The Impact of Personality on College Student Connectedness, Course Satisfaction, and Mental Well-Being

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Abstract

The adaptability of college students during the academic paradigm shift caused by the COVID-19 pandemic is important to investigate in order to understand how we can encourage positive and healthy experiences for students. This study focused on analyzing the relationships between personality traits (extraversion, openness to experience, shyness) and college connectedness, course satisfaction, mental well-being, and desire to be more connected to college. Participants included 209 randomly selected students aged 18 years or older recruited from a community college in the Midwest. Participants completed a 150-item self-report survey in March 2022 that assessed the variables using standardized measures. As expected, correlational analyses found that extraversion had a significant positive relationship with college connectedness and mental well-being. However, we did not find significant relationships between extraversion and course satisfaction or desire to be more connected. Consistent with our hypothesis, openness had a significant positive correlation with each of the variables but was assessed cautiously due to a low alpha level. As expected, shyness had a significant negative correlation with college connectedness, course satisfaction, and mental well-being, but not with desire to be more connected. In studying personality as a static trait, we can better understand that extraverted, open, and shy individuals tend to maintain levels of college connectedness, satisfaction, and mental well-being even when unexpected turmoil (e.g., a pandemic) occurs. Future research can investigate how educators can adjust the culture of their courses to accommodate personality variation among students and develop personality-specific ways to strengthen the adaptability of college students.

Keywords: college connectedness, course satisfaction, mental well-being, personality, COVID-19
In March 2020, the world was flipped on its axis from the effects of COVID-19. This forced the academic realm to adapt to the drastic changes of an online-only education system, a change which proved difficult for students and faculty throughout all education levels. College students in particular were forced to adapt to a world of online-only courses while simultaneously adjusting to adult life. The sudden decrease in social interaction due to the pandemic has resulted in an increase in anxiety, depression, loneliness, anger, and substance abuse by adults around the globe, including college students (Browning et al., 2021; Sifat, 2020). When studying the adaptability of students in response to the pandemic, it is important to consider individual differences, such as the effect of personality traits. As part of this study, we analyzed the impact extraversion, openness to experience, and shyness have on student college connectedness, course satisfaction, and mental well-being, particularly within the context of the pandemic and the need to adapt to it.

Whether taking classes in-person or online, it is important for students to feel connected and satisfied with their college in order to have a positive academic experience. Connectedness suggests having a positive emotional relationship with students, faculty, and the school itself (Gao et al., 2022). Being satisfied with one's college may depend on how connected students feel with their school and the relationships created within one’s college environment (Jorgenson et al., 2018). Having a high-quality social life and sense of support enhances students’ sense of connectedness to their college and has been found to be associated with decreased substance abuse, risk of violent behavior, and depressive symptoms, as well as an increase in physical and mental well-being (Jorgenson et al., 2018). Faculty can manifest students’ sense of connectedness and satisfaction to their school by providing emotional support and motivation through the promotion of academic engagement. (Gao et al., 2022; Jorgenson et al., 2018). This can be useful in the adjustment to an online-modality so that students remain feeling connected and supported when challenging times present such as COVID-19 occur. Further, college connectedness is related to successful adjustment to the college environment and is positively related to one’s well-being (Blau et al., 2016) and college satisfaction is positively related to life satisfaction (Lounsbury et al., 2005). Social adjustment and mental well-being in college are factors that are believed to impact the future development of students as well as their college experience (Gao et al., 2022). Subjective well-being consists of a general sense of one’s overall life satisfaction, tendency to experience positive emotions, and an overarching sense of happiness (Zhang & Renshaw, 2019). Some predictors of mental well-being in college students are physical activity, tobacco use, depression, the receiving of mental health services, and quality of sleep (Ridner et al., 2016). Poor subjective well-being can result in several mental and behavioral issues such as depression, anxiety, suicide, and substance abuse (Morton et al., 2017; Zhang & Renshaw, 2019).

