacher is referred to as “nervousness.” Avoiding eye contact with someone and physical shifting caused by uneasiness are thought to be results of “shyness.” For most people, that is truly all there is to it.

Others, however, are not so fortunate. The clinical definition of anxiety in the American Psychological Association’s Encyclopedia of Psychology is “an emotion characterized by feelings of tension, worried thoughts, and physical changes like increased blood pressure” (Kazdin, 2000). Such unexplainable and continual agitation can be a major intrusion on one’s lifestyle, and there are very few ways to combat it other than professional treatment. However, the typical age demographic of psychiatric anxiety has been becoming increasingly young over the past few decades. In fact, an analysis by Twenge (2000) illustrates that the average “normal” adolescent today suffers from more anxiety-related symptoms than child psychiatric patients in the 1950s.

A prime contributor to this trend is academics. Clinical social worker and psychotherapist S. Grover (2020) cites academic tension as one of the leading causes of teenage anxiety, and family psychologist J. Bernstein (2016) agrees that “performance” and “parental pressures” are the most instrumental sources of anxiety at school. This propensity is especially worse in high school students, who are burdened with concerns about prospective college and
careers. High-achieving students carry inordinate social expectations that can have a detrimental impact on their mental health; although a heightened determination to succeed can be an effective motivator, the kickback when they fail can be inordinately harsher (Wallace, 2019).

Anxiety has become an even more urgent issue since the COVID-19 pandemic (Glass, 2021). After more than a year’s worth of learning loss, students have never been more worried about their grade reports, afraid that they will be unable to meet the standards that they had once reached with relative ease. During this unconventional time, numerous psychologists are recommending less pressure and more support for the bright students who are struggling to regain their maximum capabilities, an effort that appears to be underway.

This social and psychological sensation calls the notion of risk perception—an individual’s personal assessment of risk—into question, as it incorporates the subjective opinions of academically inclined students. Therefore, in this paper, I will be evaluating the relationship between common symptoms of generalized anxiety disorder and high school students’ risk perceptions of their future academic prospects. This will consist of correlational research conducted through quantitative surveys, which will be able to gauge the values and emotions of the participants. I hypothesized that there would be a positive correlation between these variables; that is, as anxiety levels increase, risk perceptions would also increase, and the same would apply to a decreasing trend.

**Literature Review**

**Generalized Anxiety Disorder**

*Generalized anxiety disorder* (GAD) is a psychiatric disorder characterized by severe, persistent, and idiopathic anxiety about casual, non-specific events. The *Diagnostic Statistical Manual of Mental Disorders* (5th ed.; DSM-5; American Psychiatric Association [APA], 2013), the standard classification of psychological disorders used by mental health professionals in the U.S., officially defines the “essential feature” of GAD as “excessive anxiety and worry (apprehensive expectation) about a number of events or activities (such as work or school performance)” (p. 222). Depending on its severity, GAD can greatly interfere with one’s ability to function normally in everyday life.

According to the Anxiety & Depression Association of America (n.d.), people with GAD tend to avoid certain situations in order to minimize their anxiety, such as public transportation, social confrontations, and other stress-inducing circumstances. In relation to this aversion, the National Institute of Mental Health (n.d.-a) and Mayo Clinic (2018) maintain that GAD patients become frequently distressed by small, ultimately insignificant incidents that often end up triggering an *anxiety attack*, a sudden episode of intense fear or worry and, more often than not, physical symptoms, including hyperventilation, trembling, and insomnia. In recent years, considering the drastic increase in the number of national catastrophes, GAD has risen to be one of the most common mental disorders, with a comorbidity rate of up to 50 percent (Linden et al., 2004). In fact, Wittchen (2002), one of Germany’s foremost clinical psychologists who specializes in anxiety treatment, discovered that GAD is already the most prevalent anxiety disorder in primary care.

As stated in the DSM-5, a major attribute of GAD is that “the intensity, duration, or frequency of the anxiety and worry is out of proportion to the actual likelihood or impact of the anticipated event” (APA, 2013, p. 222). This tendency leads into the concept of risk perception, which I will discuss in a later section of the Literature Review.

