


Fall 2021

A Major Decision: Examining the Relationship between Emotional Intelligence, Mindfulness, and Security in College Major

Anya Clare Swinchoski
Bard College

Follow this and additional works at: https://digitalcommons.bard.edu/senproj_f2021

 Part of the [Academic Advising Commons](#), [Educational Psychology Commons](#), [Experimental Analysis of Behavior Commons](#), and the [Vocational Education Commons](#)



This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 4.0 License](#).

Recommended Citation

Swinchoski, Anya Clare, "A Major Decision: Examining the Relationship between Emotional Intelligence, Mindfulness, and Security in College Major" (2021). *Senior Projects Fall 2021*. 28.

https://digitalcommons.bard.edu/senproj_f2021/28

This Open Access is brought to you for free and open access by the Bard Undergraduate Senior Projects at Bard Digital Commons. It has been accepted for inclusion in Senior Projects Fall 2021 by an authorized administrator of Bard Digital Commons. For more information, please contact digitalcommons@bard.edu.

A Major Decision: Examining the Relationship between Emotional Intelligence,
Mindfulness, and Security in College Major

Senior Project Submitted to
The Division of Science, Mathematics, and Computing
of
Bard College

By
Anya Swinchoski

Annandale-on-Hudson, New York

December 2021

Acknowledgements

This project is dedicated in loving memory of Gladys Bruner-Petrilla (1928-2020).

Thank you to Tom Hutcheon, my advisor throughout the senior project. I appreciate your patience and curiosity in helping foster my lines of thinking. I certainly would not have been able to undertake this project without you.

Thank you to my family for endlessly supporting me and engaging me in my studies. To my mom for encouraging me in the spirit of my late grandmother...always encouraging me that “I can do it!” Your enthusiasm is truly unmatched. To my dad, for always stepping in to help me study for my math and science subjects from the time I was little, for motivating me, and for asking the right questions to keep me on my path. To my not-so-little-anymore brother Ben, my sole conspirator and “ray of sunshine” with whom I am confident our research and or/collaborative paths will cross one day!

Thank you, Lily, for being my proofreader and for helping me think through my ideas as well as providing encouragement when the going got tough.

Thank you to Shivani, for being a lifelong friend and one of the most genuine people I know.

Thank you to Eileen Brickner for being my sounding board and an incredible source of support. I truly appreciate the time you have taken to listen and empathize with my struggles as a dual-degree student in the conservatory and for honoring me as a full-fledged adult outside of my identities as a student and musician.

Thank you to my advisors I’ve had in both the college and the conservatory. To Kristin Lane, for encouraging me to demonstrate my enthusiasm for psychology and learning in general. To Erica Kieseletter, who has cheered me along the way of my individual, musical, and academic growth.

Thank you to all the lovely members in the REACH lab, especially David and Isabela. Throughout our shenanigans and “occasional” lab work, I have learned how fantastic it can be to be a part of a research team. Thank you to all of the lab members for helping pilot my study and offering feedback in its initial stages. Thank you, Richard Lopez, for your continued help and support as well as encouraging me to include additional ideas.

I want to extend a huge thank you to all of the wonderful people—friends, acquaintances, mentors, professors, and colleagues—who have inspired me throughout my time at Bard College.

To all of my friends, thank you for believing in me and supporting me along the way!

Table of contents

Abstract	1
Introduction	2
Emotional Intelligence	
Identification and Satisfaction with Major	
Academic Motivation	
Acting with Awareness	
Emotional Intelligence and Mindfulness	
Statement of Hypothesis	
Method	9
Participants	
Measures	
Procedure	
Results	19
Discussion	33
Key Findings	
Exploratory Analyses	
Limitations	
Implications	
Future Directions	
Conclusion	37
References	39
Appendices	45

Abstract

College is an important time for growth and self-discovery, as many prospective students have spent their entire childhood living at home with their parents and siblings. Choosing a major can be a daunting task, especially for those who have not given themselves the time and space to consider what academic and career areas interest them. The present study investigates whether emotional intelligence is associated with major identification and major satisfaction.

Additionally, I investigated whether the “acting with awareness” subscale from the Five-Factor Mindfulness Questionnaire (FFMQ) explains the relationship between trait emotional intelligence and major satisfaction as well as the extent to which one identifies with one’s major. Participants were current college students who completed a survey on Qualtrics assessing trait EI, “acting with awareness,” major satisfaction, and major identification, as well as demographic characteristics. As hypothesized, levels of emotional intelligence positively correlated with higher levels of major satisfaction and identification with the major, along with other key variables measured in the study. Though strong correlations are observed between acting with awareness and emotional intelligence in the sample, the tendency to act according to one’s mindful awareness did not account for the relationships between emotional intelligence and major satisfaction nor identification with one’s major. I discuss the implications of these findings, and how to foster mindful and emotional awareness of academic potential.

Keywords: emotional intelligence (EI), college major, acting with awareness, major satisfaction, identification with major, mindfulness

A Major Decision: Examining the Relationship between Emotional Intelligence, Mindfulness, and Security in College Major

Choosing a major is one of the most important decisions a student will make during their college career (McMillan et al., under review; Nauta, 2007; Soria & Stebleton, 2013). During college, students are surrounded by people with similar interests. They receive encouragement from professors to pursue internships, study abroad, and find employment opportunities. Undergraduate studies also help students network with professionals and find a postgraduate program that aligns with their interests. A person's academic major also determines their schedule and which classes they can take outside of their program of study. Socially, they spend most of their time in their major and will likely become closer with their professors and classmates. Additionally, a person's academic major is an important factor in determining post-graduate and career opportunities.

Emotional Intelligence

Emotional intelligence is derived from Howard Gardner's theory of interpersonal intelligence and intrapersonal intelligence (Gardner, 1989; Morrison et al., 2007; Stys & Brown, 2004; Visser et al., 2006). It was originally defined as an aptitude-based concept. Salovey & Mayer (1990) view emotional intelligence as an innate cognitive ability, which they define as "the ability to monitor one's own and other's feelings and emotions, to discriminate among them and to use this information to guide one's thinking" (Salovey & Mayer 1990, p. 189). It is divided into three branches: appraisal and expression of emotion, regulation of emotion, and utilization of emotion. Later on, other researchers discovered that emotional intelligence involves both cognitive and personality aspects from the big five personality traits (conscientiousness,

openness, neuroticism, agreeableness, and extraversion). Though their views are quite similar, Goleman's research focuses more on how emotional intelligence factors relate to workplace success, while Bar-On (1997) formulated the emotional quotient or EQ (Goleman, 1996; Stys & Brown, 2004). More recently, trait emotional intelligence, also known as emotional self-efficacy, created an opportunity for people to reflect on their emotional abilities, rather than to have them tested in real-time. Petrides and colleagues (2010) define trait emotional intelligence (trait EI) as "a constellation of behavioral dispositions and self-perceptions concerning one's ability to recognize, process, and utilize emotion-laden information." (Petrides et al., 2004, p. 278). The TEIQue is known as a global trait emotional intelligence measure, which will be used in this study (Petrides et al., 2009).

Emotional Intelligence and Academics

Measures of trait emotional intelligence have previously been tied to academic achievement, interest, and aptitude (Berger et al., 2011; Petrides et al., 2002). Berger (2011) and colleagues conducted a study on Chilean elementary school children in early adolescence (3rd and 4th graders). Their study framed socioemotional learning (SEL) as "attachment in the classroom," referencing both student-teacher and student-student relationships (Berger et al., 2011 p. 345). The results demonstrate that there are positive correlations between academic achievement and socio-emotional well-being, self-esteem, social integration, and positive perception of school climate. Well-being and self-esteem are two of the dimensions measured in the (TEIQue).

Emotional intelligence may also differ between academic disciplines. In particular, the humanities tend to have more emotionally evocative educational content than in the sciences (Harrison & Clark, 2016; Morris et al., 2005; Morrison, 2007), which may explain why some students are more inclined to pursue the arts than others. Some studies indicate social work

(Clarke et al., 2016; Morrison, 2007) and business schools (Morris et al., 2005) would benefit from including more arts and humanities in their curriculum to foster growth in emotional intelligence and to ultimately help students develop better interpersonal skills.

A study by Petrides and colleagues (2002) in a British secondary school revealed that trait EI did not significantly affect performance in Math or Science. However, EI did moderate the effect of IQ on test scores in English and GCSE, which is a milestone in the International Baccalaureate curriculum. As predicted in the study, low IQ students benefited from a reserve of EI more than higher IQ students did. Specifically, it may moderate the relationship between cognitive ability and academic performance. The study also concludes that trait EI may be more beneficial in “affect-related” areas of discipline such as the humanities (287). Trait EI and truancy had a negative relationship (Petrides et al., 2002). Petrides et al. (2002) argue that trait EI may explain the relationship to academic achievement, rather than predict it. Similar to the results in the previous study (Petrides et al., 2002), MacCann et al. (2020) found that EI strongly predicted performance in the humanities rather than the sciences. However, it is important to note that this study examined performance in the context of ability EI, and the other study used the trait EI mixed model as a metric. STEM students scored the highest on self-control, specifically in natural and technical sciences (Sánchez-Ruiz et al., 2010). Social science and arts students scored highest on emotionality, the ability to understand one’s emotions and the emotions of others (Sánchez-Ruiz et al., 2010). However, the TEIQue was not used to measure emotional intelligence in the study. Interestingly, self-reported EI more accurately predicted grades than standardized test scores. Their study also acknowledged that different types of EI play a role in academic performance. In another study, EI and academic performance were significantly positively correlated, with a small-to-medium effect size (MacCann et al., 2020).

Students entering college likely have not taken the time yet to recognize their value system independently from their families and develop their emotional literacy skills and self-

awareness needed to access important insight about themselves. Therefore, it is possible that students who are required to declare their major upon applying to a college may be less satisfied with their decision than those who are permitted to decide later on in their college career. Those who have inherently higher levels of emotional literacy and awareness may have an advantage when deciding their college major, especially if it is earlier on in their college career. Hence, a trait emotional intelligence measure could provide useful information about one's relationship to one's academic major.

Identification and Satisfaction with Major

Puffer et al. (2011) discuss how a performance-based EI (emotional intelligence) measure could be used for career assessment. It also calls for students to extrapolate using their self-awareness of their emotional processes. In this study, I decided to take an alternative approach. Since I am assessing students' major decisions after they are made, there is no need to assess performance-based EI. The TEIQue is a global trait EI measure which is more comprehensive and encourages the student to reflect on their emotional experience, naturally bringing up experiences of self-awareness as they relate to the "acting with awareness" mindfulness battery mentioned below. Based on the emotional intelligence and academic literature, two factors below seemed the most appropriate to break down one's relationship with one's major: satisfaction and identification. Previous research has asked students to indicate academic satisfaction in their college experience (Garriot et al., 2015), but few have asked about satisfaction levels in a chosen area of study. The Academic Major Satisfaction Scale (AMSS) is a measure specifically targeted for college students to assess their personal satisfaction level with their major decision (Nauta, 2007). A study by Urquijo & Extremera (2017) found that emotional intelligence has been positively associated with academic major satisfaction in college students.

