

# IQ as an Indicator of Academic Stress, Study Habits, and Academic Performance

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## **ABSTRACT**

Intelligence quotient (IQ) and its impacts have been studied heavily in previous research. However, studies have not yet sufficiently applied IQ to an academic environment, especially in high-school aged students. To fill this gap in the field of study, this study utilized a mixture of qualitative and quantitative methods to measure trends in the behavior of students at different IQ levels and evaluate the strengths and weaknesses of student populations. The study's participants, comprising of 21 high schoolers, voiced and quantified their opinions on their personal experiences regarding stress, study habits, and academic success. Ultimately, the trends in high IQ and low IQ groups suggest that IQ is a valuable statistic in educational environments which can be used by educators to improve student weaknesses. The exposure of IQ scores in academic settings would provide crucial insight into the behavioral trends of student groups and can make a lasting positive change in education.

## Literature Review

Intelligence quotient (IQ) is a measurement which "correlates with cognitive control abilities," (Checa & Fernandez, 2015, p. 2) and distinguishes an individual's ability to complete tasks. As such, a high intelligence quotient is generally considered a positive trait. In the past, however, research has determined that individuals with higher IQ levels are prone to negative consequences. For instance, "a high degree of worry in patients with generalized anxiety disorder (GAD) correlates positively with intelligence" (Coplan et al. 2012, p. 1). With this mixture of benefits and consequences derived from IQ, it is unclear how it can be applied to real-world situations. This study will analyze IQ in a high school setting, where its impacts will be evaluated based on correlations determined by data.

In an academic environment, researchers have observed that "academic excellence can be thought of as the reason of high intelligence quotient" (Garg & Rastogi, 2009, p. 2). However, several studies have concluded that various other components contribute to academic success. A study analyzing the impacts of early life stress (ELS) found that, "When prenatal ELS increased with 1 SD (standard deviation), expected academic achievement decreased with 0.24 SD" (Schuurmans et al, 2022, p. 1841). Furthermore, a study analyzing the habits of high performing and low performing students determined that those who perform stronger academically take notes, sit in the front of the class, meet with the professor after class, attend every class, study with other classmates, and follow other specified study habits (Cerna & Pavliushchenko, p. 2015). This study will analyze the prominence of traits in students related to three academically relevant factors - academic stress, study habits, and academic success - to determine if these traits correlate to the IQ levels of students.

#### Study Habits and Academic Performance

Previous research has proven that, in an academic environment, there is a correlation between certain behaviors and the academic performance of students. The data from a study analyzing the success of students in math classes, "suggests that the self-confidence of the respondents was significantly related to their performance in math," and that if



students highly value or enjoy math, they are statistically more likely to be successful (Capuno et al, 2019, p. 557). Similarly, a study analyzing the correlation between study habits and the success of medical students found a "significant statistical relationship between study habits and academic performance" which implied that, "the utilization of study skills and habits can play a positive role in improving academic performance of students" (Jafari et al, 2019, p. 642). Some of the specific habits which correlate with increased academic success include note taking, teacher consultation, time management, and sleeping habits (Kumar, 2015) (Oluwatimilehin & Owoyele, 2012).

In addition to study habits, it has been proven that stress and motivation are indicators of academic success. A study identifying factors which influence stress in medical students found that, "stress, motivation, and academic performance formed a triangular feedback loop," meaning the three variables are directly correlated, and that, "depression was associated with both stress and motivation, and personality was associated with motivation" (Park et al, 2012, p. 1). Another researcher sourced motivation and mental health as two habits which relate to a student's academic performance along with their other habits (Tus et al, 2020). This study analyzed variables related to the academic performance of high school students. It has been proven that measures of intelligence are related to anxiety and stress and that the habits of students strongly contribute to their academic ability. However, it has been undetermined whether correlations related to intelligence are present in an academic setting and whether intelligence relates to academic success.

## Intelligence and Anxiety

Previous research has expressed a clearly established link between human intelligence and anxiety. A study which compared these two factors by analyzing the content of subcortical white matter in the brains of participants determined that "high IQ was associated with a relatively lower degree of worry," among healthy people, and that "Patients with GAD (general anxiety disorder) exhibited higher IQ's and lower metabolite concentrations of CHO in the subcortical white matter in comparison to healthy volunteers" (Colpan et al, 2012, p. 5). Another study comparing intelligence and anxiety declared that a "high level of EI (Emotional Intelligence) was associated inversely with acute and chronic perceived stress level" (Singh and Sharma, 2012, p. 107).