**Anxiety-Related Disorders in Modern High School Students**

Under the DSM-5, the spectrum of anxiety-related disorders ranges far and wide. It encompasses not only GAD but also other important illnesses such as social anxiety disorder, panic disorder, specific phobias, separation anxiety disorder, and selective mutism. From 2001 to 2004, the lifetime prevalence of having any anxiety disorder for adolescents aged 13 to 18 was 31.9 percent, tantamount to almost one in every three teenagers (National Institute of Mental Health, 2010).
Health, n.d.-b). Given the alarmingly high rate for this age bracket, which is typically supposed to have less stress than adults, psychologists have begun referring to this phenomenon as the “epidemic of anxiety” (Flannery, 2018).

Since the early 2000s, the proportion of the generation suffering from these symptoms has only increased. A 2018 survey at the Pew Research Center found that 70 percent of U.S. teenagers aged 13 to 17 consider anxiety and depression to be a major problem among their peers (Horowitz & Graf, 2020). Many young adolescents find themselves overwhelmed or stressed by the imposing of external expectations for them to succeed in their academics, which would eventually lead to equally successful careers. The National Institute of Mental Health (n.d.-a) states that children and teens with GAD are often so anxious about their performance in areas such as school and sports, with modern disasters like school shootings, law enforcement violence, and global pandemics only exacerbating these emotions. The general expert consensus is that modern high school students are plagued with more anxiety than expected.

Risk Perception and Characteristics

The American Psychological Association (n.d.) officially defines risk perception as “an individual’s subjective assessment of the level of risk associated with a particular hazard.” It is otherwise known as perceived risk or subjective risk due to the nature of the phenomenon. Coupled with cultural biases and social relations, risk perception can be distorted so severely that people can misconstrue even the slightest of happenings (Wildavsky & Dake, 1990). Risk perception is the result of a person’s functionality in two dimensions: the cognitive dimension, which corresponds to their understanding and knowledge of the risks, and the emotional dimension, which corresponds to their feelings about them (Paek & Hove, 2017).

The cognitive dimension is often linked with objective risk, the theoretical probability of a specific event occurring, which is a stark contrast to the subjective risk perception. In certain cases, a staggering disparity is present between these two concepts. For instance, when one witnesses a television broadcast of a plane crash, they can suddenly develop a fear of flying by instantly forming a personal connection to the accident. In this scenario, the individual’s risk perception of a plane crash increased despite the fact that their chances of being involved in one had remained the same. Thus, external factors such as personal experiences and exposure to media coverage can alter risk perception. As corroborated by the Association for Psychological Science (2015), the same rationale applies to those who tend to be more afraid of shark attacks than car accidents, even though the former is significantly less likely to happen.

Previous studies on risk perception have centered around life-changing events, including terrorism, natural disasters, radical socioeconomic reforms, and public health and food hazards (Renn, 2004; Wolff et al., 2019). Ropeik (2011), an award-winning consultant and author on risk perception, has asserted that people’s risk perceptions are intrinsically irrational due to their sense of uncertainty and lack of control over particular areas of their lives, an unfortunate and perpetual source of terror for countless anxiety patients.

The Gap

Anxiety disorders and risk perception have been correlated before. However, risk perception is usually studied in adults — both with and without anxiety disorders — for events that can result in major injury or death; in other words, it is evaluated for extreme, potentially life-threatening scenarios (Nesse & Klaas, 1994). It is rarely investigated in teenagers or high school students. Generational, societal, and social trends indicate that there is a general sense of apathy among teens towards the idea of death and fatal injury, about which people are typically surveyed when assessing risk perception and anxiety (Pickhardt, 2012; University Hospitals, 2020; Whole Child Center, 2018). Several studies have discovered that adolescents do not even desire longevity. Rather, they appear to be more concerned with their immediate future and relative fortune during that time.

