Personal and Social Characteristics as Predictors of First-Year Students' Transition to University

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Abstract

The current study investigated personal (i.e., the Big Five personality traits, academic resilience, and academic engagement) and social characteristics (sense of school belongingness) as predictors of first-year students' transition to university. The study also sought to create a regression model that demonstrated the relative importance of each factor concerning a student's transition while also investigating which factors best predict one's transition overall. The sample consisted of 81 female and two non-binary-identifying students at a university in London, Ontario. A Pearson correlation analysis revealed a significant positive correlation between a student's sense of school belongingness and a successful transition to university. Additionally, academic resilience and engagement were positively and significantly correlated with a successful transition. Of all the Big Five personality traits, neuroticism was the only trait with a significant negative relationship with a student's success in adjusting to higher education. A multiple regression analysis revealed that the combination of neuroticism, academic resilience, sense of school belongingness, and number of schools attended were the best factors predicting a student's success in transitioning to university.

Keywords: transition to university, Big Five, academic resilience, academic engagement, sense of school belongingness, student population, undergraduate

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University

The transition to a higher level of education, such as the adjustment from public school to high school or high school to university, can be a challenging journey for many students. The transition from high school to university can be especially tough because, in addition to striving for academic excellence, many students face additional stressors, including moving away from their families, navigating a new environment, building new relationships, and learning to care for themselves and their space independently for the first time. New opportunities and challenges set forth by university institutions can be exciting and daunting, and there is no doubt that these adjustments and the overall transition may come easier to some students than others.

Research investigating students' transition to higher education has long been studied. As Gilbert et al. (1997) stated, for as long as there has been some form of post-secondary education, there has been some form of a broadly defined educational experience for incoming university students. Research has demonstrated that a successful transition into university is required for undergraduate students to achieve academic success (Parker et al., 2017; Strayhorn, 2012). Perry and Allard (2003) describe transition as an internal process occurring when students move to the unfamiliar while adjusting to higher education. Further literature has highlighted that most university students experience this transition as burdensome and that challenges such as increased workload, academic standards, loneliness, and homesickness exacerbate this (McMillian, 2013). Finally, research has asserted that the intense initial strain of transitioning to university significantly impacts students' well-being, with some students reporting they are "just surviving" throughout this process (Gall et al., 2000; Richardson et al., 2012).

Students choosing to obtain a university-level degree often have numerous expectations or preconceptions about what they anticipate the transition and experience will be like. Some students are overly eager to start a new beginning in a more academically advanced environment, and others demonstrate psychological distress. Research in this area has found personal characteristics to be important.

Personality has been a recurrent theme throughout the literature on the transition to higher education. Although definitions vary across the literature, personality can refer to the stable patterns in how people think, act, and feel that make them unique (Cribbet & Williams, 2013). Many psychological theories attempt to explain personality differently, but they all agree that personality helps determine behaviour. Trait theories of personality are the most researched and widely used approaches among all personality theories. Trait theorists argue that relatively stable and consistent traits determine our cognitions, emotions, and behaviours (Matz et al., 2016). Trait theory proposes that the traits comprising an individual's personality are dimensional; for example, individuals high in extraversion and those high in introversion are at the opposite ends of the same dimension. Currently, the most widely accepted and researched trait theory is Costa and McCrae's five-factor model (Matz et al., 2016).

The five-factor model (FFM) proposes that five fundamental traits comprise an individual's personality. The "Big Five" personality traits include openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism, and individuals can vary in the degree to which they express each of the five traits (Costa & McCrae, 1992). The FFM has also been referred to as the universal model of personality, as it is replicable across gender, language, and culture (Chmielewski & Morgan, 2013).

One trait highlighted in the FFM model is *openness to experience*. Individuals high in openness to experience are broad-minded and willing to try new things. Characteristics associated with openness to experience include being imaginative and creative, inventive, open to unusual ideas, adventurous, and nonconformity (LePine, 2003; Salmon, 2012). Individuals low on the trait of openness to experience are described as uncreative, unimaginative, self-constrained, and also tend to be most comfortable with the current world they live in, adhering to the daily routines and procedures they know and are familiar with (Shi et al., 2016). Openness to experience has been linked to academic and educational success. For example, research has shown openness to experience to be the most strongly associated with IQ test performance out of all Big Five personality traits (Schretlen et al., 2010). Additionally, research on in-class and online learning demonstrates that students who are more open to experience are better at adapting to new and changing situations (LePine et al., 2000). Further research posits that individuals high in openness tend to succeed academically, as they are more likely to possess a deep interest and curiosity in their learning and more likely to study for the pure desire of knowledge (Corazzini et al., 2021).