Along with proof that the presence of anxiety is related to the intelligence of individuals, studies have established a relationship between intelligence and stress coping strategies. For instance, "As emotional intelligence scores increase, people seem to employ more effective coping strategies rather than using less ineffective coping strategies" (Singh & Sharma, 2012, p. 110). The trend has also been observed in an academic environment. A study analyzing the effects of early childhood stress found that because of stress, the school performance of students "differs relative to what would be expected based on intelligence" (Schuurmans et al, 2022, 2). Outside of school, those who experienced early life stress face effects such as, "poor developmental outcomes on a social, emotional, and behavioral level" (Schuurmans et al, 2022, 2). Among a group of students with technology backgrounds, components of emotional intelligence such as, "high motivation, development, altruism and emotional stability," allow students, "to seek opportunity that will help [them] reach their academic goals and recognize the realistic goals along realistic threats and overcome them with zest and confidence" (Garg & Rastogi, 2009, 8). This study will continue to analyze these trends in an academic environment. However, the inquiry will explore IQ as an indicator of these trends rather than general intelligence.

## Intelligence Quotient and Emotional Intelligence

To create an accurate study using IQ, it is necessary to understand the measurement and its impacts. In the past, research has been used to explore the effects of IQ on the individual. It has been determined that IQ, "correlated negatively with the interference index," which demonstrates that those with higher IQ levels have the "ability to inhibit processing of irrelevant information" (Checa & Fernandez, 2015, p. 4). Additionally, among individuals with General



Anxiety Disorder (GAD), "high IQ was associated with a greater degree of worry" (Colpan et al, 2012, p. 4). These effects, among others, have been proven valid through abundant research.

However, IQ and its effects have often been compared to Emotional Intelligence (EI), which has similar effects. In this study, it is important to understand what distinguishes these measures of intelligence. Studies comparing the effects of EI and IQ on stress reactivity found that, "all correlation coefficients calculated for the domain of emotional intelligence scale and stress coping style of active emotional coping and active problem coping were positive," (Fteiha and Awwad, 2020, p. 6) while "general intelligence was not directly related to baseline stress level or reactivity." This leads to the proven conclusion that, "high emotional intelligence rather than general intelligence in subjects might have a role in choosing the right coping resources and strategies for managing stress" (Singh and Sharma, 2012, p.110). This study tested this distinction in an academic environment and found whether academic stress produces the same trends as observed in previous stress-related studies. My findings determined whether there is a correlation between IQ levels and the perceived academic stress of high school students.

## Conclusion

Regarding IQ, study habits, stress, and academic performance, there has been general research completed in the past. This research, however, has explored these topics individually, and tended to analyze them outside of an academic setting. This research will determine whether correlations found within previously completed research remain present when applied to a high school environment. In the inquiry, IQ will be used as an indicator of academic stress, study habits, and academic success, and correlations between each of these components will be explored based on qualitative and quantitative data. Despite previous research regarding IQ, the correlations between it and its components have been minimally explored, especially among high school students. The inquiry will be distinguished from studies exploring general intelligence, emotional intelligence, and other measures of intelligence by focusing on IQ, and will be distinguished from studies exploring academic success and stress by using IQ as an indicator of certain traits among individuals. The new correlations explored in this study will provide a new understanding of IQ and its effects on student populations.

# Methodology

## Overview

In developing this research, I created a correlational study which includes surveys and interviews completed by my sample, which comprised of high school aged students. Correlational research is typically a non-experimental method which allows the researcher to analyze the relationship between two or more variables. This method of study tends to include qualitative data and is utilized most often in studies within fields of social and behavioral sciences. The stated methodology is applicable to my work because the stated goal of my study is to investigate a connection between variables. Using previously completed studies, I determined that this method was the most practical as it allowed me to collect qualitative data from participants and determine a connection between multiple aspects of the topic which I found significant and unexplored. This includes the connections between the intelligence quotient (IQ), study habits, stress levels, and academic performance of students. My method of data collection was comprised of four parts: a general interest survey, an IQ test, a closed-question survey, and a one-on-one interview. Each participant completed all four of these items during the data collection process.