There has been research regarding the identification of oneself to one's career path (Portfeli et al., 2009; Portfeli et al., 2011), but not precisely about identifying with one's

academic undergraduate major. When a student identifies with their choice of major, it is likely integrated into their self-concept. Major satisfaction is potentially correlated with identification with a major; however, these are two different qualities of the relationship one has with their academic major. Therefore, I adapted a measure from the Vocational Identity Status assessment to incorporate the ideas behind identifying with one's career for a college student population evaluating the decision about their academic major.

Academic Motivation

Motivational styles have been tied to goal pursuit, particularly in the academic domain. The present study frames academic goal pursuit as a person's degree of involvement in their academic major. McMillan and colleagues (under review) are conducting a study on college students and found that autonomous motivation predicted goal pursuit and self-regulated learning. The researchers define self-regulated learning as “the application of strategies to enhance active learning in the academic context” which makes use of metacognitive processes (p.1 McMillan et al., under review). It appears that some process is taking place when one examines that a subject area is important enough for them and then integrates it into their value system. McMillan and colleagues (under review) introduce the concept of "higher attainment value for major," which is the degree to which students value their college major (pg. 12, in review). It turns out that the attainment value—defined as the reported level of importance for students to excel at their major—explains the relationship between goal pursuit and self-regulated learning (McMillan et al., under review). Further, the results suggest that being able to self-regulate and achieve academic excellence indicates an ability to access autonomous motivation and to set goals to obtain mastery in their subject area.

Ratelle and colleagues (2007) explored naturally occurring motivational profiles in both high school and college students. Each sample had three distinct—but not similar—motivational types. Taking both results from the high school and college students together, high

autonomy/high control is associated with higher academic adjustment in high school while a greater indicator of persistence in college students is mere autonomy (McMillan et al., under review; Ratelle et al., 2007). Both studies in their research paper solidify the importance of fostering autonomy. These are interesting findings, however, these data are not longitudinal, so it is hard to establish temporal precedence. On the other hand, the studies mentioned above also indicate that external, or non-autonomous motivation is not strongly associated with positive academic outcomes (Ratelle et al., 2007) The present study hopes to examine the roles of internal and external motivation as a potential factor in the major decision-making process.

Acting with Awareness

Acting with awareness is the ability to appraise situations and act according to values while maintaining self-awareness. “Acting with awareness” is a subscale from the Five-Factor Mindfulness Questionnaire (FFMQ), its other subscales are observing, non-judging, non-reactivity, and describing (Baer et al., 2006). It is negatively related to absentmindedness and dissociation (Baer et al., 2006). An example of “acting with awareness” could be hearing an unflattering comment or offensive statement about oneself and internally recognizing that it was hurtful before acting upon an impulse to react.

It is interesting to note that other facets of mindfulness from the FFMQ model (observing, describing) correlate strongly with seeking aesthetic experiences when controlling for sex and level of expertise (Harrison & Clark, 2016). This finding could explain why certain people are drawn towards the arts more than others, but it is uncertain whether these findings relate to choosing a college major in the arts. Also, mindfulness scores—measured with the Mindfulness Attention Awareness Scale or MAAS—have shown not to differ based on college major (Rieken et al., 2016). Therefore, it is not likely that the “acting with awareness” component of

mindfulness will relate to one's choice of major; rather, it would evaluate how fitting the choice is with the individual's identity and purpose.

Emotional Intelligence and Mindfulness

Prior research indicates that trait emotional intelligence and trait mindfulness are strongly related (Schutte & Malouff, 2011), especially in the domain of emotionality (Miao et al., 2018). It is interesting to note that emotional intelligence is significantly correlated with all mindfulness measures examined in Baer et al.'s study (Baer et al., 2006). Himes et al. (2021) found that lower scores in "acting with awareness" and overall FFMQ were associated with anxiety-driven emotional reactivity. Schutte & Malouff (2011) found that higher scores of mindfulness were related to more positive and less negative affect, as well as more life satisfaction. Also, higher scores in mindfulness were significantly associated with higher scores in emotional intelligence. Emotional Intelligence fully mediated the relationship between higher mindfulness overall scores and lower negative affect (Schutte & Malouff, p. 1118).

In a college student sample, there was a negative association observed with difficulties in emotion regulation on all domains of the FFMQ except "observing" (MacDonald et al., 2020). This would indicate that both the emotionality and self-control subscales of the TEIQue may negatively correlate with low scores on these respective domains in the FFMQ (non-judging, acting with awareness, describing, and non-reactivity). However, it is important to note that the sample majority is from the psychology department (MacDonald, 2020). Overall lower scores on mindfulness—which include "acting with awareness"—are associated with higher negative emotional reactivity following a mood manipulation (Himes et al., 2021). A meta-analysis by Miao and colleagues (2018) closely examined the connection between trait EI and trait

mindfulness and found that measures on the FFMQ (compared Mindfulness Attention Awareness Scale and the Freiberg Mindfulness Inventory) related the most to trait mindfulness, thus making it the most likely to correlate with trait EI.

Statement of Hypothesis

In this paper, I will focus on a pivotal decision in one's college career—choosing one's major. I am interested in whether trait EI and mindfulness influence one's choice of major. If a student acts with their awareness and has high levels of emotional intelligence, they likely will feel more secure in their chosen major. Security in major captures the essence of two target variables: identification and satisfaction with one's college major. Emotional intelligence affects how one processes and interprets emotional stimuli, the “acting with awareness” mindfulness component can determine how much an individual uses their internal observations to make an appropriate major decision. I expect that participants with high levels of trait emotional intelligence and the “acting with awareness” subscale from the FFMQ will also report higher satisfaction with their college major. I propose that “acting with awareness” will mediate the relationship between emotional intelligence and major satisfaction as well as identification with one's major.

Method

Participants

Participants were recruited from the Bard College campus, through personal connections via email, social media platforms (i.e. Facebook, Instagram), and Prolific. Data were collected from 103 participants, but data were used from 77 participants. The Prolific recruitment pool was N=73 and the rest of the participants recruited personally were N=30. Participants were excluded

(n=14) due to insufficient survey data (n=10)¹, had already graduated college (n=1), or reported more than one academic major (n=3).

Advertisements were posted throughout the main buildings of the Bard College campus including each floor of the Stevenson Library, Olin, and the Kline commons dining hall. Participants recruited via email, social media, or advertisements had a chance to enter a raffle to win prizes by entering their email address into an external link. Participants on Prolific were compensated for the time they took to complete the survey. Participants had to be currently enrolled in college and pursuing a single major in order to complete the survey. Prolific participants were compensated \$1.25 for completing the survey and other participants recruited personally or via Bard campus advertisements had the option to enter into a raffle to receive a \$50 gift card. Seventy-seven respondents completed the survey in total.

The overall participant age range is 18-29 years (M=20.51, SD=2.08). Students ranged from 1st to 5th years in college (M=2.84, SD=1.11). Since participants were allowed to report more than one race, responses were coded as identifying with a single race (n=68, 88.31%), bi-racial (n=8, 10.4%), or multi-racial (n=1, 1.3%). Please refer to Table 1 above for gender and race, and SES breakdown. In terms of ethnicity, 19.48% of students reported that they were Hispanic/Latinx (n=15) and 80.52% of students reported that they were Non-Hispanic/Latinx (n=62). Only one student (n=1) reported that they were an international student. 23.38% of respondents indicated that they were first-generation college students (n=18), while 76.62% indicated that they were not (n=59).

¹ Indicating that one has not officially declared their academic major immediately defaults to the end of the survey, but these participants are still recorded in Qualtrics. This was the case for most of the participants with insufficient data mentioned above.

Table 1

Gender, Race and SES of Sample Surveyed

	<i>n</i>	%
Gender		
Man	11	14.29
Woman	61	79.22
Non-Binary/Gender Non-Conforming	5	6.49
Race Breakdown*		
Black/African American	7	9
Asian	12	15.58
Native Hawaiian or other Pacific Islander	2	2.6
White	53	77.92
Hispanic	13	16.88
SES		
Lower	5	6.58
Lower-Middle	15	19.74
Middle	38	50
Upper-Middle	18	23.68

Note. SES=Socioeconomic Status. One respondent (n=1) failed to provide information about their socioeconomic status. *Racial categories are non-cumulative, since participants were allowed to report more than one race.

College type includes options for liberal arts colleges, university, technical/professional schools (e.g. culinary, art school, or conservatory), HBCU (historically Black colleges and universities), women's colleges, tribal colleges, religiously-affiliated colleges/universities,

community/junior colleges, for-profit institutions, and “other” (with a fill-in option) (National Association for College Admission Counseling, 2021). College size was assessed with the individual estimating along with the Carnegie “classification of college sizes” with answer choices small (<5,000 students), medium (5,000-10,000 students), and large (>10,000 students) (Ginder et al., 2018). Please refer to Table 2 below for the full college profile of the sample surveyed.

Table 2*College Makeup of Sample Surveyed*

	<i>n</i>	%
College size		
Small	24	31.17
Medium	20	25.97
Large	33	42.86
College Type		
Liberal Arts College	24	31.17
University	44	57.14
Technical/Professional School	2	2.6
HBCU	2	2.6
For-profit institution	2	2.6
Other	3	3.9

Note. College type categories reflect classifications by the National College Admissions Counseling Association (2021). College sizes follow the Carnegie Classification of College Sizes, as shown in Ginder et al. (2018); HBCU=Historically Black Colleges and Universities.

Students were also grouped by their academic major that they reported in the survey.

Table 3 displays the breakdown of students by college major categories as indicated by College Board (2021). Students in the current study are enrolled in college majors that pertain to the Arts and Humanities, Business, Health and Medicine, Interdisciplinary², Public and Social Services, Social Sciences, STEM, and Trades & Personal Services. The Arts & Humanities consists of students who major in the visual and performing arts, languages, literature, linguistics, philosophy, and religion. Public and Social Services consists of legal studies, pre-law, social work, security/protective services, as well as theological studies and religious vocations. Trades & Personal Services consist of specialty programs in culinary and other trades. Interdisciplinary majors consisted of students in Asian Studies (n=1), Applied Behavioral Science (n=1), Biopsychology (n=1), Psychological & Brain Science (n=1), and one (n=1) reported their major was “Interdisciplinary Studies.” A majority of the students in the “Social Sciences” category are psychology majors (n=12) and a majority of students in the “Public and Social Services” category are Social Work majors (n=2).

² Though students in an interdisciplinary program were strongly discouraged from filling out the survey (particularly directed to potential participants at Bard College), a few respondents indicated majors that were later categorized on college board as “interdisciplinary.” Only one respondent (n=1) declared their major on the survey as “interdisciplinary” for the fill-in question.

Table 3*Academic Major Makeup of Sample Surveyed*

Academic Major Category	<i>n</i>	%
Arts and Humanities	15	19.48
Business	6	7.79
Health and Medicine	4	5.19
Interdisciplinary	5	6.49
Public and Social Services	3	3.9
Social Sciences	23	29.87
Science, Technology, Mathematics	20	25.97
Trades and Personal Services	1	1.3

Note. Academic major categories reflect major classifications by the College Board as of 2021. Number of students refers to the number of respondents who indicated a major within the college board categories, regardless of which college type reported and how their college divides up particular majors into categories.

Measures

The primary dependent variables in this study are emotional intelligence, acting with awareness, college major satisfaction, and identification with one's college major. Secondary variables included demographic characteristics, motivational factors, and additional influences. Next, the student indicated the type of college they currently attend and the size of their college's student body. The following question asked the student to fill in their official college major.

