Individual Differences and Reasons for Major Choice

Kaitlyn Ouverson
Advisor: Dr. Marcus Credé

Objectives

• Explore how the self-reported interests and occupational values of students are related to their personality traits
• Gain insight into whether there are different reasons for choosing a single major
• Learn if certain reasons are more important for one major than another

Methods

Participants & Procedures
After providing informed consent, participants (n = 127) completed a 273 item survey. Of these participants, 47 were male, 80 were female; most respondents were first year (n = 72) students with a mean age of 19.7 years. All participants were students pulled from a pool of undergraduate research participants at a large Midwestern University.

Participants by Major (n = 127)

Variables
Using Exploratory Factor Analysis, the researchers decided on four factors, which they named Understanding People (α = 0.782), Social (α = 0.755), Job Security (α = 0.694), and General Learning Orientation (α = 0.635).

Background

Similar studies have examined the link between major choice and personality. Mars, Barb, and Ruggiero (2007) examined the self-reported reasons for psychology major choice and suggested that students majoring in psychology are drawn to the field for a number of reasons, including that they were interested in the subject matter and they wanted to help people. They also looked at the Big Five. The current study also examined students reasons for major choice, looking at the personality variables described below.

The Big Five
Also known as the Five Factor Model (FFM), the big five is a widely accepted and examined model of personality. The personality traits that are described by this model are emotional stability, openness to experience, conscientiousness, extraversion, and agreeableness.

The Dark Triad
The Dark Triad refers to the three personality traits of narcissism, Machiavellianism, and psychopathy. These traits are considered socially malevolent or “dark” qualities and tend to manifest behavioral similarities, such as self-promotion, aggressiveness, and lack of empathy.

Locus of Control
Often an aspect of personality studies, locus of control refers to the extent to which a person believes his life is in his control. A person with an internal locus of control believes her actions are directly impacting her life. A person with an external locus of control puts most of the responsibility for her life events on an external force, such as luck or an authority figure.

Results

Relation between Major Status and Sample Factors

Figure 1. Counts of participants by major or major area.

Sample Survey Items
Twenty questions created by the researcher assessed the interests and vocational values held by participants that led them to choose their major (reasons for major scale), including items such as:

1. I want to understand how society functions.
2. I am interested in most of the topics covered in the field.
3. I want to be guaranteed a job upon graduation.
4. I want to work directly with people to improve their lives.

Participants responded to these items by indicating whether they Strongly Disagree, Disagree, Agree, or Strongly Agree.

Participants also answered questions about their personality; specifically, the researchers were interested in the sample’s scores on items derived from the Big Five, Locus of Control, and the Dark Triad.

Variables
Using Exploratory Factor Analysis, the researchers decided on four factors, which they named Understanding People (α = 0.782), Social (α = 0.755), Job Security (α = 0.694), and General Learning Orientation (α = 0.635).

Conclusions

• Do people with an external locus of control not want to work with and help other people because they don’t believe they have the power to make a difference?
• Do people high on extraversion also have an interest in continual learning because they are attracted to social fields, which frequently evolve?
• What keeps a person’s interest in a major?