

Student Personality and College Fit

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Author Note

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Abstract

This study looks at student personality in relation to the college they attend and how that influences fit within their college. Undergraduate students from each of the colleges at RIT were given a short survey including the Ten-Item Personality Inventory (TIPI) and questions assessing feelings of fit with others in their college. Although there is no apparent difference in big 5 personality dimensions between the colleges, students high in conscientious and those who felt they fit better are more likely to be pursuing a career directly related to their field of study. Selecting a field of study based on how perceived fit with a college may be helpful for students in selecting a field of study.

Keywords: Personality, College Major

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A variety of factors influence how college students choose a college and field of study. Figuring out which of those factors actually lead to student success and finding a job from that college should help students make more informed choices. Fit with the personalities of others in that major is subject of review for this study.

Students have a wide array of options when choosing to apply to college that often involves choosing a degree and field of study. With many options available some students even end up changing their major once if Got they figure out what fits them well. Students who begin college without a major in an 'undecided' program become much surer in what they want to study after one year. (Wright, 2018) Students will often also change their degree slightly to better fit what they want to do; this might include changing minors or switching to a major within the college that more closely matches their skillset. A student's family situation can also play a role in college major choice. Lower SES students are more likely to choose majors that lead to more lucrative jobs. Parental involvement has also been shown to increase the chances of students choosing to study a similar field as their parents. (Yingyi, 2009) Students with high SAT Math scores are more likely to choose majors such as physics or engineering, while students with high SAT writing & reading scores are more likely to choose majors such as literature, foreign language, and communication. (National Center for Education Statistics, 2005). Students are likely to choose majors that match their skills and abilities. Academic performance has not been shown to correlate with interest in the major a student is studying (Pozzebon, Julie, Ashton, Visser, and Beth, 2014) This is likely due to students choosing to major after being able to evaluate other students who have decided on a major.

Malgwi et al. examined factors leading to student's initial choice in college major as well as causes for switching. Interest in the subject emerged as the largest contributing factor in initial major choice followed by career opportunities and pay from a list that also included various advisors, parents, guidance counselors, and college open houses. Approximately 48% of their respondents had one or more change of major. Similarly, Interest in the subject and other positive factors about the new major were the largest contributors to the choice while negative factors about the old major had significantly less effect.

Stereotypes about the personalities of people in a field has also been shown to influence how students choose a college major (Noel, Michael & Levas, 2003; Schlee, Harich, Kiesler & Curren, 2007). This leads to students selecting a major that more closely matches their own personality, reinforcing those same stereotypes. However, as Pringle et al. (2010) examines, these stereotypes can often be harmful in creating false expectations for students as they enter the workplace. One other factor that could influence this choice is the general personality within that college and how well as student feels they match and can get along with that type of personality.

The big five personality traits were used to evaluate student personality along 5 broadly defined dimensions; Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience. A person high in Extraversion would be more socially outgoing and prefer to work with people. A person high in Agreeableness would be more willing to compromise and empathetic. A person high in Conscientiousness would be rule oriented and controlled in their behavior. A person high in Neuroticism would have less emotional regulation and be reactive to stressors. A person high in Openness to Experience would be more curious or creative. (McRane & John, 1992) This should cover the wide range of personality that can be found between different colleges and provides multiple ways in which to compare students. As a specific

measure, the Ten Item Personality Inventory was used to decrease the time it would take and make it easier to assess student's personalities. The Inventory is used to calculate Big Five personality traits with two items for each dimension, one of which is reverse coded. It correlates reasonably well with longer measures with more in-depth questions for all five dimensions and provides a personality index with some external validity (Gosling, Rentfrow & Swann, 2003).

It was hypothesized that there would be differences in big five personality traits between colleges and that students that more closely matched the personality of their college would feel more included or 'fit' better with their major as well as be more likely to go into the same field as their major.

Methods

Participants

Through the survey, 63 individual responses were recorded from undergraduate students at RIT. At least one response was recorded from each of the colleges at the university with students with first to fifth year status.