Later in the survey, there was a question that asked the participant whether they believed individual characteristics assessed in the demographic portion may have played a role in their major choice. Also, there is a question with "true/false" answer choices that ask whether they received a scholarship in their area of study. To see the full demographic questionnaire, please refer to *Appendix K*.

Emotional intelligence was assessed using a short-form version of the TEIQue, which is a trait emotional intelligence questionnaire (Cooper & Petrides, 2010; Petrides et al., 2009). The TEI-que assesses emotionality, self-control, well-being, and sociability as well as adaptability and self-motivation (Petrides et al., 2009). It is recommended for quickly determining individual differences in emotional intelligence (Cooper & Petrides, 2010). The emotionality subscale evaluates emotion perception (the ability to understand one's and others' emotions), emotion expression (the ability to communicate one's emotions to others), trait empathy (the ability to take another person's perspective), and the quality of one's relationships with others. The self-control subscale evaluates impulse control, emotion regulation, and stress management. The well-being subscale evaluates happiness, optimism, and self-esteem. The sociability subscale evaluates emotion management, assertiveness, and social awareness (Petrides et al., 2009). There are 30 questions in the TEI-que short form. Questions are asked on a Likert scale of 1-7 with 1 being "completely disagree" and 7 being "completely agree." It is important to note that while the short-form questionnaire contains items from all of the subscales mentioned above, they cannot be separated into individual categories, unlike the original, longer version. For the exact measure, see *Appendix G*.

Acting with Awareness

Acting with Awareness is a subscale from the FFMQ. (Baer et al., 2004; Tran, Glück, & Nader, 2013). It has eight statements which participants rated on a Likert-type scale of 1-5, with 1 being "never or rarely true" and 5 being "very often or always true." In the present study, the "acting with awareness" subscale aims to measure whether a student makes their college major decision based on personal insight. All responses are reverse-coded on this subscale. For the exact measure, see *Appendix I*.

College Major Satisfaction

For the “satisfaction with major” variable measure, I used the AMSS—also known as the Academic Major Satisfaction Scale—an assessment designed to measure satisfaction with one’s undergraduate major (Nauta, 2007). It has six statements that participants rated on a Likert-type scale of 1-5, with one being “strongly disagree” and 5 being “strongly agree.” This measure is the first of its kind, specifically targeted at the undergraduate population. In the present study, the AMSS seeks to determine whether a student is satisfied with the major that they chose. To see the complete measure, please refer to *Appendix E*.

Identification with Major

The “identification with major” variable measure is derived from “Identification with Career Commitment” from the VISA (Vocational Identity Status Assessment) --initially designed for adolescents in high school--modified to accurately examine one’s relationship with their major, rather than their career path (Portfeli, 2009; Porfeli et al., 2011). All statements are evaluated on a Likert-type scale of 1-6, 1 being “strongly agree” and 6 being “strongly disagree.” To see the original subscale and the modified version,³ please refer to *Appendix F*.

Motivational Factors

The internal/external motivation questionnaire examines how internally vs. externally motivated one is about a particular goal (Milyavskaya et al., 2015). It includes subscores of internal and external motivation. For this study, I adapted the questionnaire to gear respondents’ thinking towards their decision of their college major. Questions were asked on a Likert scale of

³ A primary change was altering all of the questions to center around one’s major rather than one’s potential career. Another key change was omitting question #4 and changing “family life” to “personal life” in question #2. For both the purposes of the current study and the background research conducted, it seemed more fitting to include all family-related variables in the external factors questions instead.

1 to 7, 1 being “not at all for this reason” and 7 being “completely for this reason.” For the complete measure, refer to *Appendix H*.

Other Influences on Major Decision

In many cases, a college student’s family and friends can influence their choice of major. This could be for several reasons, one being that certain major choices will likely warrant more lucrative career paths than others. One statement in the survey evaluates this, participants rate whether “[their] family and friends influenced my choice of major,” on a Likert-like scale of 1-6 one being “strongly agree” and 6 being “strongly disagree.” Similarly, cultural/family dynamics (Hargrove et al., 2002) and limitations of individuals who belong to minoritized populations (i.e. Black, Indigenous, and People of Color as well as those who have a lower SES) can also influence this decision. Another question asks the respondent whether they think that other aspects of their identity (gender, race, ethnicity, SES) influenced their choice of major, on a Likert-like scale of 1-6, one being “strongly agree” and 6 being “strongly disagree.” Lastly, the respondents were asked to evaluate the following statement: “my personality influenced my choice of major” on a Likert-type scale of 1-6, 1 being “strongly agree” and 6 being “strongly disagree.” To see my adapted measure and its original form, please refer to *Appendix K*.

Formal Commitment to Major

Two questions evaluate respondents’ investment in their academic major, both formally and financially. The first question asked whether the student has formally declared their major. Declaration of major works differently depending on the academic institution; some schools require a commitment to a department to apply (i.e. technical schools, culinary, conservatory, or art schools) and others allow one to declare one’s major later on in their college career. The penultimate question asked whether the student has a merit or need-based scholarship in their program of study. Previous research has indicated that institutional financial support had a

positive impact on their college career development (Tate et al., 2015). These two questions can also be found in *Appendix K*.

Procedure

Participants recruited personally either were sent an anonymous link to complete the survey after verbally agreeing to participate via Bard email, scanned a QR code from an advertisement posted on campus, responded via social media contact, or through seeing ads on my personal Instagram and Facebook stories. Advertisements posted on both Instagram and Facebook stories were designed on Canva highlighting key information (see *Appendix N*) in a similar manner to the posters (see *Appendix M*) hung up around the Bard campus. Content in advertisement messaging/recruitment reflects the material approved by the IRB, see *Appendix A* for the full form and *Appendix D* for the revised proposal. Email recruitment provided a brief overview of the study, as shown below:

“I am a senior psychology major at Bard College and I am conducting a research study on individual characteristics and relationship to one’s college major. Participation involves a survey that will take no more than 10 minutes. If you are interested, please reply to this email and I will provide you with a link to complete the survey. At the end of the survey, you have the option to be entered into a raffle to receive a \$50 gift card.

If you are a college student in a dual degree, double-major, joint major, or interdisciplinary program you do not qualify for this study. There are no known risks involved in this research.

If you have any questions, please let me know.”

The survey consisted of 68 questions and it took an average of 11.3 minutes to complete. Participants initially completed a consent form and then were redirected to the survey. In the survey description, participants were told that they will be completing a survey asking about their individual characteristics, an introspective measure, and their relationship to their college

major. Before proceeding to the rest of the survey, participants were asked to indicate whether they had officially declared their major. If they put a “no” answer choice, they were disqualified from participating in the rest of the survey.

Participants first completed a demographic measure. Next, participants completed measures of emotional intelligence and mindfulness (acting with awareness). Lastly, participants answered questions about themselves and their major. I used regression, correlation, and mediational statistical analyses to determine the relationship between acting with awareness, emotional intelligence, satisfaction with college major, and identification with college major by controlling for demographic variables. All data were processed and run in Google Sheets and JASP. This study received no external funding and was approved by the Bard Institutional Review Board.

Results

Respondents answered a survey designed on Qualtrics containing the TEIQue-SF, Acting with Awareness from the Five-Facet Mindfulness Questionnaire, the AMSS (Academic Major Satisfaction Scale), Identification with Major subscale (adapted from the Career Identification subscale in the Vocational Identity Status Assessment), Motivational Scale, and external factors. In addition to demographics measured, participants were also asked to report their academic major. Half of the items on the TEIQue-SF, three items on the AMSS, and all of the items on the “acting with awareness” subscale were reverse coded. All statistical analyses for this study were run in JASP and scoring was computed in Google Sheets. Potential score ranges and descriptive statistics for each assessment can be found below in Table 4.

Table 4*Descriptive statistics of target variables*

	Mean	SD	Possible Score Range
TEIque-SF	137.55	19.28	30-210
Acting with Awareness	22.62	6.17	8-40
Identification with Major	15.33	3.19	1-20
AMSS	24.23	5.45	6-30
Internal Motivation	2.91	1.94	3-21
External Motivation	6.34	3.12	2-14
External Factors	7.88	2.43	2-12

Note. TEIque-SF=Trait emotional intelligence assessment, short form; AMSS=Academic Major Satisfaction Scale.

As shown in Table 5 below, there were small yet significant positive correlations between emotional intelligence and major satisfaction $r(76) = 0.26, p=.03$, as well as emotional intelligence and identification with major $r(76) = 0.26, p = .03$. In other words, higher levels of emotional intelligence were associated with higher levels of major satisfaction and identification with one's major. Thus, the first hypothesis is supported.

Table 5*Pearson's Correlations of all Latent and Observed Variables*

	1	2	3	4	5	6	7
1. Emotional Intelligence	--						
2. Acting with Awareness	0.55***	--					
3. Identification with Major	0.26*	0.09	--				
4. Major Satisfaction	0.26*	0.20 ⁺	0.47***	--			
5. Internal Motivation	0.03	-0.10	-0.11	-0.01	--		
6. External Motivation	0.10	0.07	0.36***	0.43**	0.30**	--	
7. External Factors	2.55e-4	0.40	0.13	0.14	-0.33**	0.14	--

Note. ⁺marginally significant, *p<0.05, **p<.01, ***p<0.001

A strong positive correlation was found between emotional intelligence and “acting with awareness” scores $r(76) = .55$, $p < .001$, which means that students’ higher levels of emotional intelligence are associated with higher levels of “acting with awareness.” This relationship warrants the existence of a mediation model laid out in the wherein acting with awareness

potentially explains the relationship between emotional intelligence and major satisfaction as well as identification with one's major.

Following the methodology laid out by Baron and Kenny (1986), there are four steps to establishing a mediation model. First, a Pearson correlation must be run between emotional intelligence and "acting with awareness" to determine if a mediation model was worthwhile. If there is a significant correlation, it provides us with the rationale to pursue further statistical testing for the mediation model. The Pearson correlation coefficient between the predictor (x) and mediator (m) variables is known as pathway "a."

Next, regression analyses were run between variables m and y (outcome or dependent variable). The standardized beta coefficient between these two variables determines path "b." Last, the standardized beta coefficient between x and y determines the "c" path—as opposed to the initial path "c" between the predictor and outcome variable before the mediator modified the relationship. The relationship between variables x, m, and y is considered a mediation if the c' pathway equals zero. If c' does not equal zero, partial mediation occurs if all pathways are statistically significant at the $<.05$ alpha level⁴. Standardized beta was used for all regression analyses involved in the mediation pathway calculations for pathways b and c'.