Another factor in the FFM is *conscientiousness*. Conscientiousness refers to being self-controlled, responsible to others, orderly, and rule-abiding (Jackson & Roberts, 2017). As proposed by Costa and McCrae (1992), the attributes of an individual with this trait are hard work, organization, punctuality, ambition, and perseverance toward achieving their goals. By contrast, an individual with low conscientiousness would be described as disorganized, lacking motivation toward goals, having problems with impulse behaviour, negligent, lazy, and consistently late. Past literature on conscientiousness has repeatedly shown its importance concerning individuals' academics. For example, one study identified conscientiousness as the

most robust predictor of college academic performance (Noftle & Robins, 2007). More specifically, multiple research studies have consistently shown conscientiousness to be positively related to students' grades, achievements and test scores even when cognitive ability is controlled for (Spengler et al., 2016; Lechner et al., 2017; Brandt et al., 2020).

Another factor that forms the FFM is *extraversion*. Individuals high in extraversion tend to be more sociable, talkative, assertive and outgoing. Characteristics associated with extraversion include being active, affectionate, fun-loving, and passionate (Costa & McCrae, 1992). Individuals low in extraversion are described as high in introversion. Those high in introversion tend to have a reserved attitude, are calm, quiet, and shy, prefer to work independently, and often avoid over-stimulating environments (Viñas, 2014). Research findings linking extraversion to the transition to university have been inconclusive. For example, research studies have acknowledged that extraversion negatively correlates with academic success in higher education (McKenzie, 1989). In other words, rather than promoting student's educational success, extraversion may hinder it. A possible explanation is that extroverts tend to participate in more social and impulsive activities and spend less time studying daily, which, in turn, can impact their transition (McCown & Johnson, 1991). By contrast, research by Harris et al. (2017) highlights that students high in extraversion may find it easier to make friends, hang out with them, and enjoy the new university environment overall. In line with this research, extroverted students are argued to possess specific social skills, making their transition to university more effortless.

A fourth factor of the FFM, *agreeableness*, is the ability to get along with others. Individuals high in agreeableness are trustworthy, soft-hearted, generous, acquiescent, lenient, and good-natured (Costa and McCrae, 1992). In contrast, individuals low on agreeableness are

said to not get along with others well, be less sympathetic towards others and their feelings, and are stingy, irritable, critical, and less trusting of others. Research on agreeableness and the transition to university has inconsistent findings. For example, research by Klimstra et al. (2012) demonstrated that agreeableness was positively associated with student's commitment to their education. Moreover, further research by Tackett et al. (2019) suggests that agreeable individuals may better adjust to school demands, excel in academic tasks, build positive relationships with teachers and school peers, and, thus, have a better transition to higher education. By contrast, a meta-analysis conducted by Trapmann et al. (2007) found that agreeableness did not predict academic success in higher education. Furthermore, other studies have found that agreeableness, at best, has minor effects on students' academics (Tackett et al., 2019).

The last factor that comprises the FFM is *neuroticism*. Neuroticism is defined as the disposition to experience negative affective states such as anger, anxiety and irritability (Costa & McCrae, 1995). Costa and McCrae (1992) propose that individuals high in neuroticism worry a lot, are self-conscious and self-pitying, temperamental, emotional, and vulnerable. Individuals low in neuroticism are labelled as high in emotional stability. Those high in emotional stability are described as calm, even-tempered, unemotional, hardy, and finally, self-satisfied and comfortable with themselves (Costa and McCrae, 1992). Research findings linking neuroticism to the transition to higher education, like extraversion and agreeableness, have been inconsistent. Most research has demonstrated a negative correlation between neuroticism and students' academic performance. For example, research by Nechita et al. (2015) suggests that students who score high in neuroticism have anxiety and strong negative feelings that impact their memory, attention, confidence, and learning capacity, which, in turn, then negatively affects their transition. By contrast, Rosander (2013) found a positive correlation between neuroticism and

academic performance. She suggested that the anxiety and vulnerability component of high neuroticism may be beneficial for students' academics. Specifically, Rosander proposes that students with more anxiety and more substantial vulnerability are more likely to fear failing and thus be motivated to study harder; increasing their motivation and receiving better grades may aid their transition into higher education.

In sum, abundant research has examined the link between the "Big Five" personality traits and students' transition into higher education. Most research findings conclude that of all traits in the FFM, openness to experience and conscientiousness are the most significant and positively correlated with students' academics. Research on the remaining FFM traits, extraversion, agreeableness, and neuroticism, has provided inconsistent findings.

Another personal characteristic studied concerning the transition to university is academic engagement. In simple terms, academic engagement entails all student behaviours around planning, managing, and completing one's university education (Amerstorfer & Freiin von Münster -Kistner, 2021). More specifically, past literature claims that academic engagement occurs when students dive deep into learning activities and are mentally and emotionally invested in their study materials (Amerstorfer & Freiin von Münster -Kistner, 2021). As proposed by Hattie (2003), academic engagement goes beyond surface-level learning. Instead, it draws students into more profound thinking activities, such as analyzing and understanding complex topics, rationalizing procedures, and deducing meaning from course concepts.

