

PERSONALITY AND GPA: WHO PERFORMS WELL?

Dennis E. Clayson, University of Northern Iowa

Abstract

Two separate measures of personality were taken from students in marketing classes and compared with their cumulative GPA. The Big-5 factor of conscientiousness was found to be consistently related to grades, while creativity and self-reported self-liking were generally negatively related. There was some evidence that marketing students may have a larger personality/GPA association than other majors. Implications are reviewed including the possibility that students can do quite well in most classes by memorizing material without much curiosity or creativity.

Introduction

There are several relationships found between GPA and business students that would lead us to suspect that an association should exist between their GPA and their personality. Although there has been a wide-ranging historical debate in psychology about the nature and measurement of personality, most research is currently being conducted using the Big-5 theory because of its measurement simplicity and the large body of work that has accumulated using the instrument.

The five factors are:

1. *Openness* to experience: People high on this factor tend to be creative, curious, and original, while low scores are associated with being conventional, down-to-earth, and uncreative.
2. *Conscientiousness*: Highly conscientious people tend to be well-organized, careful, and reliable, while people with low scores tend to be disorganized, and undependable.
3. *Extraversion*: This is a classical introversion/extroversion factor with which most people are familiar.
4. *Agreeableness*: High scorers tend to be cooperative, good natured, sympathetic, and courteous, while low scorers tend to be more critical, suspicious, and perhaps harsh and callous.
5. *Neuroticism*: Those high on this factor tend to be nervous, insecure, and high-strung, while low scores are typical of people who are calm, relaxed, and more secure.

Numerous research reports have been published in an attempt to find a link between personality and GPA. However, the literature is missing several elements. First, although personality has been shown to be related to a single class grade in marketing, no research was found utilizing marketing students or marketing classes with GPA. Second, no research was identified comparing standardized measurements of the Big-5 instruments with a direct measure of the students' own perception of their personality and its relationship to GPA. Third, no studies could be found relating a students' perception of their own likeability to GPA. This is an interesting oversight given that students use their perception of the instructor's likeability to evaluate instruction, which is related to their perceived level of learning.

Purpose

This descriptive study looked at the relationship between self-reported personality traits and the Big-5 personality factors on the cumulative GPA of students in a marketing core class. It investigated:

Table 1: Regression of GPA with Personality Factors**Student Characteristics**

Total	GPA	n = 459	M = 3.13	Sd = 0.41	Low = 1.99	High = 4.00
Female	GPA	n = 254	M = 3.22	Sd = 0.38		
Male	GPA	n = 205	M = 3.01	Sd = 0.41		
						t(457) = 5.66, p < .001
GPA/Likeability		r = -0.113	t(455) = 2.43, p = 0.016			

Big-5 Responses

	Sex	Openness	Consc	Extro	Agree	Neuroticism
Beta	0.166	-0.027	0.288	-0.107	-0.103	0.038
t	3.29	-0.56	5.64	-2.17	-0.26	0.75
p	0.001	0.547	0.000	0.030	0.794	0.454
Tolerance	0.893	0.967	0.879	0.937	0.900	0.909
(R ² = 0.147, F (6, 373) = 10.72, p < 0.001)						

Direct Responses

	Sex	Open(Creat)	Consc	Extro	Agree	Neuro(Stable)
beta	0.245	-0.155	0.187	-0.037	-0.001	-0.080
t	5.47	-3.47	4.08	-0.81	-0.03	-1.77
p	0.000	0.001	0.000	0.417	0.978	0.078
Tolerance	0.962	0.967	0.919	0.945	0.909	0.934
(R ² = 0.130, F(6, 450) = 11.21, p < 0.001)						

1. The relationship between students' direct assessment of their personality with a standardized Big-5 instrument.
2. The relationship between these two measures and the cumulative GPA of students in a marketing core course.
3. The impact of students' perception of their own likeability on GPA.

Method

For the last eight semesters, 459 students in an undergraduate consumer behavior class have completed a standardized Big-5 personality inventory as part of a class assignment. The cumulative GPA of each student was self-reported. Independent internal studies had found a close relationship between student-reported GPA and actual scores. In addition, a direct measure of personality was also included consisting of a scale anchored by the Big-5 factors utilized in previous research.

Results

Female students have significantly higher GPAs than males, and that is taken into account in the following analyses. There is a significant association (all with probabilities < 0.001) between the factors on the Big-5 inventory and the direct measures of personality.

GPA is positively associated with *Conscientiousness* and *Neuroticism* on the the Big-5 inventory, but negatively related to *Extraversion*. *Openness* and *Agreeableness* showed no

direct relationship with GPA. However, when *Openness* is clearly identified as being related to creativity in the direct response inventory, the association becomes negatively significant. There is a small but significant negative association between GPA and a direct measure of likeability.

The GPAs of marketing majors, marketing minors, and non-marketing students in the consumer behavior classes were found to be similar, but only marketing students showed any associations between personality factors and GPA.

It is possible that some of the non-significant associations were confounded by the linear assumptions of the associational measures. This was found not to be the case. It is also possible that a combination of personality factors may be related to GPA when the factors standing alone were not. An “ideal student” could be identified as one who is in the top 50% of all persons in *Conscientiousness*, *Openness* (original, creative, and curious), and in the bottom 50% on *Neuroticism* (i.e., being calm, secure, and hardy). An analysis found that GPA trends in the positive direction, but the mean scores are not significantly different.

Summary

1. A strong positive relationship was found between the students’ self-reported personality and the factors found on the Big-5 standardized instrument, indicating that future research could use a self-reported measure.
2. *Conscientiousness* was found to be consistently related to GPA. If *Openness* was clearly identified as “imaginative/creative”, it too was related, but negatively. While there was a significant association between *Extraversion*, and *Neuroticism* with GPA, only *Conscientiousness* and being introverted was significant when all the factors are regressed together, and even then, introversion was removed as a significant factor if self-liking was added to the regression.
3. Overall, and excluding *Conscientiousness*, personality factors were not consistently related to the GPA of students found in a consumer behavior class, and the ones that were associated were not necessarily in the direction that would be expected.
4. Creativity and self-liking are negatively related with GPA.

Implications

The lack of association with *Openness* in the Big-5 inventory is troubling. *Openness* supposedly is related to being original, creative, curious, and complex. This small association could be a result of how our students are taught and what we expect of them to earn a grade. The findings would suggest that the lack of association, or weakly negative association, between GPA and *Openness* found in this study may result from classes that do not require thoughtful and reflective thought combined with the creativity associated with fluid intelligence to obtain a high grade. In blunt terms, it implies that irrespective of our intent, our students can do quite well in most classes by memorizing material without much curiosity, and (given the negative relationship with self-liking) apparently without need for self-esteem.

References Available upon Request