The second hypothesis proposed that "acting with awareness" would mediate both of the following relationships: emotional intelligence and major satisfaction as well as emotional intelligence and "identification with major." As shown in Figure 1, "acting with awareness" did not mediate the relationship between emotional intelligence—as measured by the TEIQue—and major satisfaction nor identification with one's major. Acting with awareness did not account for

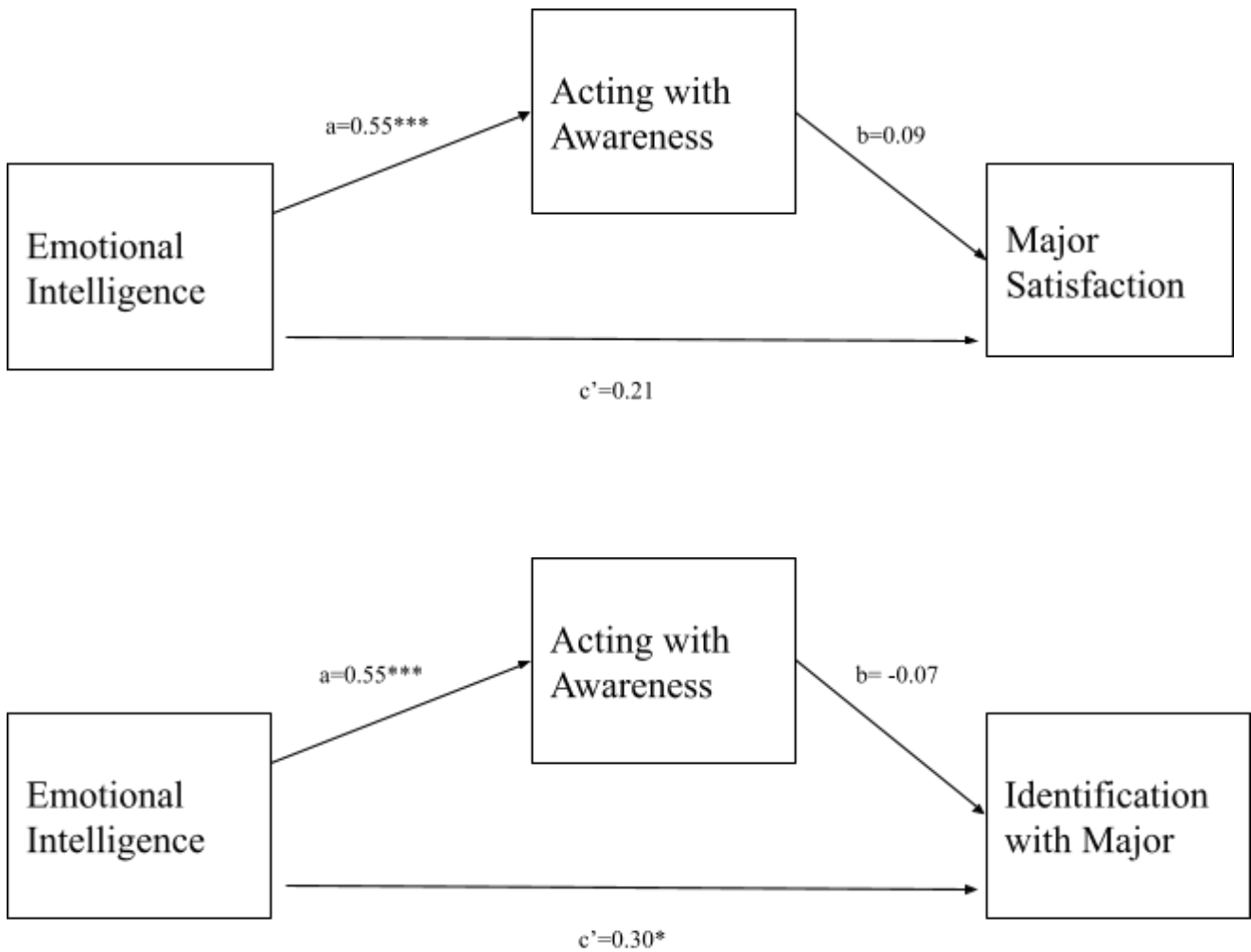
⁴ In all mediation models shown in the results section: * $p < 0.05$, ** $p < 0.01$, and *** $p < 0.001$. Marginal significance was not found in any pathway of the mediation models computed in this study.

the relationship between emotional intelligence and major satisfaction or major identification.

The initial analyses did not line up with the predictions made in hypothesis two; therefore, the null hypothesis could not be rejected. Hence, the second hypothesis does not have support.

Figure 1

Mediation Models Tested in the Full Sample



Exploratory Analyses

College advisors and other professors tied to a student's program of study will be in the running for writing letters of recommendation for graduate schools and future jobs. However, even if one does have access to a supportive peer, professor, and/or staff member in college, assumptions are often made about the extent to which one has a professional network particularly in the case of first-generation college students, or FGCS (Trenor 2009). In addition, FGCS are not well represented in elite colleges; therefore, they risk being neglected throughout and after their college experience (Tate et al., 2015). A student may make this decision based on the support they receive from their family, as many students rely on family members to financially support them throughout their college years (McCabe & Jackson, 2016). Also, an individual may tie their values to their family which can also inform one's self-efficacy about the career decision process (Hargrove et al., 2002) especially first-generation college students (Tate et al., 2015). Clearly, many factors play a role in the major-decision making process. These include race, gender, age, SES, and type of college one attends.

Additionally, international, BIPOC (Black, Indigenous, People of Color), low SES, and first-generation college students may find the process even more difficult depending on lower access to cultural capital (Bourdieu, 1986; S.R. Jenkins et al., 2013; McCabe & Jackson, 2016) and cultural differences (S.R. Jenkins et al., 2013). A preliminary qualitative study by Trenor (2009) investigated the motivations and college experiences of FGCS engineering students. Many reported that they strived to get into a well-paying career path so they would not suffer financially as their parents did (Tate et al., 2015; Trenor, 2009). Unfortunately, there are quite a few students who cannot afford to take unpaid or underpaid internships as they are expected to earn money at every possible opportunity to support their families (A.L. Jenkins et al., 2009).

Due to this opportunity cost, there is less space for these students to map out their interests and allow themselves to tune into their own thought processes about their career and academic goals. In turn, lack of access to college enrichment resources and insight makes the process harder for the underprivileged, particularly, FGCS individuals to decide about their major.

By and large, the results failed to locate “acting with awareness” as a mediator for the correlations between emotional intelligence and major satisfaction as well as emotional intelligence and identification with major. Additional exploratory analyses were conducted to account for the predicted relationship laid out in the second hypothesis—that “acting with awareness” mediates the relationship between emotional intelligence and major satisfaction as well as identification with major.

First, I isolated the sample to only include first-generation college students ($n=18$). Neither mediation models were statistically significant, as evidenced in Figure 2 below. However, there was still a significant correlation found between emotional intelligence and acting with awareness $r(17) = .67, p < 0.01$.

Next, first-generation students were filtered out of the sample to attempt one final set of the mediation models proposed above in the second hypothesis. See Figure 3 below for the mediation models excluding first-generation students. Acting with awareness—consistent with the previous statistical analyses—did not mediate the relationship between emotional intelligence and major satisfaction.

Figure 2

Alternative Mediation Models with only First-generation College Students

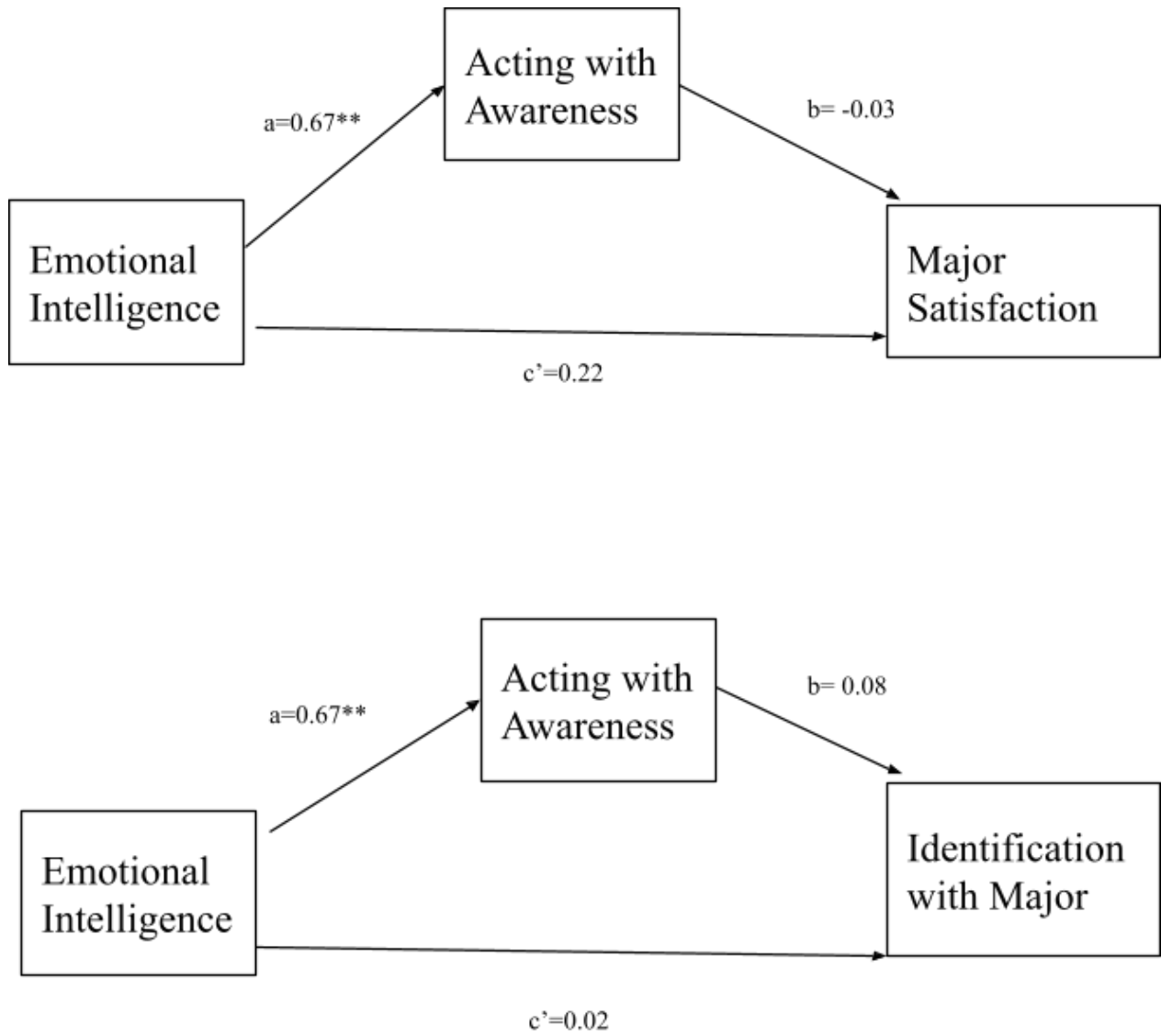
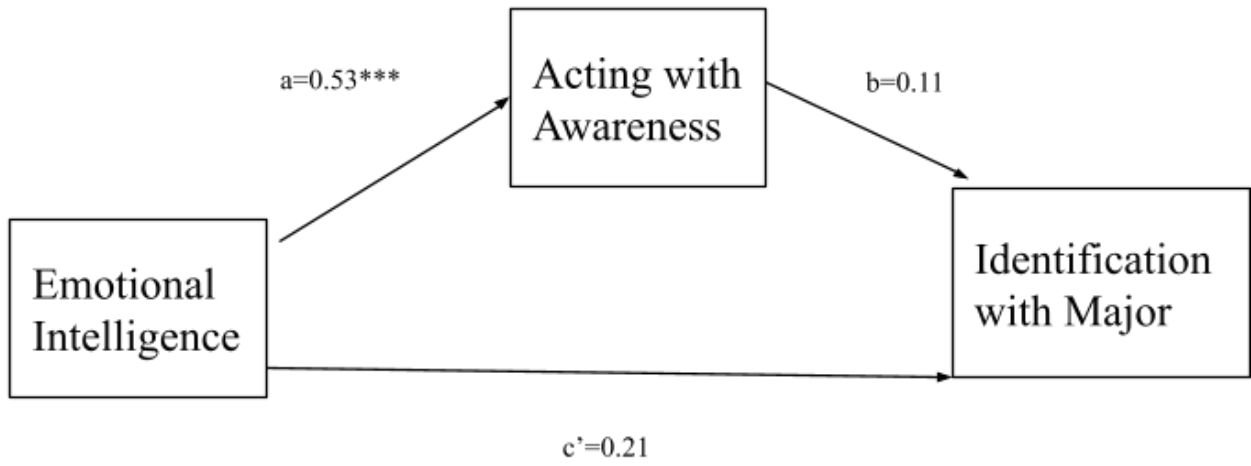
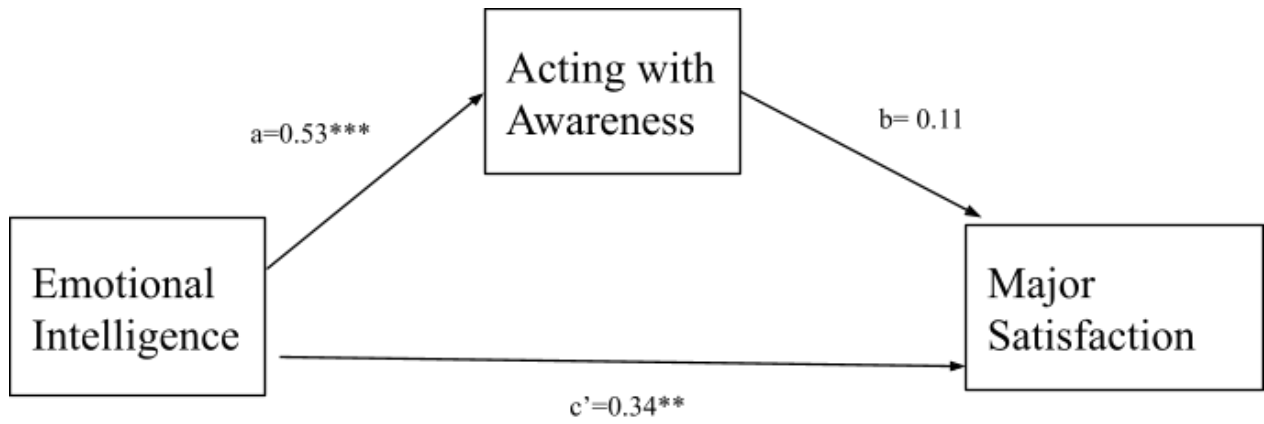