## Gathering a Sample

In my research, I determined that a lack of research had been completed which analyzed IQ in high school students, especially in an academic environment. Based on this finding, I decided to analyze a group of high school students to further illuminate an unexplored variable in the topic of study. Because I used human subjects in my study, it was essential that I met and maintained moral and ethical standards throughout the data collection process. To ensure that my sample understood the conditions of the study, along with the information which needed to be provided, I produced forms which needed to be signed by each participant as an indication of consent to the study's terms and procedures. Three forms were produced for this purpose, including a general consent form, which contained general information about the study and how data would be collected, a parental consent form, which ensured that participants under the age of 18 had consent from their parents or guardians to participate, and an audio-visual addendum, which stated that participants gave consent for their interview responses to be recorded, transcribed, and virtually stored. The forms were intended to protect the privacy of participants and protect individual identities. They also stated that stored data would be destroyed on the specified data of June 15, 2023.

After creating these documents, I produced an interest survey using Microsoft Forms, which I distributed to individuals who met the criteria for participation in my experiment. The only criteria required for participation was that one must be a high school student. The survey contained information regarding the study to inform potential participants of the procedures they would need to follow to provide appropriate data. In the survey, participants were asked to rate their understanding of the study, along with their comfort level regarding the data which they would be required to share, on a scale of 1-5. The survey also asked participants to provide contact information through which I could inform them whether they were to be included in the study.

The general interest survey was distributed through Microsoft Teams. To gather an appropriate sample, I allowed all students within the school to access and respond to the survey. This was appropriate because of the minimal criteria which I required for participation. After its distribution, students responded to the survey over a two-week period. Any respondents were considered in my process of gathering a sample. To begin, I chose only participants who rated their levels of comfort and understanding regarding the study at a 3/5 or greater on the scale-based questions. This selective sampling allowed me to find a sample which would provide the most complete and accurate data, increasing the validity of the responses of the participants.

After choosing participants from the pool of respondents, I distributed consent forms to those who were selected. Along with the forms, I provided further instructions to the chosen participants about how data would be collected in the study. I required each participant to complete and submit applicable consent forms before they provided any information or data. After another two-week period, I finalized my selection of participants, which included all individuals who had submitted their consent forms. With the selected sample, I began scheduling dates and times in which data would be collected. Most participants were interviewed during lunch periods in a quiet hallway. This was done to minimize the number of disruptions participants faced while answering questions.

# **IQ** Testing

I began collecting data from participants by administering an IQ test. To analyze the sample, I used an IQ test produced by Mensa Norway. The test consists of a series of 35 questions of progressing difficulty which must be completed within 25 minutes. The test produces results based on an IQ scale where the average IQ is 100. Due to the brief nature of the test, potential scores range from 85 to 145. To administer the IQ test, I scheduled times where I met with participants and oversaw their completion of the test. Afterward, I gathered the results of each participant and compiled a spreadsheet illustrating the scores of each participant. Using these results, I created groups based on IQ range in my sample. The created groups comprised of a low IQ group (below 95), average IQ group (95-115), and high IQ group (above 115). Participants were not informed of their placement and were not made aware of the creation of groups.



The grouping process was completed so correlations in my data could be compared in each individual group, which fits the study's purpose of identifying whether IQ is an indicator of certain trends among high school students.

## **Closed-Question Survey**

Upon creating and organizing my sample into groups, I distributed a Forms survey to each participant to gain insight into their academic experiences. In the survey, all questions were designed as either multiple choice or scale-based questions. I chose to distribute only closed questions to gather a form of quantitative data which I could use to determine correlations within each group. By applying quantitative data to correlational research, a qualitative method, I was able to ensure that there were no flaws in my quantitative findings. All analyses made from the interview responses of participants were backed by information from the scales developed in the surveys. Responses were sorted based on the group of the participants, and each group had individual results which were analyzed.

In the survey, questions were created to generate feedback related to three separate components of the study. This included academic stress, study habits, and academic success. Survey questions asked participants to answer a series of questions in a multiple-choice format. The multiple-choice questions were designed to gather general information from participants, such as whether they follow a certain study habit or how often they achieve a high grade in classes. Afterward, participants were asked to respond to a series of statements on a five-point scale. On the scale, a rating of one correlated with "completely disagree," and a rating of five correlated with "completely agree." These scale-based questions were designed to gauge whether students at a certain IQ level have different experiences than their peers at different IQ levels in an academic setting. When combined with the multiple-choice responses, these ratings allowed me to observe correlations in each IQ group through quantitative data.