In the past, psychologists have connected generalized anxiety disorder to numerous sources, including natural disasters, terrorist attacks, and the passing of a loved one. Once again, these factors are considerably acute. Therefore, I concluded that a gap remained between anxiety and risk perceptions of more innocuous or mild elements, providing
a purpose for a study that concentrates on this specific subject. Taking the aforementioned values of modern teenagers into consideration, I formulated the following inquiry: How does generalized anxiety disorder correlate with risk perceptions of future academic prospects among high school Advanced Placement (AP) students? A survey of AP students ranging from the ninth to the twelfth grade aided in answering this research question.

**Methods**

**Participants**

A two-part survey was organized for American high school students to take. In order to qualify, respondents must have previously been in and/or currently be in the College Board Advanced Placement (AP) program and have a cumulative unweighted grade point average (GPA) of 3.5 or higher. This cutoff GPA was chosen based on objective benchmarks for successful academic prospects in America. The 2009 High School Transcript Study of the National Center for Education Statistics reveals that the average high school GPA in the United States is a 3.0. However, one can assume that the average has risen since then; in a report by the Thomas B. Fordham Institute, Gershenson, Northern, and Petrilli (2018) state that the national average steadily increased each year from 2005 all the way to 2016, and they postulate that this trend will continue. Moreover, although elite colleges tend to value weighted GPAs more than they do unweighted ones, measuring the latter was the only way to standardize the scale across different school systems considering my research objective.

Respondents were high schoolers based in New Jersey, which has a consistent record of ranking in the top three U.S. states for the best K-12 public education every year (Morad, 2021; U.S. News & World Report, 2019; World Population Review, 2021). The survey was personally distributed to individual students after preliminary research was conducted to identify those who met the qualifications for participation. Students willingly volunteered their academic statistics for that part of the selection process as well. I chose to administer the survey through the Google Forms platform because of its accessibility and ease of distribution. Before the students took the survey, they were required to sign an informed consent form that provided all of the necessary information to understand the purpose and methods of the survey. If they were younger than 18 years old, their parents or guardians also needed to sign the same form. In addition, the entire survey was completely anonymous in order to protect the surveyees’ names, identities, schools, and other sensitive personal information. Instead, each participant was coded with a number (e.g., Respondent 1, Respondent 2, etc.) in order to maximize confidentiality. The students understood and agreed to this arrangement.

**Procedure**

**Round 1: Anxiety Screening**

Round 1 of the survey consisted of generalized anxiety screening as per the criteria of the GAD-7 (see the Instruments Used section below) to identify which respondents, if any, showed symptoms of GAD. Afterwards, I would be able to cross-examine these results with those of Round 2 in order to determine the existence of a correlation between GAD and risk perceptions regarding academic prospects.

However, one notable aspect of Round 1 is that I did not provide any information on what the test was or what it screened for. Any respondent who happened to be aware of its true purpose must have acquired the knowledge through a method of which I was not aware. Omitting key details about the research, usually referred to as deception, is a common practice in many social, behavioral, and educational psychology experiments because such cognizance could impact the results of the study (Gluck & Hahn-Smith, 1995; Tai, 2012). Deception is often necessary to ensure that the results are genuine and unbiased. Two infamous examples of deception in psychological research are the
Bystander Apathy Experiment (Darley & Latané, 1968) and the Milgram Shock Experiment (Milgram, 1963), which tested the degree to which people were willing to assist perceived ‘victims’ who were in a threatening situation. These landmark experiments garnered immense ethical controversy, but for my survey, I deceived my respondents because knowing that they were being screened for anxiety could influence the honesty of their answers. My study complied with the American Psychological Association’s (2017) code of conduct, which requires debriefing, the process of informing individuals about the intentions of the study in which they participated. Debriefing is a mandatory element of psychological experiments that involve deception, and I fully revealed the true purpose and nature of my survey following its completion.