Figure 3

Alternative Meditation Models excluding First-generation College Students



None of the proposed, exploratory or otherwise, mediation models held up in the present study. Acting with awareness did not mediate the relationship between emotional intelligence and identification with major nor did it mediate the relationship between emotional intelligence and major satisfaction. These data indicate that there is an alternative explanation that could explain the relationship between emotional intelligence and connection to one's academic major.

However, there was a stronger correlation between emotional intelligence and acting with awareness in the FGCS sample than in the non-FGCS sample. Further, in the non-FGCS portion of the sample surveyed, these individuals may have access to insight regarding their personal interests and how it could translate into making decisions aligned with it, but not enough information is present to argue these processes are involved with their choice of major. Since there were slight differences observed in the correlation strength in the FGCS and non-FGCS samples concerning emotional intelligence and "acting with awareness," the data warranted further statistical analysis to investigate this disparity. For this reason, I ran additional correlational analyses between the predictor (Emotional Intelligence) and outcome variables (Major Satisfaction and Identification with Major) from the mediation models. Findings are illustrated in Table 6 below.

Table 6

Exploratory Correlations between First Generation Students and Non-First-Generation Students

Correlation	Non-First-Generation Students (<i>n</i> =59)	First Generation Students (<i>n</i> =18)
Emotional Intelligence and Major Satisfaction	0.27*	0.20
Emotional Intelligence and Identification with Major	0.28*	0.17

Note. * $p < 0.05$; all numbers reflect Pearson *r* correlation coefficients.

As shown in Table 6, Emotional Intelligence had moderate yet significant correlations with Major Satisfaction $r(58) = .27$, $p < .05$, and Identification with Major $r(58) = .28$, $p < .05$, in the non-first generation student population. On the other hand, there was no significant correlation between Emotional Intelligence and Major Satisfaction $r(17) = .20$, $p > .05$, nor identification with Major $r(17) = .17$, $p > .05$, in the first-generation college student population.

Discussion

This is the first study of its kind to explore the relationship between one's college major decision as an item of importance concerning emotional intelligence and mindfulness. The present study utilized an existing measure of academic satisfaction (AMSS) and adapted a new construct entitled "Major Identification" derived from the "Career Identification" subscale from the Vocational Identity Status Assessment.

Key Findings

There was a significant positive correlation between emotional intelligence and major satisfaction as well as identification with one's major. These findings provide support for the

first hypothesis. This means that students with higher levels of emotional intelligence tend to have both higher levels of major satisfaction and major identification. Acting with awareness did not mediate the relationship between emotional intelligence and major satisfaction nor did it mediate the relationship between emotional intelligence and identification with one's major. Therefore, there was no support for the second hypothesis in the initial analyses conducted for the present study. Since acting with awareness did not explain the relationships found in hypothesis 1, it is likely that there are other factors at play.

Additionally, emotional intelligence and acting with awareness were significantly and positively associated with each other across all correlational and regression analyses in the present study. In other words, higher levels of emotional intelligence are associated with higher levels of acting with awareness. This is consistent with previous research comparing mindfulness and trait emotional intelligence (Baer et al., 2006; Himes et al., 2021; Miao et al., 2018; Schutte & Malouff, 2011) particularly in a college student sample (MacDonald et al., 2020). The correlation between these two variables provided the basis for pursuing a mediational statistical model in both the proposed study and in the exploratory analyses.

Most interestingly, external motivation had a significantly positive relationship with identification with one's major. Higher identification with one's major was associated with higher levels of external motivation. Also, internal motivation had a significant negative relationship with external factors $r(76) = -.33, p = .004$. This means that lower levels of internal motivation were associated with higher levels of external factors on the major decision, and vice versa. This is consistent with previous research, particularly when it comes to family dynamics, as they tend to interfere with one's internal sense of motivation about academics (Hargrove et al., 2002; Tate et al., 2015). "Identification with major" and major satisfaction were highly correlated with each other $r(76) = .47, p < .001$. In short, the more one identifies with one's

major one is also likely to have higher levels of satisfaction with it and vice versa. Internal and external academic major motivation have a moderate, yet significant and positive correlation $r(76) = 0.30, p = .007$. This means that higher levels of internal motivation are associated with higher levels of external motivation when participants were prompted to describe the motives behind choosing their college major.

Exploratory Analyses

When isolating first-generation students and non-first-generation students, acting with awareness did not mediate the relationship between major satisfaction. It also did not mediate the relationship between emotional intelligence and identification with one's major. Interestingly, a study by nurses Young-Brice and Dreifuerst (2019) indicated that mindfulness interventions would immensely benefit ethnic minority first-generation college students in the nursing program in terms of retention rate and success. Conversely, lack of mindfulness was associated with the opposite effect—less persistence in the nursing program (2019). More research in both areas as well as connecting their relationship in an FGCS population is much needed.

Those who have family members that received bachelor's degrees (and beyond) have the knowledge and experience to share with their children when they are in the midst of their decision. Schools that have more funding will likely provide better career counseling services; low-income neighborhoods are not often afforded that luxury. Their main prerogative is to get the students oriented to college. People from wealthier families have access to increased resources such as individualized career counseling. From a much younger age, children are more likely to pursue what they are truly passionate about if the family can provide more financial support.

Those who have a better support system are more likely to be intrinsically motivated in their academics (Tate et al., 2015), yet no studies have looked at differences in intrinsic, or

internal motivation comparing FGCS to non-FGCS populations (Garriott et al., 2015). I was interested in looking at the differences in motivation in FGCS and non-FGCS students in the sample. To do this, I analyzed the scores from the internal/external motivation scale and compared them between the FGCS and non-FGCS students. Though observed means were slightly higher in the non-FGCS group (n=59) than the FGCS group (n=18), it was not statistically significant. Results for this analysis are found below in Table 7.

Table 7

Differences in Mean Internal and External Motivation in FGCS and non-FGCS Students

	FGCS	non-FGCS	t(75)
Internal Motivation	2.95	2.78	0.33
External Motivation	6.54	5.67	1.05 ⁺

Note. Scores reported are subscales from the Internal External Motivation Scale.

⁺Levene's test results were significantly different at the $p < 0.05$ level, suggesting an exception to the assumption of homogeneity in variance.

An independent means t-test reported in Table 7 revealed that there were no statistically significant differences between FGCS and non-FGCS individuals in the sample. Internal motivation was not significantly different in FGCS and non-FGCS students despite the slight difference in mean scores $t(75) = .33$, $p = .75$. FGCS and non-FGCS students may differ in external motivation, according to Levene's test $t(75) = 1.05$, $p = .30$. Again, it is questionable whether these comparisons have enough power to detect a significant difference between the means. This is due to both the size disparity between the groups and small samples within the groups.

Discussion

Limitations

Sample

Overall, data from 77 college students were analyzed in this study; however, more people may be needed in order to detect a significant effect. Particularly in the exploratory analyses, it is possible that the correlations run in the first-generation sample were underpowered ($n=18$) as compared to the larger cohort of non-first-generation students found in my sample ($n=59$). However, this disparity could potentially explain the nonsignificant results in the first-generation student alternate mediation models. Further, there was an unequal distribution of first-generation students and non-first-generation students in this study. This makes it difficult to compare the mediation models and correlational analyses run in each population.

As shown in Table 1 (found in the method section), the sample in the present study is disproportionately representative of students in the Social Sciences, STEM, and Arts & Humanities according to the College Board classifications (College Board, 2021). Previous studies have found significant differences in aspects of emotional intelligence and mindfulness. Specifically, one study found that students in STEM have reported higher levels in the self-control facet of emotional intelligence, while students in the Social Sciences and Arts reported higher levels in the emotionality facet of emotional intelligence (Sánchez-Ruiz et al., 2010). It is important to note that this study did not use the TEIQue nor does the TEIQue-SF battery scoring used in the present study easily break down into the subscales represented in the full version of the measure or other measures of trait emotional intelligence. Therefore, future research both incorporate the use of the TEIQue and should attempt to account for more diversity in college majors when possible.

Reporting Biases

All measures in this survey were self-report, which are subject to some biases. Considering that I personally know some of the people I have recruited to participate in this study, it may have inadvertently affected their honest performance on the survey questionnaire. Specifically, socially desirable responses could have certainly occurred while respondents completed the survey. In particular, some students may have hesitated to disclose sensitive demographic information such as first-generation status (Tate et al., 2015) or have been unclear if they fall into the FGCS category due to multiple definitions of the term (Garriot et al., 2015; A.L. Jenkins et al., 2009; S.R. Jenkins et al., 2013; Tate et al., 2015; Trenor, 2009). Many studies decide to categorize first-generation college students as students whose parents did not complete a bachelor's degree (Garriot et al., 2015; Tate et al., 2015; Trenor, 2009). The survey administered in Qualtrics did not specify what a FCGS was; rather, it only asked whether or not the student was a FCGS.