Academically engaged students participate in several behaviours in the classroom, including writing, participating in class tasks, reading aloud, reading silently, discussing academics, and asking and answering questions (Greenwood et al., 1984). Further research has shown that academically engaged students demonstrate engaging behaviours by immersing

themselves in enriching educational activities (e.g., workshops), seeking guidance from staff (e.g., attending office hours), and working collaboratively with other students (Coates, 2005). Further research on academic engagement has revealed that it strongly predicts student's learning and personal development (Sengsouliya et al., 2020). Moreover, research by Lei et al. (2018) found that academic engagement is necessary to prevent student dropouts and favour high academic success. Considering that engaged students tend to have better learning and academic achievement, it could be expected that these individuals will have an easier time with their school work and, thus, a more seamless transition into university.

In addition to personality and academic engagement, academic resilience is another personal characteristic studied regarding students' transition to university. Resilience refers to positive adaptation despite adversity (Fleming & Ledogar, 2008). More specifically, academic resilience is defined as overcoming acute or chronic adversity that significantly threatens educational development (Martin, 2013). In other words, Rudd et al. (2021) suggest that resilient students are those who continue to demonstrate high levels of academic performance despite being exposed to such adverse circumstances.

Martin and Marsh (2006) propose that there are five factors or character skills that academically resilient students possess. Specifically, they suggest that self-efficacy (which they also term as 'confidence'), coordination (i.e. time management skills), control, composure (i.e. low anxiety), and commitment (which they also term as 'perseverance') are all linked to academic resiliency. Despite all skills being solid predictors of academic resilience, research has particularly emphasized the importance of composure and self-efficacy, asserting that low anxiety and confidence are the strongest predictors of student academic resilience.

Further research on academic resilience has demonstrated that it is positively related to mastery orientation, self-regulation and academic achievement while negatively correlated with self-sabotage, anxiety, procrastination, and failure avoidance (Perez et al., 2009; Martin & Marsh, 2008). Considering previous literature, it could be expected that the less students procrastinate, fear failing, self-handicap, and are anxious, the more students are self-regulated and resilient during the transition to university, which, for many, is commonly marked by academic adversity. The less students are affected by challenges set forth by their institution, the more effortless their transition to university will be.

In addition to personal characteristics such as those previously mentioned, social factors have also been studied concerning students' transition to university. For instance, a sense of school belongingness has been commonly investigated. Belonging is a fundamental human need characterized by the subjective feeling of deep connection with social groups, physical places, and individual and collective experiences (Allen et al., 2021). More specifically, Ahn and Davis (2020) describe a sense of school belongingness as a student's feelings about being accepted, included by, and connected to their institution.

Specifically, research has suggested that students possessing a strong sense of school belongingness are more likely to be committed to their studies, not drop out, exhibit fewer emotional and behavioural problems, and are less likely to be involved in risky behaviours such as bullying and substance abuse (Bond et al., 2007; Georgiades et al., 2013). Additionally, students who feel like they belong at their institution tend to enjoy school more, are more engaged, have positive attitudes towards themselves and others, are more accepting of authority, and are more empathetic towards others (Osterman, 2010). Further research by Korpershoek et

al. (2020) has demonstrated that students who feel a sense of belonging show better academic performance and are more motivated to learn.

By contrast, research by Voelkl (1997) suggests that students with a low sense of belonging do not feel like an accepted member at their school, have little or no sense of fitting in, do not feel comfortable in the school setting, and often fail to incorporate school into their self-definition. Moreover, those with a low sense of belongingness often have anger toward the institution, would rather be anywhere other than school, and are sometimes distrustful or suspicious of the university and those who represent it.

In the current study, it is expected that personality traits, academic engagement, academic resilience, and a sense of school belongingness will all affect students' transition to higher education. Specifically, it is hypothesized that the higher the individual's score on openness to experience and conscientiousness using the Big Five Inventory-2 Short Form (Soto & John, 2017), the higher the student's subjective rating of their transition into university using Krause and Coates (2008) Transition Engagement Scale (TES) will be. Research on extraversion, agreeableness, and neuroticism has provided inconsistent results, and therefore, the current study will aim to resolve this discrepancy. Finally, it is predicted that those scoring higher on the Academic Resilience Scale (Cassidy, 2016), the Academic Engagement Scale (Krause & Coates, 2008), and the School Belongingness Scale (Arslan & Duru, 2016) will also score higher on the TES. The current study will create a regression model to demonstrate the relative importance of each factor and develop a model that best predicts the transition to university.

Method

Participants

In the current study, 81 female and two non-binary-identifying students enrolled in Psychology 1015B at Brescia University College were recruited as participants during the Winter 2024 term. The recruitment strategy involved using SONA systems, Brescia's research participation system.

Materials

The Big Five Inventory-2 Short form (BFI-2-S) is a 30-item self-rating questionnaire (Appendix B) that was used to assess Costa and McCrae's Big Five personality domains, including openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (BFI-2-S; Soto & John, 2017). The BFI-2-S uses a five-point Likert scale where participants can select a choice of either (1) disagree strongly, (2) disagree a little, (3) neutral; no opinion, (4) agree a little, or (5) agree strongly. The BFI-2-S is an abbreviated form of the original 60-item Big Five Inventory-2 (BFI-2). Research shows that at the level of the five domains, the BFI-2-S retains much of the original measure's reliability and validity (Soto & John, 2017).