Common in the research literature, college connectedness, satisfaction, and mental well-being are important aspects to college students’ experiences and are influenced by the personality traits extraversion, openness, and shyness. Extraversion, the trait in which people are more outgoing and enjoy social interaction (Audet et al., 2021), must be examined to understand how a drastic change in social life can affect one's college experience. Jorgenson et al. (2018) found that connectedness can be promoted through student academic involvement including campus events and clubs, as well as relationships with peers and faculty. Students with a high degree of college connectedness also show high connectedness with their peers, which is an aspect of college that extroverted individuals find easier (Jorgenson et al., 2018). Student satisfaction, found to be significantly related to extraversion, can be developed within interpersonal relationships and social bonds as well (Lounsbury et al., 2005). Further, Kohút et al. (2022) found that extraversion is a significant predictor of subjective and psychological well-being.
Openness is an intellectual curiosity in which people tend to seek out new experiences and can smoothly adapt to change (Audet et al., 2021). Examining openness alongside college connectedness, course satisfaction, and mental well-being provides this study with a deeper understanding of adaptability to extreme change since students who are open to experience may use their curiosity as they enter and become involved in an unfamiliar environment. Feeling connected to one’s college involves interaction within academics, and an engagement in extracurricular activities, groups, or research (Jorgenson et al., 2018). Finding connection to the college experience leads to students feeling further satisfied with it; Lounsbury et al. (2005) explained that a student’s development and satisfaction with each aspect of their college experience may be dependent on who they are when entering college. Therefore, a student who has a strong openness to experience may find course satisfaction despite changing external situations. Furthermore, Audet et al. (2021) found a strong correlation between openness and elevated levels of subjective well-being, which may be interrelated with one’s adaptability to change.

As a temperamental personality trait, shyness describes an individual’s tendency to feel uncomfortable, anxious, cautious, and inhibited in social environments and when faced with perceived social evaluation (Chen, 2021; Gao et al., 2022). Alongside social discomfort, shyness interferes with other aspects of the college experience including course selection and academic performance (Afshan et al., 2015). Gao et al. (2022) found that shy individuals tend to avoid social situations due to their perceived lack of social skills, resulting in a deficit of the interactions necessary to maintain college connectedness and course satisfaction, which can potentially lead to poor communication and maladjustment. However, they argued that increasing connectedness through emotional support from faculty and peers and promoting academic involvement creates greater mental well-being for shy individuals.

The unexpected development of the Covid-19 pandemic forced students to adjust to an uncontrollable external circumstance. A forced change of educational modality compounded the effects of the Covid-19 pandemic leading to isolation from peers and friends, stress of serious illness, lack of social interaction, and students were faced with rapid change that required adaptability. College connectedness, course satisfaction, and mental well-being are important aspects of the college student experience and differing personality traits may lead to individual differences within these variables. The aim of the current research was to gain insight into the impact of personality traits on these variables (i.e., college connectedness, course satisfaction, mental well-being) which may in turn offer insight to colleges and students regarding their experiences during unpredictable times. To this end, the following hypotheses were investigated: student to student and student to faculty college connectedness is positively correlated with extraversion and openness and negatively correlated with shyness (H1); student course satisfaction is positively correlated with extraversion and openness and negatively correlated with shyness (H2); student mental well-being is positively correlated with extraversion, openness, and shyness (H3); and desire to be more connected to the college is positively correlated with openness and negatively correlated with extraversion and shyness (H4).

Method
Procedure and Participants
At the time of data collection in March of 2022, the community college of interest was not back in pre-pandemic mode, and instead most psychology classes were being offered remotely (72%). This compares to prior to the pandemic (March of 2019), when 49% of psychology classes were offered online and 51% were in-person. After receiving approval from the community college’s Institutional Review Board, participants were recruited from in-person or online psychology courses and were offered extra credit at the discretion of their instructors. Adapted from the Psi Beta...
National Research Project, the current research assessed the variables college connectedness and personality (extraversion, openness to experience, shyness), variables that were part of the original research study, and the variables mental well-being and course satisfaction, which were added by the current researchers. After providing informed consent, participants anonymously completed a 150-question self-report survey, and each scale was scored and recorded anonymously to ensure participant confidentiality. Data was collected from 209 participants (66.50% primarily online; 33.50% primarily in-person) through a random sample of students ages 18 years and older from a community college in the Midwest, with an average age of 24.13 (SD=9.69) and 76.10% identifying as female. Most participants (71.30%) identified as White followed by Hispanic/Latino (7.70%), African American (7.20%), Biracial/Multiracial (4.30%), Asian/Asian American (1.90%), and Middle Eastern (1.90%). Most students (56.00%) were full-time, taking 12 or more credits.

