

# Analyzing If Personality and Effort Predict High School Performance Better than Standardized Testing



Abigail Long  
Jr. Arnold High School

## Abstract

The purpose of this study is to identify if the personality traits and work ethic expressed by a student are better predictors of academic performance, in terms of GPA, than a high-stakes standardized assessment. Previous research has tied a strong connection between Conscientiousness and academic achievement, but fails to address the implications of the other four main personality traits, under the abbreviation of OCEAN. Also Florida's Benchmarks for Excellent Student Thinking Standards (B.E.S.T) Assessment was taken into account when measuring student achievement through standardized tests.

## Introduction

The standard for intelligence was predicting success on the criteria of General Cognitive Ability, often referred to as the Intelligence Quotient (IQ). This traditional view of intelligence relied on the factor that a student's performance was immensely limited by one's innate mental ability and that reality dictates one's success (Spearman, 1904). However, modern education pushes frameworks such as Florida's Benchmarks for Excellent Student Thinking Standards (B.E.S.T), which have moved towards a Whole Student approach, that is a three-legged stool that makes up student development. While the classroom tends to value traits of curiosity and organization, standardized assessments such as the B.E.S.T, ACT, or SAT tend to reward test-taking stamina, or speed. Creating a disconnect between the B.E.S.T standards value and what the high-stakes tests actually measure (Florida Department of Education, 2021).

The honest issue here is not that the FAST assessment is hard; it is that it creates, along with other Standardized assessments, a blind spot in measurement, whereas students' entire academic infinity is defined and reduced to a single number that ignores their drive and personality. Reducing an individual's work effort, they have displayed for four years to a number acquired from a three-hour test. This jeopardizes individuals who do not fit the mold in education

## Hypotheses

Non-cognitive traits of personality and effort will account for much of the amount of variance in GPA beyond the prediction explained by standardized testing.

## Methods

Correlational study where Data was collected from three main sets: objective achievement data, psychological metrics, and quantitative data. Comparing the predictive validity of two non-cognitive factors, personality traits and effort, against the traditional cognitive metric of standardized test scores in predicting high school academic performance.

### Participants

- Amount Survey Respondents : 65
- Amount of Valid Survey Respondents: 46
- 62.2% were women and 37.8% were male

## Results

86% have high work ethic if they have high conscientiousness  
 13% have high conscientiousness with low work ethic  
 24% of individuals have their lowest personality score being C  
 Low work ethic and low C 18%  
 Low work ethic and high C 81%  
 93% of individuals in this study have a higher Work ethic score than their Conscientiousness personality trait  
 High Agreeableness and Neuroticism -40%

SAT	Gender	Highest OCEAN	Lowest OCEAN	FAST
1400	Male	Openness	Neuroticism	5
1380	Male	Extraversion	Agreeableness	N/A
1360	Female	Agreeableness	Conscientiousness	N/A
1280	Female	Conscientiousness	Agreeableness	N/A
1270	Male	Conscientiousness	Openness	1
1260	Male	Conscientiousness	Neuroticism/E	5
1250	Male	Agreeableness	Neuroticism/C	5

Student #37	GPA	Highest OCEAN	Lowest OCEAN	Work ethic
Junior	WGPA: 4.47	Openness	Conscientiousness	2.17
Female	UWGPA: 3.94	Neuroticism	ACT: 33	lowest out of 46

## Discussion

### Limitations

- Correlation does not equal causation. so though there is a pattern no cause can be determined.
- Amount of valid participants could've skewed data.
- Hand-scored data could have lead to human error
- Lack of reported FAST scores impacted on the original goal to compare them.

### Implications

- Student #37 is a prime example of standardized assessments being a insufficient metric, as her success is driven by a strong interaction of personality traits.
- A relationship between who the student is and their GPA can possibly be stronger than a students relationship with their SAT/ACT and GPA

### Conclusions

- A standardized test is a single high stakes moment where personality traits sustain achievement overtime.
- For colleges and universities one should take into account the entire person not just a three hour test/ standardized test score to determine who will be more successful in higher level education.

## References

Spearman, C. (1904). *APA PsycNet*. Psycnet.apa.org. <https://psycnet.apa.org/record/1926-00296-001>

Florida Department of Education . (2021, April 8). *Standards review*. Wwww.fldoe.org. <https://www.fldoe.org/standardsreview/>