The Academic Resilience Scale (ARS-30) is a 30-item self-report questionnaire (Appendix C) that was used to measure university students' responses to a hypothetical but authentic vignette (ARS-30; Cassidy, 2016). The vignette was created to portray an example of academic adversity, where a hypothetical student experiences many academic challenges and struggles. Participants are asked to imagine themselves as the student characterized in the vignette; responses to the 30 scale items were made along a 5-point Likert scale from (1) likely to (5) unlikely (Cassidy, 2016). Research demonstrates that the ARS-30 has good internal reliability and construct validity. Research also suggests that it is a valid construct measure of academic resilience relevant for research in university populations (Cassidy, 2016).

The Students' First-Year Engagement Scales were created to assess the extent to which first-year university students engage in activities linked with high-quality learning outcomes (Krause & Coates, 2008). The current study used two subscales: the Academic Engagement Scale (AES) and the Transition Engagement Scale (TES). Research by Krause and Coates (2008) has shown that both subscales are reliable and valid measurement tools. The AES (Appendix D) includes 10 items that focus on three key areas: the student's self-initiated study behaviours, contributions to class discussions, and attendance patterns. The AES scale attributes the agency to the student rather than the institution and invites the student to self-assess strategic workload management and help-seeking behaviours (Krause & Coates, 2008). In the present study, the wording of one test item was modified to make it more appropriate for the sample. The TES (Appendix F) has seven items which measure the extent to which students engage with university life and experiences during the transition to higher education (Krause & Coates, 2008). This scale captures students' views on their university transition in three dimensions. The first dimension includes evaluating the success of the university's orientation program in helping students connect with other students and services to support their learning and experience overall. A second dimension investigates how much advice students receive on their courses and their decision-making regarding their subjects. Lastly, a third dimension of this scale looks at student identity and whether students feel their expectations concerning their transition to university have been met. The current study used the TES to measure student's overall transition to university. Both scales utilized a 5-point Likert scale for participant responses.

The School Belongingness Scale (SBS) is a 10-item self-rating questionnaire (Appendix E) that was used to assess school belongingness levels and consisted of two sub-dimensions: acceptance and exclusion (SBS; Arslan & Duru, 2016). The SBS was initially created for high

school students; however, the current study used a modified version that used words applicable to university rather than secondary students. The SBS uses a four-point Likert scale where students can select (1) almost never, (2) rarely, (3) sometimes, or (4) almost always. Previous research by Arslan (2018) has shown that the SBS scale has sound psychometric properties, strong internal reliability ($\alpha = .86$), and convergent validity with school-specific subjective well-being indicators (i.e. school connectedness, academic efficacy), as well as loneliness and life satisfaction. In the present study, the wording of one test item was modified to make it more appropriate for the sample.

Procedure

Using SONA Systems, students were able to choose to participate by viewing the study's "Call for Participants," a short, detailed study description. Upon selection, participants clicked on a link, bringing them to Qualtrics. Participants were first presented with the letter of information and then began with a brief demographic questionnaire (see Appendix A) asking participants their age, gender, living situations, and if they have attended more than one elementary school and more than one high school. Following the demographic questionnaire, respondents filled out the five measurement scales in the following order: BFI-2-S, ARS-30, AES, SBS, and TES. After completing the surveys, participants were shown the debriefing form.

Results

All analyses were conducted with Jamovi version 1.6.23. Pearson correlation coefficients were calculated to determine how the "Big Five" personality traits, academic engagement, academic resilience, sense of school belongingness and overall transition to university are related. The variable most strongly and positively correlated with students' transition to university was a sense of school belongingness ($r(81) = .56$, $p < .001$, $r^2 = .31$; see Figure 1). In

Figure 1

Relationship Between Sense of School Belongingness and Successful Transition to University.
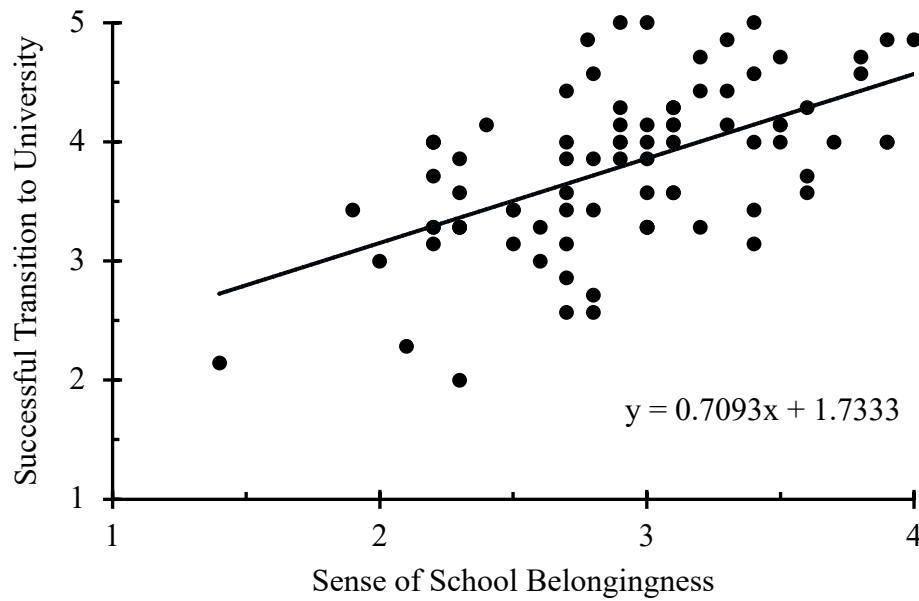
Note: There is a significant positive correlation between a sense of school belongingness and a successful transition to university ($r(81) = .56, p < .001$), n = 83.