External Factors

The present study did not entirely encompass the types of external influences that are taking place when one decides one's college major. Research studies mention that it is crucial for college students to have both perceived support and awareness of their academic network, particularly in the case of underprivileged and/or first-generation students (Tate et al., 2015). Given the limitations of the present study, it was difficult to determine whether there was a clear distinction between the plight of FGCS and non-FGCS concerning their major decision. First-generation students tend to experience a lot of other factors and challenges throughout their college experience as compared to their non-FGCS counterparts (A.L. Jenkins et al., 2009; Tate et al., 2015). Since they have a little working model of what the college experience is like, let alone deciding on a major, many aspects are unfamiliar and potentially stressful. A study by S.R.

Jenkins and colleagues (2013) coined the term “academic acculturative stress” to describe the compounded stress that FGCS experience while at college—operating as a cultural split of the self—trying to find a balance between the culture at home and school. Oftentimes these two cultures are structured entirely differently, and with little-to-no knowledge of how the college environment and institution operate can cause FGCS to feel quite lost.

Implications

In the present study, there were statistically significant correlations observed in the full sample between acting with awareness and emotional intelligence, emotional intelligence and major satisfaction, as well as emotional intelligence and identification with one’s major. These correlational relationships occurred in the positive direction, as projected in the first hypothesis. Neither mediation model held up in the full sample, or when FGCS were isolated from non-FGCS.

To make the major decision-making process easier, career counselors should focus on encouraging students to access their insight about their passions and highlight their skills that could potentially define their career path (Tate et al., 2015). Some programs have established mentor/mentee relationships to bridge the gap between high school and college, often attempting to pair students with similar demographic characteristics (Stebelton et al., 2010). Previous studies emphasize the importance of fostering autonomy to ensure academic persistence and interest in college (Garriott et al., 2015; McMillan et al., under review; Ratelle et al., 2007).

Also, those in career counseling should calibrate their services to the needs of underprivileged populations. Counselors should also not assume that all college students know how a college institution operates or what values it upholds. Instead, they should make a concerted effort to inform these students about these important factors. A good first step would be to ask students about their questions and concerns regarding the “unwritten” rules of

functioning in a college institution (Trenor, 2009), especially if their families did not socialize them to understand it (S.R. Jenkins et al., 2013). This also can be accomplished by screening for life satisfaction and mental health disorders—particularly symptoms of PTSD (post-traumatic stress disorder) and depression—as well as providing resources for their academic, economic, and psychological needs (S.R. Jenkins et al., 2013). Doing so may foster a more personal connection to their college and could potentially encourage them to pursue an area of study that interests them through realistic self-appraisals (S.R. Jenkins et al., 2013). Taken together, it would be auspicious to adopt a more holistic approach of the individual when helping them navigate and feel secure in the college academic environment.

Future Directions

Future research studies in this area should include longitudinal studies assessing every stage of the major decision. These would be conducted at intervals when the student is still in high school but had already made their college decision, after their first year of college, the second year of college, and one more time before the student has graduated college. These intervals will help determine more precisely the temporal precedence of the variables at play. Other studies have associated “belonging” with variables of academic satisfaction and success as well as intrinsic and extrinsic motivations (Soria & Stebelton 2013), which potentially could explain mechanisms that are involved in the major decision process. Additional personality and self-esteem measures may be helpful to determine individual differences more clearly, as this project operates more from a general scope and after the major decision has been made.

Conclusion

The present study examined the relationship between emotional intelligence and two indicators of security in one's college major: major satisfaction and identification. Statistically significant correlations were established between emotional intelligence and major satisfaction as well as "identification with major." Thus, the present study has established emotional intelligence as a key variable in the major decision-making process. To these correlations, there were also two mediation models including a mindfulness construct, acting with awareness. Further exploratory analyses were conducted and still did not reveal that "acting with awareness" connected to the relationships between emotional intelligence and security in major choice (satisfaction and identification). Another exploratory analysis revealed that the correlations between emotional intelligence and major satisfaction as well as "identification with major" did not hold up when testing them exclusively from the FGCS members in the sample.

Certainly, the "identification with major" construct should be more closely and carefully developed and it warrants further research in career counseling studies. The grouping "Relationship to major" need not be an important categorization regarding its terminology; rather, other studies should develop an overarching construct that accounts for the complex manner in which one feels bound to one's college major. This would include "major satisfaction" and "identification with major," as well as potentially expanding to other subscales.

Lastly, the concepts of vocational identity and relationship to one's undergraduate college major should be looked at in tandem, whether a more secure relationship with one's college major would inform a more secure vocational identity and ultimately, life satisfaction (Cimsir, 2019). These relationships should also take into account demographic variables, such as FGCS status. Creating mindful awareness of one's own processes could inspire a student to select a major that is closely related to who they are as a person and the values they align with (Milsom & Coughlin, 2015).

Paying close attention to one's thought processes regarding the self and one's interests is crucial to developing a good relationship to one's area of study. Therefore, the future of career counseling calls for a more specialized approach to thinking about academic career planning that requires the values and situation of the student to come to the foreground. Additionally, a counselor or teacher should encourage individuals to carefully examine how they enjoy spending their time and what areas particularly pique their interest. Given that mindfulness and emotional intelligence are useful traits that can be developed over time, an emphasis should be placed on developing these areas throughout one's formal schooling, not just in preparation for choosing one's major or career.

References

- Alvarado, A., Spatariu, A., & Woodbury, C. (2017). Resilience & Emotional Intelligence between First Generation College Students and Non-First Generation College Students. *FOCUS on Colleges, Universities & Schools, 11*(1).
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment, 13*(1), 27-45.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology, 51*(6), 1173.
- Bar-On, R. (1997). *BarOn emotional quotient inventory*. Multi-health systems.
- Berger, C., Alcalay, L., Torretti, A., & Milicic, N. (2011). Socio-emotional well-being and academic achievement: Evidence from a multilevel approach. *Psicologia: reflexao e critica, 24*(2), 344-351.
- Bourdieu, P. (1986). The Forms of Capital. Richardson, JG ed. *Handbook of Theory and Research*.
- Cimsir, E. (2019). Insight, academic major satisfaction and life satisfaction among college students majoring in education: Implications for career counselling. *Journal of Psychologists and Counsellors in Schools, 29*(2), 206-218.
- Clarke, J., Lovelock, R., & McNay, M. (2016). Liberal arts and the development of emotional intelligence in social work education. *The British Journal of Social Work, 46*(3), 635-651.
- College Board (2021). Major and Career Search. Big Future.

<https://bigfuture.collegeboard.org/majors-careers>

- Cooper, A., & Petrides, K. V. (2010). A psychometric analysis of the Trait Emotional Intelligence Questionnaire–Short Form (TEIQue–SF) using item response theory. *Journal of personality assessment, 92*(5), 449-457.
- Gardner, H., & Hatch, T. (1989). Educational implications of the theory of multiple intelligences. *Educational researcher, 18*(8), 4-10.
- Garriott, P. O., Hudyma, A., Keene, C., & Santiago, D. (2015). Social cognitive predictors of first-and non-first-generation college students' academic and life satisfaction. *Journal of counseling psychology, 62*(2), 253.
- Ginder, S. A., Kelly-Reid, J. E., & Mann, F. B. (2018). Postsecondary Institutions and Cost of Attendance in 2017-18; Degrees and Other Awards Conferred, 2016-17; and 12-Month Enrollment, 2016-17: First Look (Provisional Data). NCES 2018-060rev. *National Center for Education Statistics*.
- Goleman, D. (1996) *Emotional Intelligence: Why It Can Matter More than IQ*, London, Bloomsbury.
- Hargrove, B. K., Creagh, M. G., & Burgess, B. L. (2002). Family interaction patterns as predictors of vocational identity and career decision-making self-efficacy. *Journal of vocational behavior, 61*(2), 185-201.
- Harrison, N. R., & Clark, D. P. (2016). The observing facet of trait mindfulness predicts frequency of aesthetic experiences evoked by the arts. *Mindfulness, 7*(4), 971-978.

Himes, L., Hubbard, N. A., Maruthy, G. B., Gallagher, J., Turner, M. P., & Rypma, B. (2021).

The Relationship between Trait Mindfulness and Emotional Reactivity Following Mood Manipulation. *Mindfulness*, 12(1), 170-185.

Jenkins, A. L., Miyazaki, Y., & Janosik, S. M. (2009). Predictors that distinguish first-generation college students from non-first generation college students. *Journal of Multicultural, Gender, and Minority Studies*, 3(1), 673-685.

Jenkins, S. R., Belanger, A., Connally, M. L., Boals, A., & Durón, K. M. (2013).

First-generation undergraduate students' social support, depression, and life satisfaction. *Journal of College Counseling*, 16(2), 129-142.

Labhane, C. P., & Baviskar, P. A. (2015). Self-concept and Emotional intelligence: A comparative study of Arts and Science college students. *The International Journal of Indian Psychology*, 2(2), 84-90.

MacCann, C., Jiang, Y., Brown, L. E. R., Double, K. S., Bucich, M., & Minbashian, A. (2020).

Emotional intelligence predicts academic performance: A meta-analysis. *Psychological Bulletin*, 146(2), 150–186. <https://doi.org/10.1037/bul000021>.

MacDonald, H. Z. (2020). Associations of Five Facets of Mindfulness With Self-Regulation in College Students. *Psychological Reports*, 0033294120937438.

McCabe, J., & Jackson, B. A. (2016). Pathways to financing college: Race and class in students' narratives of paying for school. *Social Currents*, 3(4), 367-385.

McMillan, G., Werner, K. M., Svoboda, R., & Milyavskaya, M. (2020--under review). The why and what of academic goals, their perceived value, and relation to academic goal pursuit.

Miao, C., Humphrey, R. H., & Qian, S. (2018). The relationship between emotional intelligence and trait mindfulness: A meta-analytic review. *Personality and Individual Differences, 135*, 101-107.

Milsom, A., & Coughlin, J. (2015). Satisfaction with college major: A grounded theory study. *The Journal of the National Academic Advising Association, 35*(2), 5-14.

Milyavskaya, M., Inzlicht, M., Hope, N., & Koestner, R. (2015, May 18). Saying “No” to Temptation: Want-to Motivation Improves Self-Regulation by Reducing Temptation Rather Than by Increasing Self-Control. *Journal of Personality and Social Psychology*. Advance online publication.

Morris, J. A., Urbanski, J., & Fuller, J. (2005). Using poetry and the visual arts to develop emotional intelligence. *Journal of Management Education, 29*(6), 888-904.

Morrison, T. (2007) ‘Emotional intelligence, emotion and social work: Context, characteristics, complications and contribution’, *British Journal of Social Work, 37*,pp. 245–63.

National Association for College Admission Counseling (2021). College Types. NACAC National College Fairs. <https://www.nacacfairs.org/learn/search/college-types/>

Nauta, M. M. (2007). Assessing college students' satisfaction with their academic majors. *Journal of career assessment, 15*(4), 446-462.