**Instruments Used**

In Round 1, one major instrument was used to identify probable cases of GAD among the participants. *Generalized Anxiety Disorder 7 (GAD-7)* is a self-reporting psychiatric questionnaire that screens for the seven most prominent GAD criteria described in the DSM-5. By its guidelines, I asked the following question: “Over the last two weeks, how often have you been bothered by the following problems?” I provided the participants with a list of the seven items, which were identified as the said “problems”:

1. Nervousness
2. Inability to stop worrying
3. Excessive worry
4. Restlessness
5. Difficulty in relaxing
6. Easy irritation
7. Fear of something awful happening

The respondents were instructed to rate their level of disturbance for each on a scale. This anchoring measure was a four-level Likert scale that includes the following tiers: 0 points (*not at all*), 1 point (*several days*), 2 points (*more than half the days*), and 3 points (*nearly every day*). Once the questionnaire was complete, the points were totaled, with the minimum possible score being 0 and the maximum possible score being 21. Finally, I categorized the sums into four diagnostic groups: 0 to 4 points (*minimal anxiety*), 5 to 9 points (*mild anxiety*), 10 to 14 points (*moderate anxiety*), and 15 to 21 points (*severe anxiety*).

Spitzer, Kroenke, Williams, and Löwe (2006) developed GAD-7 in the early 2000s with the mission statement of creating a “brief clinical measure for assessing GAD” (p. 1092). Therefore, from November 2004 to June 2005, they administered GAD-7 to a total of 2740 adult patients in U.S. primary care and found that it was a valid measure for a prefatory diagnosis of GAD. Ultimately, they ascertained that the test “will have considerable utility in busy mental health settings and clinical research” (p.1096). Since then, scores of psychological researchers and professionals have confirmed the statistical, clinical, and pragmatic reliability of GAD-7. It has been described as having “excellent internal consistency” (Johnson et al., 2019, p. 1), and its efficacy remains even in the general population (Löwe et al., 2008). In particular, I determined that the GAD-7 was the most suitable instrument for this research because it not only effectively screens for symptoms of GAD, which is the targeted psychiatric disorder, but also is concise, making it easier for participants to understand and answer.

**Round 2: Gauging Risk Perceptions**

Round 2 of the survey gauged the surveyees’ risk perceptions of their future academic prospects. The first step was to identify factors that are likely to negatively impact high school students’ academic success in the future. Although no
factor is guaranteed to affect everyone, I discerned ten of the most prevalent reasons for stress and worry among high school and college students based on the discoveries of six published sources (Beilock, 2011; Leonard et al., 2015; Link, 2019; Neighmond, 2013; Pascoe et al., 2019; Scott, 2020). Then, I converted these causes into adequately appropriate and realistic scenarios, which are listed below:

1. Scoring a 1400 or lower on the SAT and/or a 1300 or lower on the PSAT
2. Scoring a 30 or lower on the ACT
3. Scoring a 3 or lower on an AP exam
4. Scoring a B or lower on a final course grade at school
5. Not being able to acquire/maintain a leadership position in a school club
6. Not being able to obtain enough volunteering hours
7. Disappointing my parent/guardian due to academic failure
8. Not being able to succeed in your preferred major/concentration
9. Receiving a rejection from a Top 20 college/university
10. Not being able to pay college tuition/not receiving financial aid

The participants rated each factor on the following five-level Likert scale:

- 0 points (very much less likely to happen to me than to the average student)
- 1 point (less likely to happen to me than to the average student)
- 2 points (equally likely to happen to me than to the average student)
- 3 points (more likely to happen to me than to the average student)
- 4 points (very much more likely to happen to me than to the average student)

Using this scale, the minimum possible sum was 0 and the maximum possible sum was 40, respectively pointing to extremely low and high risk perceptions. Thus, the standards for the results of the survey were finalized. If GAD-7 scores were high while risk perception scores were low or vice versa, then there would be a negative correlation between the two concepts. If both GAD-7 and risk perception scores were high or low, then there would be a positive correlation. Additionally, there was the possibility that there would be no significant correlation at all; in that case, I would conclude that the two concepts do not have a notable relationship and that any present correlation is the result of mere coincidence.