addition to social characteristics, personal characteristics such as academic resilience ($r(81) =$ .37, $p <$.001, $r^2 = .13$) (see Figure 2) and academic engagement (Figure 3) were also found to have positive, significant correlations with transition ($r(81) = .23$, $p = .037$, $r^2 = .05$). Finally, as shown in Figure 4, neuroticism had a significant, negative correlation with transition ($r(81) = -$ .26, $p = .018$, $r^2 = .06$), and was the only personality trait with a negative correlation. Agreeableness, conscientiousness, openness, and extraversion had non-statistically significant correlations with students' transition to university (p's$> .1$). Table 1 highlights the complete correlation matrix for all study variables.

The data was further explored using a multiple regression analysis. As measured using Krause and Coates' (2008) TES scale, students' overall transition to university was entered into the regression equation as the outcome variable. The test revealed that the combination of neuroticism, academic resilience, sense of school belongingness, and number of schools attended explained 42.1% of the variance in students' overall transition to university, $r^2 = .421$, $F (4, 78) =$ 15.90, $p < .001$. Predictors were manipulated to achieve the lowest AIC value with the highest Adjusted r^2 to create a model that best predicted students' overall transition to university. Parameters for this model are displayed in Table 2.

Discussion

The current study explored personal and social characteristics as predictors of first-year students' transition to university. In line with hypothesis one, personality traits, academic engagement, academic resilience, and a sense of school belongingness all affected students' transition into higher education. Hypothesis two outlined that the higher students scored on openness to experience and conscientiousness, the more successful their transition to university; interestingly, in the current study, neither of these variables was statistically significant. Hypothesis three
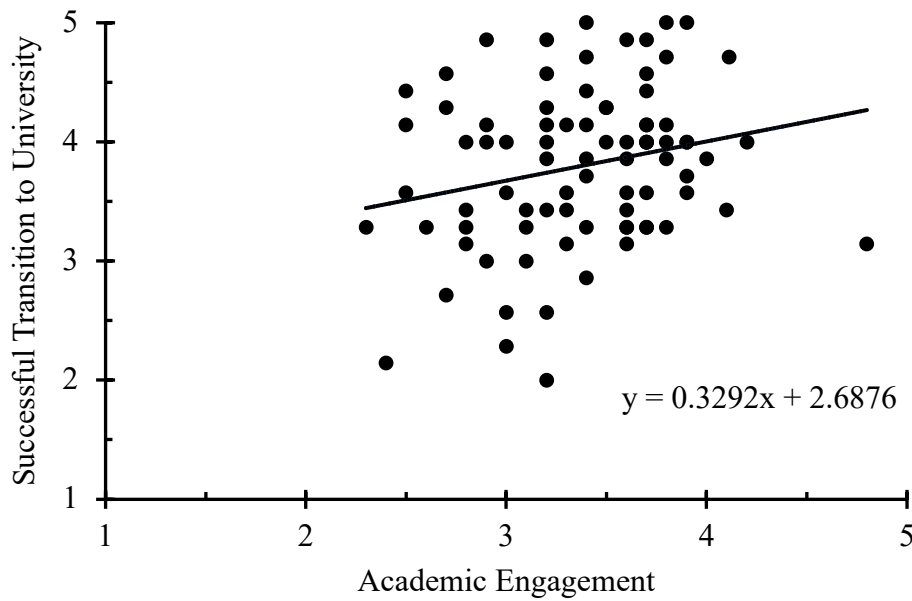
Figure 2