Procedures

In order to reach as many students as possible from around RIT a short 5-minute survey was created and sent it out various RIT clubs and groups. This included a standard message that can be found in [Appendix A]. Through an external sign-in page only RIT students were given access to the survey without needing to record student name or email. They were then presented with the consent form that can be found in [Appendix B] and had to select 'Yes' to agree before continuing. They were then presented with a few questions about their college and college fit, followed on the next page by the TIPI. The final section contained some debriefing information

that can be found in [Appendix C]. There were no researchers present while participants took the survey. All TIPI scores were calculated after the survey results were compiled.

Measures

The first section of our survey concerned asked questions about college and fit within that college. Students were then asked to choose which of the 11 colleges within RIT they belonged to; students were allowed to select multiple colleges to account for double majors who might have more than one college. Students were asked to manually input their major in case differences between majors in any of the colleges appeared later on. Some additional demographic information was also collected including the number of club activities they participate in and current academic year.

We were also interested in how well students felt they fit with their college so that we could look at how well that correlated with personality fit withing the college. To catch cases where students didn't fit well in their major we asked students if they had switched to another major or are planning on switching in the future. To get a self-reflection of how well student fit in their major we also asked how interested they are in their field of study, how well they feel they fit, and if they plan to go into their chosen field of study.

To look at personality, the TIPI instructions and questions were included in the next section of the survey. Calculations of personality scores were completed afterwards.

Results

Recruitment

Responses were recorded between February 6, 2020 and March 4, 2020. To keep observations independent, double major responses were recorded using only their primary major and corresponding college. It was also necessary to remove one Alumni response as it did not

meet the undergraduate requirement. In the end there were 62 unique undergraduate student responses with at least one response from each of the colleges at RIT.

Analysis

As a whole, average personality responses for Extraversion ($M = 4.85$, $SD = 0.99$), Agreeableness ($M = 4.54$, $SD = 1.79$), Conscientiousness ($M = 5.23$, $SD = 1.27$), Neuroticism ($M = 4.65$, $SD = 1.49$), and Openness to Experience ($M = 5.41$, $SD = 0.96$) are slightly greater than the average survey value of 4 on the survey [Table 1].

Using a one way ANOVA for each of the personality dimensions; there was not a significant difference between the means of each of the colleges for Extraversion ($F(9, 52) = 1.30$, $p = .26$), Agreeableness ($F(9, 52) = 1.46$, $p = .20$), Conscientiousness ($F(9, 52) = 1.41$, $p = .21$), Neuroticism ($F(9, 52) = 1.15$, $p = .35$), and Openness to Experience ($F(9, 52) = 1.10$, $p = .38$) with an alpha of 0.05. There was one college with a single response, removing this data point had little effect on significance.

When looking at if students felt they fit with others in their college 44 responded 'yes', 13 'sort of', and 4 'no'. For Planning to go into the same field as their major 49 responded 'yes', 10 'maybe', and 3 'no'.

A one-way ANOVA was also used to look at the Personality differences in students who were planning to go into the same field as their major. There was not a significant difference between the means of students who responded 'Yes', 'No' or 'Maybe' for Extraversion ($F(2, 59) = 0.74$, $p = .48$), Agreeableness ($F(2, 59) = 1.71$, $p = .19$), Neuroticism ($F(2, 59) = 2.37$, $p = .10$), and Openness to Experience ($F(2, 59) = .46$, $p = .63$) with an alpha of 0.05. However there was a significant difference when looking at Conscientiousness ($F(2, 59) = 7.25$, $p < .01$). Post Hoc

tests revealed that this was due to subjects who planned to go into the same field as their major rating themselves significantly higher in Conscientiousness [Figure 1].

To get a better measurement of personality fit, the average personality difference from a student's college along all big five dimensions was calculated. For each individual, the difference from each their college personality averages were taken and averaged. The differences were minimal, ranging from 0 to 2.19 and no significant differences were found between the average difference by Fit ($F(2, 59) = 1.189, p = .312$) of Plan to go into same field as major ($F(2, 59) = .183, p = .834$).