Justification of Methodology

It was decided that a survey was the optimal research methodology because personal opinions were critical to the final results and conclusion. Firstly, the nature of GAD-7 as a self-reporting questionnaire requires subjective introspection; screening would not be possible without direct responses from participants. Secondly, analyzing others’ risk perceptions is also based on an evaluation of one’s own emotions. Surveys have been established as a reliable and effective methodology for social science research, especially in the field of psychology, because they can inspect “cognitive, affective, and perceptual processes within individual people” (Jans et al., 2015, p. 3). Furthermore, I chose to employ Likert scales for not only their quantitative efficiency but also the standard of comparison that they provide when interpreting results (Sullivan & Artino, 2013). In particular, Likert scales are the preferred surveying measure in correlational research such as this one.

Results
The survey was first distributed on October 1st, 2021 and closed on October 15th. During this time, 47 responses were collected from high school AP students across the state of New Jersey.

Round 1 and Round 2

As stated in the Instruments Used section, Round 1 of the survey consisted of the GAD-7 questionnaire. All 47 participants rated the seven items on GAD-7, resulting in a final score of anywhere between 0 and 21. Once all of the points were totaled, I categorized the respondents into the aforementioned four diagnostic groups: 0 to 4 points (minimal anxiety), 5 to 9 points (mild anxiety), 10 to 14 points (moderate anxiety), and 15 to 21 points (severe anxiety). Then, I calculated the mean GAD-7, rounded to the nearest tenth if necessary, for each classification.

Round 2 of the survey evaluated the participants’ risk perception. I maintained the GAD-7 diagnostic categories established in Round 1 in order to cross-examine the results in the next section. As I mentioned in the Methods section, Round 2 allows for a minimum possible score of 0 and a maximum possible score of 40. Then, I calculated the mean risk perception score, rounded to the nearest tenth if necessary, for each group.

The results are as follows:

**Minimal Anxiety**

11 out of 47 respondents (23.4 percent) reported minimal anxiety.

| Respondent | GAD-7 Score | Risk Perception Score |
|------------|-------------|-----------------------|
| 1          | 4           | 11                    |
| 2          | 3           | 8                     |
| 4          | 4           | 10                    |
| 12         | 2           | 5                     |
| 21         | 2           | 6                     |
| 23         | 2           | 6                     |
| 31         | 3           | 7                     |
| 33         | 4           | 13                    |
| 38         | 3           | 10                    |
| 44         | 3           | 9                     |
| 47         | 4           | 7                     |

Mean GAD-7 Score: 3.1  
Mean Risk Perception Score: 8.4

**Mild Anxiety**
10 out of 47 respondents (21.3 percent) reported mild anxiety.

| Respondent | GAD-7 Score | Risk Perception Score |
|------------|-------------|-----------------------|
| 5          | 9           | 20                    |
| 6          | 9           | 21                    |
| 13         | 7           | 14                    |
| 19         | 5           | 12                    |
| 20         | 8           | 18                    |
| 22         | 6           | 14                    |
| 28         | 6           | 13                    |
| 36         | 7           | 16                    |
| 37         | 9           | 17                    |
| 46         | 8           | 19                    |

Mean GAD-7 Score: 7.4
Mean Risk Perception Score: 16.4

Moderate Anxiety

13 out of 47 respondents (27.7 percent) reported moderate anxiety.

| Respondent | GAD-7 Score | Risk Perception Score |
|------------|-------------|-----------------------|
| 7          | 14          | 29                    |
| 8          | 11          | 25                    |
| 14         | 10          | 20                    |
| 17         | 11          | 21                    |
| 18         | 11          | 22                    |
| 24         | 12          | 23                    |
| 26         | 13          | 30                    |
| 32         | 14          | 31                    |
### Mean GAD-7 Score: 12.0  Mean Risk Perception Score: 24.2

#### Severe Anxiety

13 out of 47 respondents (27.7 percent) reported severe anxiety.