Petrides, K. V. (2009). Psychometric properties of the trait emotional intelligence questionnaire (TEIQue). In *Assessing emotional intelligence* (pp. 85-101). Springer, Boston, MA.

Petrides, K. V., Frederickson, N., & Furnham, A. (2004). The role of trait emotional intelligence in academic performance and deviant behavior at school. *Personality and individual differences, 36*(2), 277-293.

Porfeli, E. J. (2009). A five-dimensional measure of vocational identity status for adolescents.

Society for Research on Child Development, Denver, CO.

Porfeli, E. J., Lee, B., Vondracek, F. W., & Weigold, I. K. (2011). A multi-dimensional measure of vocational identity status. *Journal of adolescence, 34*(5), 853-871.

Puffer, K. A. (2011). Emotional intelligence as a salient predictor for collegians' career decision making. *Journal of Career Assessment, 19*(2), 130-150.

Ratelle, C. F., Guay, F., Vallerand, R. J., Larose, S., & Senécal, C. (2007). Autonomous, controlled, and amotivated types of academic motivation: A person-oriented analysis. *Journal of educational psychology, 99*(4), 734.

Rieken, B., Schar, M., & Sheppard, S. (2016, October). Trait mindfulness in an engineering classroom: An exploration of the relationship between mindfulness, academic skills, and professional skills. In *2016 IEEE Frontiers in Education Conference (FIE)* (pp. 1-8). IEEE.

Sánchez-Ruiz, M. J., Pérez-González, J. C., & Petrides, K. V. (2010). Trait emotional intelligence profiles of students from different university faculties. *Australian Journal of Psychology, 62*(1), 51-57.

Salovey, P. and Mayer, J. (1990) 'Emotional intelligence', *Imagination, Cognition and Personality, 9*, pp. 185–211.

Schutte, N. S., & Malouff, J. M. (2011). Emotional intelligence mediates the relationship between mindfulness and subjective well-being. *Personality and individual differences, 50*(7), 1116-1119.

Soria, K. M., & Stebleton, M. (2013). Major decisions: Motivations for selecting a major, satisfaction, and belonging. *Nacada Journal, 33*(2), 29-43.

- Stebbleton, M. J., Huesman Jr, R. L., & Kuzhabekova, A. (2010). Do I belong here? Exploring immigrant college student responses on the SERU survey sense of belonging/satisfaction factor.
- Stys, Y., & Brown, S. L. (2004). *A review of the emotional intelligence literature and implications for corrections*. Research Branch, Correctional Service of Canada.
- Tate, K. A., Caperton, W., Kaiser, D., Pruitt, N. T., White, H., & Hall, E. (2015). An exploration of first-generation college students' career development beliefs and experiences. *Journal of Career Development, 42*(4), 294-310.
- Tran, Ulrich S.; Glück, Tobias M.; Nader, Ingo W. (2013). Investigating the Five Facet Mindfulness Questionnaire (FFMQ): Construction of a Short Form and Evidence of a Two-Factor Higher Order Structure of Mindfulness. *Journal of Clinical Psychology, 69*(9), 951–965.
- Trenor, J. M. (2009). A phenomenological inquiry of the major choice processes of an overlooked demographic: First generation college students in engineering. In *Proceedings of the 2009 Research in Engineering Education Symposium*.
- Urquijo, I., & Natalio, E. (2017). Academic satisfaction at university: the relationship between emotional intelligence and academic engagement.
- Vansteenkiste, M., Lens, W., & Deci, E. L. (2006). Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation. *Educational psychologist, 41*(1), 19-31.
- Visser, B. A., Ashton, M. C., & Vernon, P. A. (2006). g and the measurement of Multiple Intelligences: A response to Gardner. *Intelligence, 34*(5), 507-510.
- Young-Brice, A., & Dreifuerst, K. T. (2019). Exploration of mindfulness among ethnic minority undergraduate nursing students. *Nurse educator, 44*(6), 316-320.

Appendix A

IRB Application

Section 1: Contact Information

Anya Swinchoski, as5652@bard.edu, Psychology, Undergraduate student

Advisor: Thomas Hutcheon, thutcheo@bard.edu

Section 2: External funding

No. Only requesting from the Bard Psychology Department.

Section 3: Title of Project

A major decision: Examining the relationship between emotional intelligence, acting with awareness, and college major satisfaction

Section 4: Dates of project

January 2021-December 2021

Research Question

I am interested in the possibility that trait EI and mindfulness could influence one's choice of major. If a student acts with their awareness and has high levels of emotional intelligence, they should be more satisfied in their major. Thus, they likely will choose a program of study aligned with their purpose. My main research question is: does acting with awareness explain the relationship between emotional intelligence and identification/satisfaction with one's major? Additionally, I would like to explore whether EI differs depending on one's major.

Section 5: Specific Populations:

I aim to recruit students from all backgrounds who are only pursuing a single major. Specifically, I would like approximately half of my dataset to be composed of Bard students or those who attend a liberal arts college, which I intend to recruit myself via email and through the Bard Students Facebook page. I plan that the other half of the dataset is composed of university students, either recruited through mutual friends who attend large universities or through online platforms like Qualtrics or Mturk. My expected age range is 18-24 years old.

Section 6: Estimated Number of Participants

100

Section 7: Procedure

The survey should take no more than 5 minutes to complete. Participants will receive a link to a consent form and then will be redirected a survey containing the SF (short form) TEI-que (trait emotional intelligence measure), the "Acting with Awareness" subset from the FFMQ (Five Facet Mindfulness Questionnaire), and a set of questions intended to measure the relationship the student has with their major: 7 questions (on a scale of 1-6) and 2 questions (Yes/No).

Section 8: Risks and Benefits

Benefits: Research on emotional intelligence and mindfulness are relatively new, especially when related to academic or career domains. Through this study, I hope to better understand the factors that go into choosing a college major. I hope to illuminate a hybrid personality measure that could aid future students in choosing their college major, based on their characteristics. The TEI-que is an introspective measure, so each question has the potential to bring up positive or negative emotions as the individual reflects on their experience in order to make the most accurate answer choice. No risks are associated with answering questions in the self/major or “acting with awareness” domains.

Section 9: Mitigation of Risk

I will remind participants in the consent form that the first series of questions will ask them to reflect on their emotional experiences. Additionally, I will include a debriefing at the end of the study that describes the categories asked by each survey measure.

Section 10: Confidentiality

All information collected will be both confidential and anonymous. Survey data will not be linked to any names or email addresses. Those who choose to enter the raffle for compensation will fill out their email address on a separate webpage, not linked to my study.

All data will be kept on my personal computer on a password-protected file. Only my faculty adviser and I will have access to this information.

Section 11: Deception

No deception will be used in the study.

Section 12: Consent form

Digital acknowledgement, understands risks and benefits, over 18 years old, agreement.

See Appendix B.

Section 13: Debriefing Statement

Thank you for participating in my research! This study examined the relationship between trait mindfulness (through a multi-faceted measure), trait emotional intelligence, and college major identification/satisfaction. More specifically, I was interested in whether your choice of college major and your personal relationship to it was related to your scores in emotional intelligence and acting with awareness. Please do not share the purpose of this study with anyone who could potentially participate in my study, as it would render my experiment ineffective. Again, thank you for taking the time to complete my survey, it is much appreciated. Through measuring emotional intelligence and mindfulness in combination with major satisfaction, I aim to create a hybrid personality measure to help future college students decide their major. If you have any questions, please feel free to contact me at as5652@bard.edu.



FHI 360

certifies that

Anya Swinchoski

has completed the

RESEARCH ETHICS TRAINING CURRICULUM

March 4, 2019

Appendix B

Consent form

Consent to participate in this survey

Project Title: A Major Decision

Researcher: Anya Swinchoski

Faculty Adviser: Thomas Hutcheon

I am a student at Bard College studying the relationship between individual characteristics and relationship to one's college major.

If you agree to participate in this study, you will complete a brief survey consisting of basic demographic information, introspective measures, and questions about your relationship to your major. This survey should take no longer than 10 minutes to complete. After completing this survey, you will have the option to enter into a raffle for prizes.

Potential risks of this study include the potential to bring up positive or negative emotions as you reflect on your emotional experiences in order to make the most accurate answer choice. If you feel uncomfortable answering while answering these or any questions in this survey, feel free to skip it or exit the survey.

Participants may receive an indirect benefit of reflecting on their college experience, learning about the research process, and understanding the literature behind my proposed relationship of emotional intelligence, mindfulness, and relationship to one's major.

All the information you provide will be kept confidential. Participants will click on the link and Qualtrics will assign them a random participant ID number. Their names will not be in the dataset. Survey responses remain on a password-protected file on my computer, and no personal information will be linked to your responses. Only my faculty adviser and I will have access to this information. After completion of the survey, each participant will receive a link to another website where they can enter into the raffle. Raffle entries will be coded using the randomized participant ID number and will not be linked to any other participant personal information.

Participant's Agreement:

I understand the purpose of this research study. My participation in the survey is voluntary. I understand that I may withdraw my participation at any time, without an explanation.

The researcher has reviewed the relevant risks and potential direct/indirect benefits with me. I am aware the information will be used in a Senior Project that will be publicly accessible online and at the Stevenson Library of Bard College in Annandale, New York. I have the right to review, comment on and withdraw information prior to December, 2021.

The information gathered in this study is confidential with respect to my personal identity. I understand that complete confidentiality cannot be guaranteed, since the researcher may be required to surrender data if served with a court order.

If I have questions about this study, I can contact the researcher at as5652@bard.edu or the faculty adviser at thutcheo@bard.edu.

If I have questions about my rights as a research participant, I can contact the chair of Bard's Institutional Review Board at irb@bard.edu. I have been offered a copy of this consent form to keep for myself.

I am at least 18 years of age and I consent to participate in today's survey. ____

I consent to the survey. [Participants will be asked to "click agree to consent"]

By clicking next, I consent to participate in this survey:

Appendix C **IRB approved scripts**

Recruitment Statement for Bard College Students

Dear [Name]:

I am a senior psychology major at Bard College and I am conducting a research study on individual characteristics and relationship to one's college major. Participation involves a survey that will take no more than 10 minutes. If you are interested, please reply to this email and I will provide you with a link to complete the survey. At the end of the survey, you have the option to be entered into a raffle to receive a \$50 gift card.

If you are a college student in a dual degree, double-major, joint major, or interdisciplinary program you do not qualify for this study. There are no known risks involved in this research.

If you have any questions, please let me know.

Anya Swinchoski as5652@bard.edu

Recruitment Statement for Prolific Participants

Dear [Name]:

I am conducting a research study on individual characteristics and relationship to one's college major. Participation involves a survey that will take no more than 10 minutes. If you are interested, please reply to this email and I will provide you with a link to complete the survey. You will be compensated for your time completing this survey. If you are a college student in a dual degree, double-major, joint major, or interdisciplinary program you do not qualify for this study. There are no known risks involved in this research.

If you have any questions, please let me know. Anya Swinchoski as5652@bard.edu

Reminder Message: Completion of a certain study step

This is a reminder that on [specific date] I sent you a survey link via email [or other platform]. The survey will be available for you to complete until [date survey is no longer available]. If you have already completed the survey, thank you for your time. If you have not completed the survey, I would greatly appreciate any input you could provide.