**Measures**

In addition to demographic questions, the Ten Item Personality Inventory (TIPI; Gosling et al., 2003) was used to assess extraversion, a person’s level of social engagement and energy derived from this engagement, and openness to experience, a person’s willingness to try new things and participate in imaginative and intellectual activities. Shyness was measured by the 20-item Cheek Buss Shyness Scale (as found in Weyer & Carducci, 2001), a self-reported measure designed to assess a person’s inclination for social withdrawal. We used the 7-item student to student and the 8-item student to faculty subscales of the self-report College Connectedness Scale (Jorgenson et al., 2018) to measure a student’s feeling of belongingness and having bonding relationships with other students and faculty. Satisfaction with in-person classes and online classes was measured using a 16-item measure (as found in Powell & Rey, 2021) to assess satisfaction with class structure, types of interactions possible, and learning. The 7-item Short Warwick-Edinburgh Mental Well-being Scale (Stewart-Brown et al., 2009) was used to assess a student’s mental health and well-being in a non-clinical setting. Internal consistency estimates for our study can be found in Table 1.

Table 1 Descriptive Statistics, Coefficient Alphas, and Intercorrelations for all Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CC—student/student</td>
<td>.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.93</td>
<td>1.97</td>
<td>1–9</td>
</tr>
<tr>
<td>2. CC—student/faculty</td>
<td>.53**</td>
<td>.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.96</td>
<td>1.96</td>
<td>1–9</td>
</tr>
<tr>
<td>3. Extraversion</td>
<td>.20**</td>
<td>.19**</td>
<td>.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.11</td>
<td>1.59</td>
<td>1–7</td>
</tr>
<tr>
<td>4. Openness</td>
<td>.14*</td>
<td>.22**</td>
<td>.32**</td>
<td>.49</td>
<td></td>
<td></td>
<td></td>
<td>5.21</td>
<td>1.17</td>
<td>1–7</td>
</tr>
<tr>
<td>5. Satisfaction-Overall</td>
<td>.22**</td>
<td>.38**</td>
<td>.11</td>
<td>.15*</td>
<td>.94</td>
<td></td>
<td></td>
<td>3.07</td>
<td>0.53</td>
<td>1–4</td>
</tr>
<tr>
<td>6. Shyness</td>
<td>-.18**</td>
<td>-.20**</td>
<td>-.59**</td>
<td>-.29**</td>
<td>-.25**</td>
<td>.93</td>
<td></td>
<td>3.01</td>
<td>0.85</td>
<td>1–5</td>
</tr>
<tr>
<td>7. Well-being</td>
<td>.14*</td>
<td>.24**</td>
<td>.19**</td>
<td>.17*</td>
<td>.32**</td>
<td>-.43**</td>
<td>.82</td>
<td>3.37</td>
<td>0.66</td>
<td>1–5</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01. CC = College Connectedness. Coefficient alphas are presented along the diagonal. The means and variability of our measures are reasonable, and except for openness to experience which was lower at alpha of .49, all coefficient alphas are at the acceptable level of .70 or higher (Nunnaly, 1978).
Results

Table 1 shows the descriptive statistics, coefficient alphas, and intercorrelations for all study variables. Notably, college connectedness (both student to student and faculty to student), course satisfaction, and mental well-being were all positively correlated. Using correlational analysis to evaluate all hypotheses, results demonstrated that extraversion had a significant positive correlation with student to student ($r(207) = .20, p = .003$) and student to faculty ($r(207) = .19, p = .005$) college connectedness and mental well-being ($r(207) = .19, p = .007$). Extraversion was not significantly correlated with course satisfaction or the desire to be more connected to the college. Openness had a significant positive correlation with student to student college connectedness ($r(207) = .14, p = .040$), student to faculty college connectedness ($r(207) = .22, p = .002$), course satisfaction ($r(207) = .15, p = .031$), mental well-being ($r(207) = .17, p = .012$), and desire to be more connected ($r(207) = .16, p = .022$). Shyness had a significant negative correlation with student to student ($r(207) = -.18, p = .007$) and student to faculty ($r(207) = -.20, p = .003$) connectedness, course satisfaction ($r(207) = -.25, p < .001$), and mental well-being ($r(207) = -.43, p < .001$). Shyness was not significantly correlated to the desire to be more connected to the college.

Discussion

The consequences stemming from the COVID-19 pandemic have negatively impacted the mental health of college students around the globe. Studies have found an increase in issues such as anxiety, depression, loneliness, anger, and substance abuse due to increased social isolation (Browning et al., 2021; Sifat, 2020). To improve these negative mental health outcomes, we must better understand students as they adapt to dramatic shifts. The aim of the present study was to gain insight on the impact of extraversion, openness to experience, and shyness on the college experience including student to student and student to faculty college connectedness, course satisfaction, and mental well-being. As hypothesized, we found support for personality being differentially related to these important outcome variables. In concurrence with Jorgenson et al. (2018), our results show that extraverted individuals are more likely to feel connected to their college as these individuals find it easier to connect with their peers and faculty. These connections as well as involvement in extracurricular activities increase college connectedness and college and course satisfaction (Jorgenson et al., 2018). We also found a positive relationship between college connectedness and course satisfaction. Results also show that extraversion was not significantly correlated with the desire to be more connected. Because extraversion is positively correlated with college connectedness, extraverted individuals are already active in maintaining connectedness and therefore may have no desire to increase it. Surprisingly, extraversion and course satisfaction were not significantly related, which may indicate that course satisfaction simply has less to do with being extroverted, and more to do with course structure.