#### Interviews

In a correlational study, it is pivotal that data is included which measures a relationship between multiple variables. Although the closed-question survey provided some general information regarding the trends students follow among different IQ groups, it did not have the same effect as the interviews in exemplifying the relationship between each component of study. In the interview, participants were asked to answer a series of open-ended questions regarding their firsthand experiences with academic stress, study habits, and academic success. The questions were designed to gain insight from participants which the survey did not cover, and to build connections between the topics of different questions. To accomplish this task, I also included a series of follow-up questions for each question which I asked participants who were unsure of how to answer the question or left essential details out of their response. This allowed me to ensure that responses were complete and accurate. Interviews occurred over six weeks, and participants completed their interviews individually.

After the interview process had concluded, I began to transcribe and organize the responses of each participant. Before beginning the transcription process, I stored the recordings of interviews digitally and sorted responses by the name of the participant and date of the interview. Additionally, the responses within each IQ group were stored in separate locations. During the transcription process, I followed the same method of organization. To transcribe interviews, I played the audio recordings of each interview and typed out the responses to each question. The transcription of each interview was placed in a separate document, and each document was added to a spreadsheet. Three spreadsheets were created to correspond to the three IQ groups. These transcriptions were included in the study to convey the qualitative findings and correlations observed in the audio recordings. These transcriptions were used as my primary source of qualitative analysis.



## **Data Analysis**

My study included a combination of qualitative and quantitative data. Due to this mixed data collection method, I separated my analysis into two processes, one including only qualitative data and the other only quantitative data. I chose to utilize both qualitative and quantitative figures to best fit my research question, which includes IQ, a quantitative value, along with comparisons to academic stress, study habits, and academic success, which are primarily qualitative values. By including both types of data, I was able to effectively compare these values and satisfy the correlational intent of my research.

In my analysis of qualitative figures, I began by creating 21 transcriptions of the interviews which I gathered from participants during data collection. I stored each individual transcription in an Excel spreadsheet, where I organized the transcriptions by the IQ scores of each participant. Following this process, I developed a list of 10 themes which were determined through my identification of common responses from participants. The themes were developed to fall under the three primary qualitative components of my research: academic stress, study habits, and academic success. After creating these themes, I gathered the most relevant and insightful quotes from my interviews by reviewing each transcription and finding responses from participants which closely related to the 10 themes I developed. I stored these significant quotes in a Word document, and organized them by theme, participant, and participant IQ level. These quotes were used to represent findings and correlations which were reflected in my quantitative data and helped me to determine which quantitative trends were most relevant among students of different IQ levels.

When analyzing my quantitative data, I organized the data from my quantitative survey into an Excel spread-sheet. I organized the data by creating a table, with each row representing the responses of a participant, and each column representing an individual question from my survey. Afterward, I calculated 5 figures to represent the responses, including mean, median, mode, variance, and standard deviation. I calculated these figures for each individual question, where the figures represented the full sample of participants. For most survey questions, I used a scale, ranging from 1-5, which represented the extent to which respondents agreed with a given statement. A score of 1 indicated complete disagreement, while a score of 5 indicated complete agreement. I used these values to calculate the 5 figures I previously introduced. For questions which did not use this scale, I converted qualitative scores into quantitative scores which were used in my calculations. For instance, regarding responses to the question, "How much time do you typically spend completing homework daily," I converted a response of "Less than an hour" to a score of 1 and a response of "More than 4 hours" to a score of 5.

After calculating unique figures for each question, I searched for the distinct and significant correlations in the data. I observed correlations which existed both within individual IQ groups and within the entire sample. Using the features in Excel, I created appropriate graphs and charts to reflect findings relevant to the goal of my study. Then, I reviewed my list of significant quotes and searched for qualitative responses which reflected my findings. I ensured that I included data from each of my three IQ groups to represent IQ's correlation to my study's findings accurately and sufficiently. After reviewing my original list, I developed a new list of significant quotes which I organized according to each quote's relationship to my quantitative findings. In this way, I ensured that the quotes used in my study would be reflective of the quantitative sample. Using this combination of qualitative data, comprised of quotes, and quantitative data, comprised of charts and figures, I effectively discovered and analyzed relationships between the IQ of students and their academic stress, study habits, and academic success. I reflected these relationships in a series of figures produced in accordance with the most significant trends which I found.