Relationship Between Academic Resilience and Successful Transition to University.
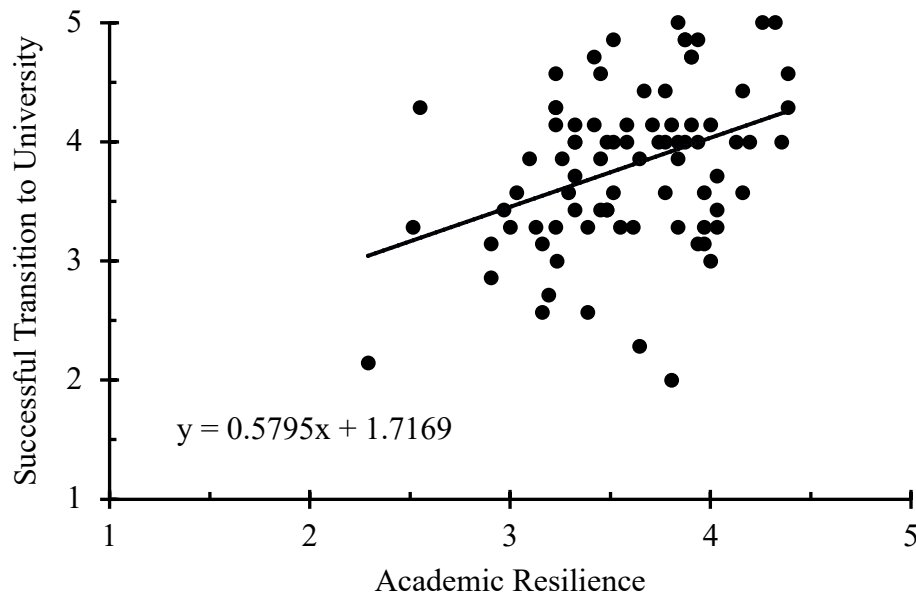
Note: There is a significant positive correlation between students' academic resilience and a successful transition to university ($r(81) = .37, p < .001$), n = 83.
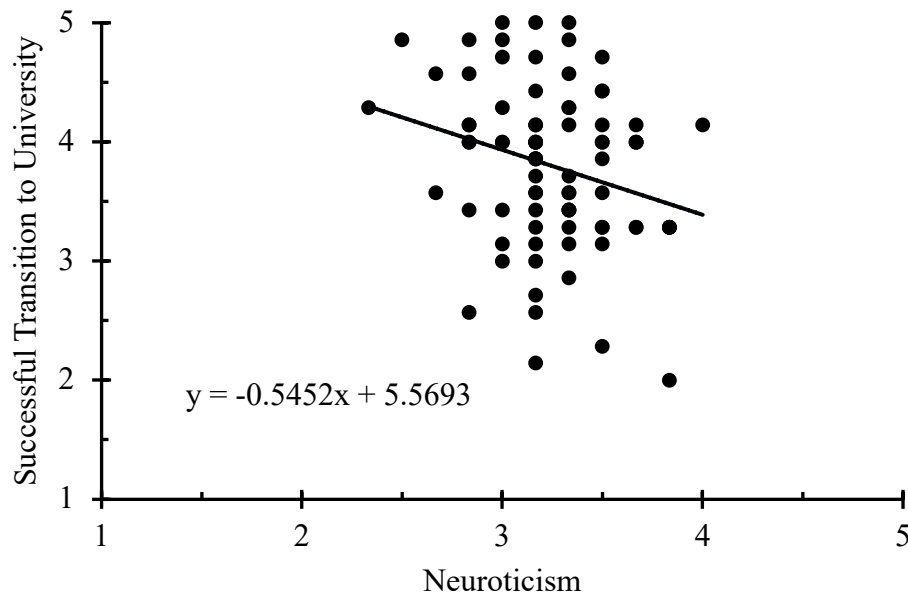
Figure 3

Relationship Between Academic Engagement and Successful Transition to University

$$y = 0.3292x + 2.6876$$

Note: A positive correlation exists between students' academic engagement and a successful transition to university ($r(81) = .23$, $p = .037$), n = 83.

Figure 4

Relationship Between Neuroticism and Successful Transition to University.

Note: There is a significant negative correlation between neuroticism and a successful transition

to university ($r(81) = -.26$, $p = .018$), n = 83.

Table 1

Complete correlation matrix for all study variables.

		Extra	Agree	Consc	Neurot	Open	ARS30	AES	SBS	Schools
Extra	r	—								
	p	—								
Agree	r	0.31**	—							
	p	0.004	—							
Consc	r	0.20	0.30**	—						
	p	0.068	0.006	—						
Neurot	r	0.13	0.29**	0.29**	—					
	p	0.257	0.009	0.007	—					
Open	r	0.16	0.18	0.10	0.18	—				
	p	0.152	0.098	0.389	0.106	—				
ARS30	r	0.06	-0.09	-0.06	0.08	0.15	—			
	p	0.571	0.426	0.601	0.485	0.187	—			
AES	r	0.02	-0.07	-0.06	-0.04	0.08	0.27*	—		
	p	0.839	0.523	0.613	0.709	0.478	0.014	—		
SBS	r	0.10	-0.14	-0.07	-0.30**	-0.03	0.14	0.19	—	
	p	0.348	0.210	0.509	0.006	0.796	0.202	0.088	—	
Schools	r	-0.08	-0.07	-0.07	-0.11	0.22*	-0.09	0.10	-0.02	—
	p	0.485	0.516	0.546	0.325	0.047	0.410	0.380	0.822	—
TES	r	0.17	-0.13	-0.06	-0.26*	-0.14	0.37***	0.23*	0.56***	-0.18
	p	0.126	0.232	0.573	0.018	0.220	<.001	0.037	<.001	0.103

Note. $* p < .05$, $** p < .01$, $*** p < .001$; N = 83.