If you have any questions, contact me at as5652@bard.edu or my faculty advisor at thutcheo@bard.edu

Appendix D
IRB Revisions Cover Letter

Anya Swinchoski

Sep 12, 2021

Rationale

After careful consideration of my midway board comments and additional research of my target constructs, I realized that both the “identification with major” and “satisfaction with major” needed to be more accurately measured. I initially only had one question for each of these, merely asking if one identified with their major and if one was satisfied with their major choice.

To more specifically operationalize the target variables “identification with major” and “satisfaction with major,” one question set for each was added to the survey. The “identification with major” variable measure is derived from “Identification with Career Commitment” from the VISA (Vocational Identity Status Assessment) --initially designed for adolescents in high school--modified to accurately examine one’s relationship with their major, rather than their career path (Portfeli, 2009; Porfeli, Lee, Vondracek, & Weigold, 2011). For the “satisfaction with major” variable measure, I used the AMSS (Academic Major Satisfaction Scale), an assessment designed to measure satisfaction with one’s undergraduate major (Nauta, 2007). Both question sets embody the language and processes outlined in my research questions as well as being designed for my target population.

Additionally, I modified the subscale initially entitled “self and major” to “external factors and major.” There were many questions from the “self and major” category that were omitted from the revised set, as they were better represented for the measures of identification and satisfaction with major. Overall, my revisions add a few more minutes in length to my survey and present a more comprehensive overview of the concepts at large as they relate to my research and the hypotheses I will be testing.

Appendix E
Academic Major Satisfaction Scale
(Nauta, 2007)

Instructions: Answer the following questions about how you feel about your major to the best of your ability. Questions are asked on a scale from 1-5, 1 being “strongly disagree” and 5 being “strongly agree.”

1. I often wish I hadn't gotten into this major
2. I wish I was happier with my choice of academic major.
3. I am strongly considering changing to another major.
4. Overall, I am happy with the major I've chosen.
5. I feel good about the major I've selected.
6. I would like to talk to someone about changing my major.

Appendix F

Identification with Major

Section 1. Vocational Identity Status Assessment (VISA) Identification with Career Commitment scale (Portfeli et al., 2011; Portfeli et al., 2009)

1. My career will help me satisfy deeply personal goals.
2. My family feels confident that I will enter my chosen career.
3. Becoming a worker in my chosen career will allow me to become the person I dream to be.
4. I chose a career that will allow me to remain true to my values.
5. My career choice will permit me to have the kind of family life I wish to have.

Section 2. Adapted subscale from "Identification with Career Commitment" to encompass identification with one's major

Instructions: Answer the following questions to the best of your ability in relation to your major choice. Questions are asked on a scale of 1-5, 1 being "strongly disagree" and 5 being "strongly agree"

1. My major will help satisfy deeply personal goals.
2. Pursuing work in my chosen major will allow me to become the person I dream to be.
3. I chose a major that will allow me to remain true to my values.
4. My major choice will permit me to have the kind of life I wish to have.

Appendix G
Trait Emotional Intelligence Questionnaire--Short Form
(Petrides et al., 2006)

Instructions: Please answer each statement below by clicking the number that best reflects your degree of agreement or disagreement with that statement. Do not think too long about the exact meaning of the statements. Work quickly and try to answer as accurately as possible. There are no right or wrong answers. There are seven possible responses to each statement ranging from 'Completely Disagree' (number 1) to 'Completely Agree' (number 7).

1. Expressing my emotions with words is not a problem for me.
2. I often find it difficult to see things from another person's viewpoint.
3. On the whole, I'm a highly motivated person.
4. I usually find it difficult to regulate my emotions
5. I generally don't find life enjoyable.
6. I can deal effectively with people.
7. I tend to change my mind frequently
8. Many times, I can't figure out what emotion I'm feeling.
9. I feel that I have a number of good qualities.
10. I often find it difficult to stand up for my rights.
11. I'm usually able to influence the way other people feel.
12. On the whole, I have a gloomy perspective on most things.
13. Those close to me often complain that I don't treat them right.
14. I often find it difficult to adjust my life according to the circumstances.
15. On the whole, I'm able to deal with stress.
16. I often find it difficult to show my affection to those close to me.
17. I'm normally able to "get into someone's shoes" and experience their emotions.
18. I normally find it difficult to keep myself motivated.
19. I'm usually able to find ways to control my emotions when I want to.
20. On the whole, I'm pleased with my life.
21. I would describe myself as a good negotiator.
22. I tend to get involved in things I later wish I could get out of.
23. I often pause and think about my feelings.
24. I believe I'm full of personal strengths.
25. I tend to "back down" even if I know I'm right.
26. I don't seem to have any power at all over other people's feelings
27. I generally believe that things will work out fine in my life.
28. I find it difficult to bond well even with those close to me.

29. Generally, I'm able to adapt to new environments.
30. Others admire me for being relaxed.

Appendix H

Internal/external motivation scale adapted for college major choice

(Milyavskaya, Inzlicht, Hope, & Koestner, 2015)

Instructions: Think about the reasons that you chose your major. For each reason below, give a rating of 1 to 7 on how much you chose your major for that reason.

I chose my major...

1. Because somebody else (parent, professor, friend, etc.) wanted me to, or because I'd get something from someone if I did.
2. Because I would feel ashamed, guilty, or anxious if I didn't -- I feel that I should try to do it.
3. Because I really believe that it is an important major for me to have.
4. Because of the fun and enjoyment which the major would provide me--the primary reason is simply my interest in the experience itself.
5. Because it represents who I am and reflects what I value most in life.

Appendix I

Acting with Awareness subscale from the Five Facet Mindfulness Questionnaire

(Baer et al., 2008)

Instructions: Please rate each of the following statements with the number that best describes *your own opinion* of what is *generally true* for you.

1. When I do things, my mind wanders off and I'm easily distracted.
2. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted.
3. I am easily distracted.
4. I find it difficult to stay focused on what's happening in the present.
5. It seems like I am "running on automatic" without much awareness of what I'm doing.
6. I rush through activities without being really attentive to them.
7. I do jobs or tasks automatically without being aware of what I'm doing.
8. I find myself doing things without paying attention.

Appendix J

External factors & major --modified from “self & major” questions

Instructions: Answer the following questions to the best of your ability in relation to your major choice. Questions are asked on a scale of 1-6, 1 being “strongly agree” and 6 being “strongly disagree.”

1. My family/friends influenced my choice of major.
2. Other aspects of my identity (gender, race, ethnicity, SES, etc.) influenced my choice of major.

Appendix K**Demographic
Questionnaire**

1. What is your gender identity?
 - a. Man
 - b. Woman
 - c. Gender Non-Conforming/Non-Binary
 - d. other (provide fill-in option)
2. How old are you? (fill-in)
3. What year in college are you in?
 - a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior
 - e. Other (provide fill-in option)
4. What is your race? Pick as many that apply to you.
 - a. Black or African-American
 - b. American Indian or Alaska Native
 - c. Asian
 - d. Native Hawaiian or Other Pacific Islander (includes Hawaii, Guam, Samoa, Polynesian Islands)
 - e. White
 - f. Hispanic
5. What is your ethnicity?
 - a. Hispanic or Latinx
 - b. Non-Hispanic or Latinx
6. Are you a 1st generation college student?
 - a. Yes
 - b. No
7. Are you an international student?
 - a. Yes
 - b. No
8. What is your SES?
 - a. lower class
 - b. lower middle class
 - c. middle class
 - d. upper middle class
 - e. upper class

9. Which of the following best describes the college you currently attend?
 - a. Liberal arts school
 - b. University
 - c. Technical school (culinary, art school, conservatory)
 - d. Community college or junior college
 - e. HBCU
 - f. Women's College
 - g. Tribal College
 - h. Religiously-affiliated college/university
 - i. Other (fill-in)
 - j. For-profit institution
10. What is your major? (fill-in)
11. I have a scholarship in my program of study.
 - a. Yes
 - b. No

Appendix L
Senior Project Funding
Proposal

<p><i>TEI- que assessment:</i> the instrument used to measure trait emotional intelligence. Initially I thought I was going to use the long form, but in order to see the measure I had to purchase it through the researcher's website at psychometric lab (receipt is attached to the email).</p>	\$68.30
<p><i>Prolific Participants:</i> I am trying to recruit about 60 people through this online platform, which will cost \$1.60 per person if they take 10 mins to complete my survey.</p>	\$100
<p><i>Additional costs:</i> 1. Participant compensation—all participants will have the option to enter into a raffle for 1 \$50 gift card 2. Advertisement: printing through SPARC</p>	\$100
<p>Total proposed budget</p>	\$268.30

Appendix M

Recruitment poster distributed around the Bard College campus

Have you moderated yet? *

Would you be interested in completing a survey about your major and personal characteristics?

Complete the survey for a chance to win a

\$50 gift card!

Scan the QR code below for the survey link!



**Students who have not officially declared their major, and/or are in a dual degree, double major, interdisciplinary, or joint major program are not eligible to participate in this study.*

Appendix N

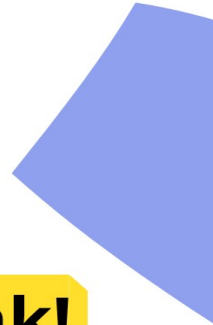
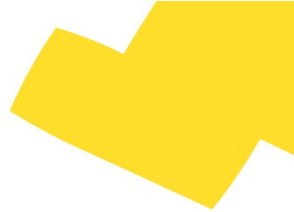
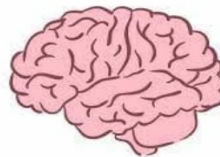
Recruitment advertisement for social media

Have you declared
your major already?*

**Complete
survey for a
chance to
win a \$50
gift card!**

DM me for the link!

**Students who have not officially
declared their major, and/or are in
a dual degree, double major,
interdisciplinary, or joint major
program are not eligible to
participate in this study.*



Appendix O

Documentation of IRB Approval

Bard College

Institutional Review Board

May 11, 2021

To: Anya Swinchoski
Cc: Thomas Hutcheon, Deborah Treadway

Re: A Major Decision: Examining the Relationship Between Emotional Intelligence, Acting with Awareness, and College Major Satisfaction

DECISION: APPROVED

Dear Anya,

The Bard Institutional Review Board has reviewed and approved your proposal entitled "A Major Decision: Examining the Relationship Between Emotional Intelligence, Acting with Awareness, and College Major Satisfaction". Your proposal is approved through May 7, 2022 and your case number is 2021May7-SWI.

Please notify the IRB if your methodology changes or any unexpected events arise.

We wish you the best of luck with your research!



Brandt Burgess
Associate Dean for Compliance
bburgess@bard.edu

Appendix P

**Documentation of IRB Approval for
Amendments**

Bard College

Institutional Review Board

Date: September 17, 2021
To: Anya Swinchoski
Cc: Deborah Treadway, Brandt Burgess
From: Tom Hutcheon, IRB Chair
Re: Proposed Amendments to 2021MAY7-SWI

DECISION: APPROVED

Dear Anya,

The Bard Institutional Review Board has reviewed and approved the amendments you submitted to your protocol on September 12, 2021. Your case number remains 2021MAY7-SWI.

Please notify the IRB if your methodology changes or unexpected events arise.



Tom Hutcheon
IRB Chair
thutcheo@bard.edu