## **Results**

Among the entire sample, I observed that students spend an average of about 2 hours on homework every day, which converts to a mean of 2.667 on my 5-point scale. On a similar note, students reported that they spend an average of between 1-2 hours studying for exams daily, which converts to a mean of 2.286. Students reported that they spend an

average of between 2-3 days studying per week, which converts to an average of 2.524. Based on the standard deviation of these figures, these values could potentially vary by about 1 point on the scale, which indicates a variance of about one hour in the daily measurements, and about one day in the weekly measurement. On average, participants responded that they achieve an average grade between an A and B, which converts to a mean of 4.143 on the scale. This figure had a standard deviation of 0.888, which indicates a variance of just under a letter grade. A combination of these four measurements is illustrated in Figure 1.

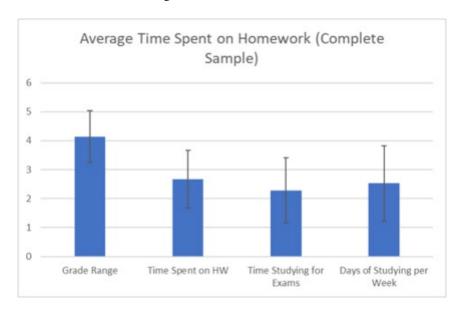


Figure 1. Average Time Spent on Homework

Additionally, I determined correlations between IQ and grade range, time spent on homework, time studying for exams, and days of weekly studying. I determined that students with higher IQ scores generally received higher grades. This figure had a correlation coefficient of 0.44127. Of the five students in the high IQ group, all five had at least an average grade of A-B. Of the seven students in the low IQ group, three had an average B-C or below.

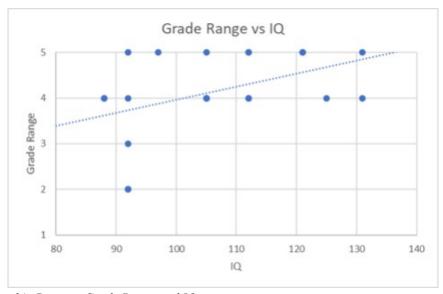


Figure 2. Relationship Between Grade Range and IQ

Responses indicated that IQ and time spent on homework did not share a significant correlation. The correlation coefficient between these two values was 0.046861, indicating that there was no relationship between the variables.

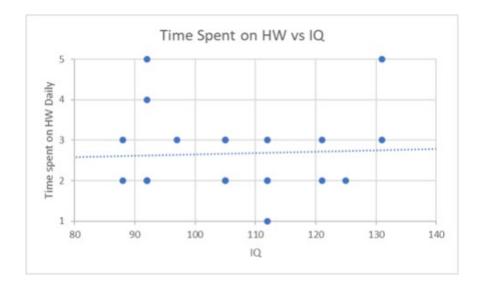


Figure 3. Relationship Between Time Spent on Homework and IQ

However, although IQ and time spent on homework were not related, there was a substantial correlation between IQ and the average time spent studying for exams. I found that four of five participants in the high IQ group indicated that they spend an average of either 1-2 hours studying or do not study at all. The coefficient relating these two variables was -0.26534.

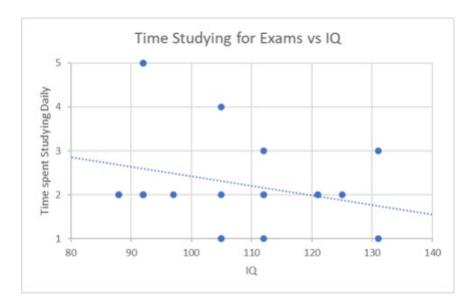


Figure 4. Relationship Between Time Spent Studying for Exams and IQ

There was a similar negative correlation between IQ and the number of days students spend studying weekly. The relationship had a correlation coefficient of –0.4867. Within the high IQ group, every member indicated that they spend two or less days studying weekly. On the contrary, four of seven members of the low IQ group reported that they spend three or more days studying weekly. Three of these members reported that they study every day.