The *r* values shown are Pearson correlation coefficients. Variables included are Extraversion (Extra), Agreeableness (Agree), Conscientiousness (Consc), Neuroticism (Neurot), Openness (Open), Academic Resilience Scale (ARS30), Academic Engagement Scale (AES), School Belongingness Scale (SBS), number of schools attended (Schools), and the Transition Engagement Scale (TES).

Table 2

Coefficients for the regression model that best predicts TES.

Predictor	Estimate	SE	t	p
Intercept	1.773	0.883	2.007	0.048
Neuroticism	-0.337	0.188	-1.793	0.077
ARS30	0.474	0.133	3.564	<.001
SBS	0.590	0.113	5.238	<.001
No. Schools	-0.101	0.054	-1.861	0.066

outlined the inconsistent findings between extraversion, agreeableness, and neuroticism and the transition to university in recent literature. The current study successfully disputed these discrepancies. Finally, hypothesis four outlined that the higher participants' scores on academic resilience, academic engagement, and school belongingness, the more successful their transition into university. The present study also found this to be true. The current study

found results similar to those of previous studies investigating the relationships between personal (i.e., personality traits, academic engagement, and academic resilience) and social characteristics (sense of school belongingness) on students' transition to university. The consistency of these findings reinforces the importance of these factors for a successful transition to post-secondary education. Consistent with previous research (e.g., Corazzini et al., 2021), personality traits in Costa and McCrae's FFM were found to be correlated with student success. Much of the research on the FFM has drawn considerable attention to the influences of conscientiousness and openness to experience on students, repeatedly demonstrating its significance. Intriguingly, neither of these traits showed any statistical significance in the current study. Considering previous literature, it is very likely that conscientiousness has a positive effect on students; however, these effects are more likely specific to individuals' grades, achievements, and exam scores than the transition to university as a whole. For example, being conscientious may aid students in ensuring they are up to date with course content, complete their homework and assignments on time, and are punctual, organized, and responsible with their studies and school commitments. This undoubtedly helps students and their academics, but it is likely missing a crucial social component for students' transition overall. Finding a non-significant relationship between conscientiousness and a successful transition to university suggests that the transition to university requires more than just self-control, hard work, ambition and responsibility and that

scoring high in conscientiousness alone cannot reflect a successful transition into higher education.

Like conscientiousness, openness to experience also demonstrated a non-significant relationship with a successful transition to university. This observation challenges existing literature (e.g., LePine et al., 2000) and is compelling because it would be highly expected that the more open someone is to new experiences, the better off they would transition to university; however, that was not the case within this research. This finding is even more thought-provoking, considering that prior research has demonstrated that students who are open to experience are better at adapting to new and changing situations (LePine et al., 2000). As we know from previous research, transitioning to university is extremely daunting for many incoming first-year students each year. Moving away from family members, navigating residence life, and building new relationships can be significantly unfamiliar and novel experiences for many students. Much of the research investigating the correlation between openness to experience and transitioning to university has provided contrasting results to those of the current study. Potentially, with more research, a consensus can be made about the relationship between both variables.

Existing literature on the relationships between extraversion, agreeableness, and neuroticism and the transition to university has been inconclusive. Although much of the research looking at extraversion and transition to higher education has shown a significant relationship, literature has demonstrated inconsistencies on the effects of extraversion on students' transition; a subset of studies have shown extraversion to have positive effects (e.g., Harris et al., 2017), and others have demonstrated the trait to have negative influences on transition (McKenzie, 1989). In the current study, the relationship between extraversion and a

successful transition was not statistically significant. This finding indicates that regardless of whether a student is more extroverted or introverted, this will not affect their ability to transition into higher education successfully. This suggests that even if students are more reserved, quiet, shy, and avoid overstimulating environments, they are equally as likely to have a successful transition as their more outspoken peers. This research finding contrasts with most work looking at the Big Five traits and transition to university, raising further questions as to what traits really impact students' likelihood of a successful transition.

Previous work investigating the relationship between agreeableness and transition to university has also shown inconsistent findings. Unlike conscientiousness, where the majority of research has illustrated a correlation between both variables, literature on agreeableness has both studies demonstrating statistically significant relationships (e.g., Klimstra et al., 2012; Tackett et al., 2019), and others showing no correlation (e.g., Trapmann et al., 2007). In the current study, no relationship was found. This observation suggests that the ability to get along with others does not affect students' ability to have a successful transition. The more soft-hearted, generous, and good-natured an individual may be, the better chance they can make new friends and establish relationships with other university faculty; however, this may not be enough to help support a student's overall transition. This finding further supports literature showing no connection between agreeableness and student transition.

Consistent with much of the Big Five personality traits literature, neuroticism demonstrated a significant, negative correlation with student transition to university. This finding emphasizes the idea that the more an individual is dispositioned to experience negative affective states such as anger, anxiety, and irritability, the less successful they are with transitioning to university. We know from previous research that neuroticism can lead to memory, attention,

confidence, and learning capacity impairments, which could be anticipated to impact students' academics negatively and, thus, their overall transition (Nechita et al. 2015). It is logical that the less emotionally stable a student is, the worse off they are when transitioning to higher education. This research finding builds on previous literature, furthering our understanding of the impacts of neuroticism on the transition to university.