| Respondent | GAD-7 Score | Risk Perception Score |
|------------|-------------|-----------------------|
| 3          | 17          | 32                    |
| 9          | 18          | 34                    |
| 10         | 16          | 33                    |
| 11         | 19          | 38                    |
| 15         | 20          | 37                    |
| 16         | 15          | 29                    |
| 25         | 21          | 39                    |
| 27         | 16          | 32                    |
| 29         | 19          | 35                    |
| 30         | 16          | 32                    |
| 35         | 21          | 36                    |
| 42         | 20          | 35                    |
| 43         | 20          | 36                    |

Mean GAD-7 Score: 18.3  Mean Risk Perception Score: 34.5
Cross-Examination

To cross-examine the GAD-7 scores and the risk perception scores, I calculated the correlation coefficient using the following equation:

\[ R = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 \sum (y_i - \bar{y})^2}} \]

- \( R \) = correlation coefficient
- \( x_i \) = values of the GAD-7 scores (x-variable)
- \( \bar{x} \) = mean of the GAD-7 scores (x-variable)
- \( y_i \) = values of the risk perception scores (y-variable)
- \( \bar{y} \) = mean of the risk perception scores (y-variable)

The correlation coefficients, rounded to the nearest thousandth, for each category are the following:

| Diagnostic Category   | Correlation Coefficient |
|-----------------------|-------------------------|
| Minimal Anxiety       | +0.765                  |
| Mild Anxiety          | +0.913                  |
| Moderate Anxiety      | +0.855                  |
| Severe Anxiety        | +0.891                  |

Discussion

Analysis of Findings

Correlation coefficients can range from –1.0 (for a negative correlation) to +1.0 (for a positive correlation), with 0 as the numerical center. The closer the \( r \) value is to either one of these extremes, the greater the correlation is. Most experts concur that in the discipline of psychology, a correlation coefficient has to be at least –0.7 or +0.7 in order to be considered a “significant” correlation (Cherry, 2021; Moore et al., 2012; Mukaka, 2012). All four \( r \) values in my study are above +0.7; therefore, there is a strong positive correlation between levels of generalized anxiety and risk perception of future academic prospects, demonstrating compelling results.

These outcomes can be analyzed in more detail. The lowest \( r \) value was +0.765 for the minimal anxiety group, which means that there was a more substantial difference between the two variables being tested compared to the other categories. Meanwhile, the highest \( r \) value was +0.913 for the mild anxiety group, showing a slimmer gap between the variables. A deeper inspection reveals that the mean GAD-7 score for these students was a 7.4 out of 21 and that the mean risk perception score was a 16.4 out of 40. The ratio of 7.4 to 21 is approximately 0.35, but the ratio of 16.4 to 40 is 0.41. However, the most interesting correlation in the survey was, by far, that of the severe anxiety group. +0.891 is a very compelling coefficient, and the high value indicates that the individuals who reported severe anxiety...
also had extremely high risk perception scores. As expected, these respondents had a mean GAD-7 score of 18.3 and a mean risk perception score of 34.5, each of them the largest value out of the four. However, even without the cross-examination and the correlation coefficients, the results from Round 1 and Round 2 alone are worthy of serious consideration. Out of 47 respondents, 11 (23.4 percent) reported minimal anxiety; within this group, no one had a score of 0 or 1, and only 3 had a score of 2. Moreover, 13 students (27.7 percent) reported severe anxiety, and 2 of them had a score of 21, the maximum possible number of points. Accordingly, the aforementioned “epidemic of anxiety” is demonstrated among modern teenagers, as there appears to be an underlying presence of GAD-related symptoms and manifestations in every one of the four diagnostic categories.

In addition, an in-depth breakdown of the participants’ responses in Round 2 signifies that there were certain prompts that elicited a higher risk perception than the other ones did. For instance, 35 students (approximately 74.5 percent) gave a rating of either 3 or 4 points to Scenario 7 (disappointing my parent/guardian due to academic failure), and 38 students (approximately 80.9 percent) gave a rating of either 3 or 4 points to Scenario 9 (receiving a rejection from a Top 20 college/university). It can be presumed that the students judged these two scenarios as the most concerning out of the ten.