Like extraversion, previous literature suggests that being open to new experiences aids in finding satisfaction in college as well as feeling connected within it (Lounsbury et al., 2005). Our results align as we found that openness has a positive relationship with both student to student and student to faculty connectedness and course satisfaction. These results may stem from the attitude or demeanor that open individuals maintain which encourages them to partake in new experiences and new relationships, building greater connections and satisfaction. Our findings indicate that open individuals are more likely to desire to be more connected, perhaps because they are more open to the idea of continuing to increase their connections. Furthermore, like extraversion, open individuals are more likely to seek out social situations, so there are more opportunities for the positive experiences that make up a healthier subjective mental well-being (Zhang & Renshaw, 2019). Our results agree with those of
Kohút et al. (2022) and Audet et al. (2021) in finding that both extraversion and openness correlate to a positive mental well-being. Our hypothesis that shyness would be positively correlated with mental well-being was formed under the expectation that perhaps shy individuals are comfortable at their level of social interaction and hold adequate levels of mental well-being. However, results found shyness to be negatively correlated with mental well-being, college connectedness, and course satisfaction. The study by Gao et al. (2022) explained that the negative correlations of shyness with these variables may stem from the lack of initiation and interaction put forth by shy individuals. Furthermore, Jorgenson et al. (2018) argued that the level of connection that students feel with their school and those within it may impact students’ satisfaction with their school. By increasing college connectedness in shy individuals through academic involvement and interaction, satisfaction and mental well-being may increase due to the interrelation of these variables. Surprisingly, our results show no significant relationship between shy individuals and the desire to be more connected. This result may reintroduce the idea that perhaps some shy individuals are satisfied with their level of connection and do not desire to increase it.

When the COVID-19 pandemic hit, students had to adjust to a new way of learning, socializing, and navigating their world. Unfortunately, the fallout that ensued resulted in increased mental health issues around the globe (Browning et al., 2021; Sifat, 2020). In studying personality traits, we can gain further insight into their role in how students adapt to difficult paradigm shifts. This information can further aid students towards a positive college experience. As personality is relatively static, the effect of traits on aspects of the college experience goes beyond a student’s college years. In learning how to maintain college connectedness, course satisfaction, and mental well-being, students can take these skills and use them after college to improve their relationships, mental health, and adaptability. The results of our study can help better understand how extraverted, open, and shy individuals maintain levels of college connectedness, course satisfaction, and mental well-being during difficult paradigm shifts.

Limitations and Suggestions for Future Research

All research has limitations, and this study is no different. First, the sample participants identified mostly as white (71.30%) and female (76.10%), which is not representative of the population and can lead to an increased risk of sampling error. Second, the coefficient alpha for openness to experience was low, indicating that the results should be interpreted with caution and further investigated. Third, course modality was not the focus of this study, even though there were more online participants than in-person, which may have impacted the results. Finally, we used a self-report survey which assumed participants can accurately identify their attitudes and feelings. Despite these limitations, our findings provide insight that can be expanded by developing more personality-specific ways in which colleges can strengthen the adaptability of students when challenging times arrive. Further research can determine if certain personality traits provide more resiliency than others during times of stress, which can potentially assist mental health care on college campuses to better adjust methods to support students. Future research should use a more extensive measure of openness to experience to gain better reliability, and examine modality differences in connectedness, course satisfaction, and mental well-being and how personality might impact these differences. With the lack of literature addressing a student’s desire to be more connected to their college and our addition to this knowledge, future research is needed on this topic. Our findings indicate that personality matters in peer and faculty connections, course satisfaction, and student mental well-being. Future research could investigate how teachers can adjust their course culture to accommodate personality differences among their students, particularly during...
paradigm shifts where students’ adaptability is necessary. Students need support when experiencing unprecedented challenging times, so a focus on personality-centric care may be essential to ensure a healthy student body.

References
Outcomes, 7(15), 1-8.  
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