A final one-way ANOVA found a significant difference between how well students felt they fit with their major based on if they were planning on going into the same field as their major ($F(2, 59) = 3.54, p = .04$). Post hoc test revealed that students who planned to go into the same field as their major felt they fit better in their major.

Discussion

Although it was originally predicted that student personalities would differ by college, no significant difference was found between the colleges. This may have been due to the relatively large number of colleges relative to the number of responses that we obtained. Personalities were also quite similar within each of the colleges with most students within a single TIPI point away from the average personality of their college along each of the big five dimensions. A large majority of the students responded that they felt as though they fit with others in their major and planned to go into a related field. While there were not a lot of conclusions to be drawn from student personality, some correlations emerged when looking at feelings of fit and their future plans.

It does appear that students who feel as though they fit with others in their major are more likely to want to go into a field related to their major. This is similar to results found by Noel, Michael & Levas (2003) where high school students were more likely to choose a college based on how well they feel they fit with people in that major. It appears that this trend of wanting to be around people with similar personalities continues from college into the workplace. Although there were no significant differences in personality between the colleges, students still reported varied levels of how well they fit with others in their major. This indicates that their colleges still have a stereotyped personality perhaps beyond the definitions of the big five dimensions. As examined earlier these stereotypes may help in making a decision but can also create false expectations (Pringle et al, 2010).

Perhaps the most interesting result is that Conscientious individuals are also more likely to want to go into the same field of study as their current major. This is likely to do with motivation of students planning to use the knowledge they gain from class later in their career. Behaving in a controlled manner towards long term goals is generally helpful in achieving those goals, so it makes sense that students high on this dimension would be actively working towards their goals in college. It is therefore unlikely that someone high in conscientiousness would be enrolled in a major unrelated to their long-term academic or career goals.

Limitations and Future Directions

More responses from each of the colleges may have revealed some of the more subtle differences along the big five dimensions. Agreeableness and Conscientiousness in particular seem likely to show differences given more responses. The measure for 'fit' could have also been expanded from yes, maybe, and no options to include a wider range of values that measure the degree to which students feel they fit. Future research might look at different measurements of

personality to discern what differences exist between colleges. It may also be helpful to look at more generally defined areas of study such as Engineering or Design as RIT contains a few colleges focused on different aspects of each field. Grouping these may help to reveal differences in personality.

Since lower SES students are more likely to choose a college major based how lucrative the related jobs are (Yingyi, 2009), it would be interesting to see how different demographic factors modulate the effect of personality and fit on college choice.

Conclusion

If there are differences on the big five personality dimensions between colleges at RIT, this research did not find it. However, it appears that students still have varied feelings of fit or lack of fit with others in their major. This perception of fit correlates with student desire to continue on and pursue a job in a field related to their major. Students with higher conscientiousness were also more likely to follow this trend. It is therefore still important for students enrolling in college to get a feel of the type of students in different colleges to find a major that helps them towards their long-term career goals. This fit may not be determined by the big five personality traits but there is likely still some factor that influences how well students integrate with others in their chosen field of study.

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Appendix A: Survey Link and Script

I am in a psychology Research Methods class this semester and am conducting a study on RIT colleges and student characteristics. If you are willing to participate please take the survey on the link below. It should only take about 5-10 minutes. This is entirely optional and will be kept completely anonymous.

Link to survey: <https://forms.gle/YLTDDYRf7VELwZhX8>

Appendix B: Consent Form

Thank you for agreeing to participate in our study. Please read this form completely and carefully prior to choosing whether to participate.

In this study, you will be asked to fill out a survey with questions asking about your academic involvement at RIT and questions involving rating personal characteristics.

The survey should take about 5-10 minutes to complete and there are minimal risks involved in participating. There are no right or wrong answers in this study. If you feel any discomfort due to the survey, you are free to stop at any time, and you can receive free counseling from the RIT Counseling Center (at 585-475-2261).

All of your answers will be kept completely confidential. Participation is completely voluntary and you are allowed to discontinue the study at any time without any consequences.