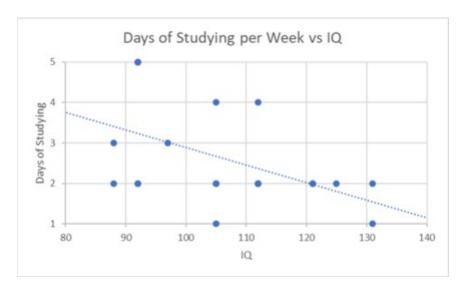


Figure 5. Relationship Between Number of Days Studying and IQ

## Study Habits

A sizable portion of my research was dedicated to exploring correlations between the IQ of students and their study habits. My findings indicated that in general, students with higher IQ scores tended to have inferior study habits compared to their peers. In Figure 6, I have included a list of specific correlations which fall into the field of study habits. Of the correlations I found regarding specific study habits, I determined one of the most substantial correlations to be between a student's IQ and their tendency to ask for help from others. The correlation coefficient between IQ and asking for help from a teacher was –0.5101, while the coefficient between IQ and asking for help from classmates was –0.2254. Additionally, I found that students with high IQ scores are significantly less likely to utilize notes in class. The correlation between IQ and a student's tendency to take notes often in class had a coefficient of –0.3131. The correlation between IQ and a student's tendency to review notes outside of class was even more negative, with a correlation coefficient of –0.4061. Students with higher IQ scores were also significantly more likely to procrastinate. The correlation coefficient between IQ and tendency to wait until the deadline approaches to complete assignments was 0.41635. Some additional findings included that students with higher IQ scores were less likely to sit in the front of the classroom, review with classmates, and complete large assignments in small parts. I found a negligible correlation between a student's IQ and their belief that stress affects their study habits, and that poor study habits hold them back academically.



**Table 1.** Correlations Between IQ and Study Habits

Measured Value	Coefficient (R)
I typically sit in the front of the classroom.	-0.34
I ask my teachers for help when I do not understand a topic.	-0.5101
I ask my classmates for help when I do not understand a topic.	-0.2254
I review material with my classmates.	-0.2532
Academic stress affects my study habits.	-0.1797
I review my notes outside of school.	-0.4061
I take notes very often in class.	-0.3131
I complete large assignments in small parts over multiple days.	-0.2958
I wait until the deadline approaches to complete assignments.	0.41635
Poor study habits hold me back academically.	0.00604
I use my free time in school to complete work.	-0.1329

#### **Academic Stress**

Another primary component of my research was exploring correlations between the IQ and academic stress of students. In most cases, I observed that there is little relationship between these figures. A list of the figures related to stress is illustrated in Figure 7. Based on the responses of the participants, there was no correlation between the IQ of students and their belief that homework is the primary cause of their stress. On the same note, a similar trend could be seen regarding the belief that exams are the primary cause of stress. Additionally, there was no correlation between IQ and the effects of stress on students. This was indicated by a lack of correlation between IQ and the belief that students' lives were negatively impacted both inside and outside of school because of stress, as well as the belief that students were unable to relax outside of school because of stress. The only major trend which I observed relating to stress was that students with higher IQ scores are less likely to be overwhelmed by homework. This correlation had a correlation coefficient of -0.364.



Table 2. Correlations Between IQ and Academic Stress

Measured Value	Coefficient (R)
Academic stress affects my study habits.	-0.1797
Exams are the primary cause of my academic stress.	0.10742
Academic stress negatively affects my life outside school.	-0.1747
Academic stress negatively affects my life inside school.	0.00839
I am unable to relax at home as a result of academic stress.	-0.0364
My academic stress interferes with my mental health.	-0.023
I am often overwhelmed by homework.	-0.364
Homework is the primary cause of my academic stress.	0.132954

## **Academic Success**

I have already discussed my findings regarding the relationship between the IQ scores and grades of students. However, I also analyzed two other trends which fall under the category of academic success. The first of these trends was the correlation between a student's IQ and their ability to retain information from earlier parts of the year. These variables shared a positive correlation with a coefficient of 0.214842.