Limitations

Recruiting high school students as respondents implies several limitations. Firstly, due to the nature of a survey as a research methodology, honest and transparent answers were not guaranteed. Moreover, academics and mental health are two topics that tend to evoke rather defensive reactions from young adolescents, so there is a strong possibility that at least a few surveyees were not totally forthright, even with the anonymity of the survey. Having foreseen this potential uncertainty, I reminded the participants of the importance of truthfulness in the directions. Secondly, a sample size of 47 participants may be considered small and thus negligible. However, the results of the study suggest representativeness of the sample set as the students hold a wide variety of beliefs, which may have been influenced by differing cultural values, grade levels, GPAs, schools, support systems, personal priorities, and/or other unrecognized components. These factors undoubtedly caused their levels of anxiety and risk perceptions to change, resulting in diverse responses.

Additionally, as I mentioned in the Procedure section of this paper, I did not disclose the true purpose of GAD-7 to participants before they took the survey. Although this deception was my attempt at minimizing respondents’ dishonesty, it may have been unsuccessful if they had prior knowledge of the questionnaire. I am not aware of anyone who was, but it remains a possibility. To continue, one specific limitation of GAD-7 in the context of my survey is that it requires respondents to rate the items based on their experiences during the last two weeks of their lives at the time of completion. Because I am not aiming to actually diagnose any of my participants with GAD, their emotions could fluctuate depending on external agents, potentially translating into their responses.

The final limitation worth considering is related to the nature of Round 2 of the survey. Individual conditions, environments, and opinions can heavily sway one’s risk perception, and some questions in Round 2 cannot account for these elements, regardless of whether they are subjective or objective. For example, in response to Scenario 1 — scoring a 1400 or lower on the SAT and/or a 1300 or lower on the PSAT — a surveyee may claim that it is very much more likely to happen to [them] than to the average student, but this rating could be attributed more to real-life experiences than to anxiety-related symptoms. In other words, a student with greater academic prowess might have lower risk perceptions than a student with a lower one. However, I mitigated this possibility by requiring all participants to have similarly high academic standings. Conclusively, I took all of these limitations into consideration throughout the entire research process.

Conclusion and Future Directions
Overall, my findings and analysis indicate that there is a strong positive correlation between symptoms of generalized anxiety disorder and risk perceptions of future academic prospects among first-rate high school students. Participants with minimal anxiety, judged by GAD-7, had significantly lower risk perceptions than those with severe anxiety. Thus, the initial hypothesis that I presented in the Introduction was proven correct.

Future research on this subject can be expanded in several directions. For example, rather than surveying academically intensive high school students, one could apply this study to those who are not, as the results may differ. In another line of thought, one could also stray away from teenagers as a target population; adults working in competitive fields are another group of people who are at risk from anxiety. All in all, however, further developments regarding this specific topic can be made by changing a particular facet of the research design, such as implementing qualitative surveys instead of quantitative ones. Furthermore, other steps can be taken to address certain details that I mentioned throughout the paper; limitations like sample size and diversity can easily be eliminated by recruiting a larger number of students from all over the country. This can better generalize the data and make it more suitable to the research question as a whole.

The results of this study also offer several implications that are essential to understanding adolescent anxiety. Firstly, although this paper concentrates on academic success, it is not the only factor that can influence risk perception; for instance, a top-grade student athlete who experiences grievous performance anxiety might perceive a high level of risk for missing a critical point during a game. Additionally, this study emphasizes students’ perennial need for external reassurance. For many high schoolers, academic failure (by their individual standards) deals a heavy blow to their confidence and dignity, and, oftentimes, it is difficult to escape the cycle of self-deprecation. High-achieving students may feel comfortable heartening and enlivening their peers, but they are devastated when they are the ones under the same circumstances. Regardless of how prevalent the epidemic of anxiety is, this kind of behavior only encourages a toxic culture of social and academic pressure. In summation, there is still a long way to go before society can truly liberate high school students from this anxiety-oriented mindset.

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