If you have any questions or concerns, you may contact the researchers, Noah Rolince, Jacob Kinley, Lin Welsh, or Dane Sherman at nxr1143@rit.edu, jdk1061@rit.edu, lw5549@rit.edu, or dms7827@rit.edu respectively. You may also feel free to contact our advisors, Dr. Condry or Dr. Godleski at kxcgsh@rit.edu or saggsh@rit.edu respectively.

Appendix C: Debrief

Thank you for participating in our survey. We are exploring the relationship between the college a student is a part of and their personality traits. We are interested to see if different personalities (e.g., extraverts versus introverts) seem to be drawn to different majors and colleges of study. All of your answers will be kept completely confidential but will be compared to people who are in the same and different colleges.

The personality survey that you completed is the Gosling Ten Item Personality Inventory (Gosling, Rentfrow & Swann, 2003). If you would like to see which personality traits apply to you, you can also take it at the following link: <https://psychcentral.com/quizzes/personality-test/>

There are no right or wrong answers to any of the questions on this survey, we are only interested in your opinion. However, if you do feel any discomfort due to the survey, please know that you can receive free counseling from the RIT Counseling Center. Contact at 585-475-2261.

If you any questions or concerns arise, you may contact us, Noah Rolince, Jacob Kinley, Lin Welsh, or Dane Sherman at nxr1143@rit.edu, jdk1061@rit.edu, lw5549@rit.edu, or dms7827@rit.edu respectively. You may also feel free to contact our advisors, Dr. Condry or Dr. Godleski at kxcgsh@rit.edu or saggsh@rit.edu respectively.

Tables

Table 1

Descriptive Statistics of Personality Traits

	N	Mean	Std
Agreeableness	62	4.85	0.99
Extraversion	62	4.55	1.79
Conscientiousness	62	5.23	1.23
Neuroticism	62	4.65	1.49
Openness	62	5.41	0.96

Figures

Figure 1

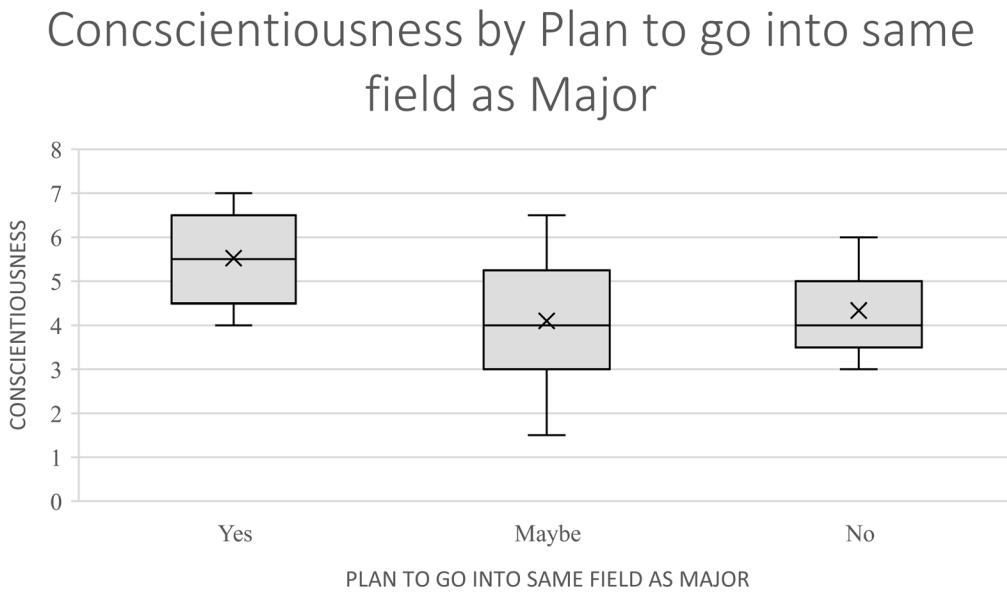


Figure 1. Spread of Conscientiousness scores by response to ‘Plan to go into same field as major’ question. Mean Conscientiousness was significantly higher for those who responded ‘Yes’.