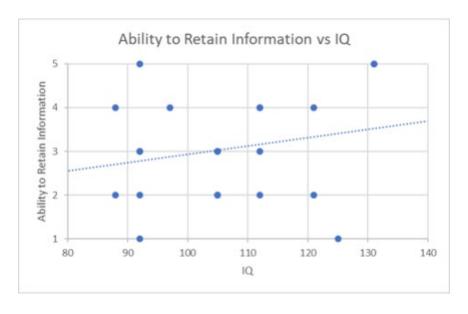


Figure 6. Relationship Between Information Retention and IQ

Additionally, I explored the correlation between a student's IQ score and their belief that their grades are representative of their effort in school. These variables shared a negative correlation, where the students with high IQ scores felt that their grades were less representative of their effort, with a coefficient of –0.2024.

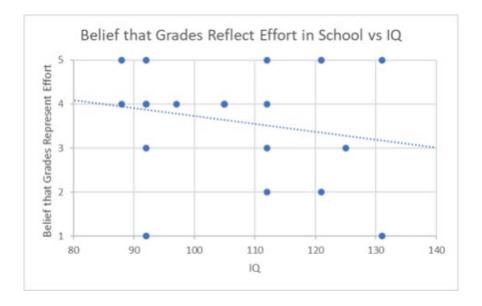


Figure 7. Relationship Between the Belief That Grades Represent Effort in School and IQ

## Limitations

Though this study produced valid results and correlations, there were a few aspects of the research process which could have slightly harmed the legitimacy of the data. These limitations were caused in part by concerns regarding feasibility, and concerns regarding funding. In future research, the issues which I found in my study should be considered and mitigated.

One concern I had while developing my study was finding an IQ test which was applicable to my sample. There are a variety of IQ tests available online, but most of these are prone to issues. Some tests were applicable to my sample but were not backed by research and could therefore be ineffective in providing appropriate analysis. Others were backed by research, but cost money to use, which was a concern because I could not afford access to these materials. Because of such factors, I settled on a test produced by Mensa Norway, which was both free and backed by research. However, the test was short, comprising of only 35 questions, which may have skewed the results. Furthermore, the test was intended for adults, and my sample was comprised of high school students. Having access to a longer, paid test would have helped me to produce more accurate results.

Another primary issue in my study was the small size of my sample. My study only included 21 participants, which means that data could have been skewed or inaccurate. Furthermore, my study required me to divide participants into three groups. However, these groups became considerably small due to the lack of participants present in my study. My smallest group, the low IQ group, comprised of only five members, increasing the risk of the presence of invalid data. In future research, the use of a large sample of students may yield some results which are different from those found in this study. Another issue with my sample was the substantial proportion of participants with high academic achievement. Out of 21 participants present in my study, only three had an average grade of B-C or lower. As such, the information in my study lacked representation from unsuccessful students, which possibly skewed trends in my data.



## **Future Research**

In future research, similar studies can expand on my findings by analyzing the correlations on a larger scale and with a larger sample. My research was limited by both time and monetary constraints, and a researcher with access to more materials may be able to build off my data and produce new results. Additionally, researchers can construct correlations between IQ and other factors among high school students, such as the relationship between IQ and athletic performance or the relationship between IQ and family status. In short, IQ is a greatly unexplored field, particularly when related to high school students. While my study was able to find some correlations in this field at a basic level, future researchers will be able to both expound my findings in greater detail and explore correlations which were not covered in my research.

# **Significance and Implications**

The correlations found in my study provide new insights into the educational experiences of high school students. My findings establish an understanding of IQ and its ability to impact student success, and can be used by students, teachers, and other educational figures to enhance the education of high schoolers. My study found that students with higher IQ scores tend to have higher average grades. However, these students are also less prone to stress and have inferior study habits compared to their peers. As such, educators should focus on improving such weaknesses based on my observations.

For students with low IQ scores, educators should be aware of the increased level of stress these students face in comparison to their counterparts. Alternatively, for students with high IQ scores, educators should consider the generally poor study habits of these students despite their academic success. By considering the strengths and limitations of students in accordance with IQ, schools will be able to effectively manage the areas in which students lack success. For instance, educators could spend time on managing and reducing stress with low IQ students or focus on enforcing the importance of specific study habits with high IQ students. Such a process would require schools to gain access to the IQ scores of students. This can be managed through either a school-wide IQ test or a standardized test, which would be shared among multiple schools. Having access to IQ as a figure would allow schools to understand and combat weaknesses within students. Yet, the topic of IQ in educational settings remains largely unexplored and many implications remain to be discovered in future research.

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