Consistent with prior research, academic resilience (e.g., Perez et al., 2009), academic engagement (e.g., Lei et al., 2018), and a sense of school belonging (e.g., Korpershoek et al., 2020) were all positively and significantly correlated with a successful transition to university. Concerning academic resilience, the current study findings suggest that students who can demonstrate high levels of academic performance despite being exposed to adversity are more likely to successfully transition to university than those who cannot. Additionally, it could be expected that the more self-efficacy, time-management skills, control, and commitment a student has, the better their transition to higher education. Concerning academic engagement and the current study results, it could be assumed that the more mentally and emotionally invested students are in their studies, the better their transition. Prior research studies have demonstrated that academically engaged students tend to have better learning and academic achievement; knowing this, it could be expected that these students have an easier time with their schoolwork and, thus, a more seamless transition into university. Finally, in relation to a sense of school belongingness, the current study's findings suggest that the more students feel accepted, included by, and connected to their institution, the better their transition to university. Furthermore, the more students feel a sense of belongingness, the more likely they are to show a liking towards attending school and have more positive attitudes, which are likely to aid their transition to university. The current study's findings align with previous literature, strengthening our

confidence in the positive relationships between academic resilience, academic engagement, and a sense of school belongingness on the transition to university.

Despite the current study providing critical insight into predictors of first-year students' transition to university, an event that may have impacted responses should be noted. Before the study's commencement date in January 2024, on September 21, 2023, students, faculty and staff were presented with the news of Brescia University College's official closure for May 2024. This unique and unexpected event likely affected students' transition to university. The first semester of adjusting to university is undoubtedly challenging and scary for many incoming students; on top of this, participants in the current research study were faced with the burdening news of the institution's shutdown. Due to Brescia's closure, some students were confronted with program and degree changes and had to decide where they would transfer to the following academic year. Students may have also had a negative outlook on their experience transitioning to Brescia when they were aware that they would no longer be attending the same institution the following year and have to 're-transition' elsewhere. Ultimately, it is presumable that Brescia's closure was emotionally distressing on students, increasing anxiety and stress and thus having an effect or biasing their transition to university.

In light of the unexpected closure of Brescia University College on students, this event provides an opportunity for a new avenue of future research. Specifically, future research should investigate how students retransition to another university, having already gone through an original transition to one institution that has since officially closed down as an organization. Students who endure a school closure while adjusting to university may have a more challenging time adjusting due to the disruption of a typical transition experience. In addition, students who become aware of an institutional closure soon after beginning their education may lack

motivation and effort to create relationships with friends and faculty, knowing that those connections and relationships may soon disperse after the school closure. Because of this, students may lack 'practice' with a typical transition to university, making their new adjustment at another institution just as challenging as the first time.

The current study's findings provide valuable insights for post-secondary university institutions. For example, knowing what personal and social factors best predict student success while transitioning to university is highly insightful and helpful for orientation and student support services throughout the beginning of a new academic year. More specifically, university welcome weeks may implement new orientation programs and strategies focusing on factors more strongly linked to student success than previous years. Instead of arranging activities such as icebreakers, group games, and mixers, orientation programs should focus on events more strongly linked to a successful student transition. For instance, rather than events for mingling and socializing, workshops and seminars should be geared toward building students' academic engagement, academic resiliency, and sense of school belongingness.

In conclusion, transitioning to university can be challenging for many students. In addition to striving for academic excellence, students face additional stressors such as navigating a new environment, building new relationships, and, for many, learning to care for themselves independently for the first time. The current study illustrated that a sense of school belongingness, academic resilience, academic engagement, and neuroticism were all correlated with students' transition to university. Moreover, the regression model demonstrated that neuroticism, academic resilience, a sense of school belongingness, and the number of schools attended were the best predictors of a student's successful transition into post-secondary education. In light of the unexpected closure of Brescia University College, this current study

suggests future research, such as investigating how students retransition to another university, having already gone through an original transition at a different institution. Furthermore, the current study provides valuable insight for future university orientation programs, promoting a shift in focus from activities such as icebreakers and group games to activities more geared toward building students' academic engagement, resiliency, and sense of school belongingness.

References

Ahn, M. Y., & Davis, H. H. (2020). Four domains of students' sense of belonging to university. *Studies in Higher Education*, *45*(3), 622-634. https://www.tandfonline.com/doi/full/10.1080/03075079.2018.1564902?casa_token=PPxi2lz4cQoAAAAA%3AVovKg0hNFDCuBSDVtO8DAqENUhdF1H7lK6BSOv3p-Rpzu0ykTVgVg9fhinNgA03EFpQmDTWVDHH6aw

Allen, K. A., Kern, M. L., Rozek, C. S., McInerney, D. M., & Slavich, G. M. (2021). Belonging: A review of conceptual issues, an integrative framework, and directions for future research. *Australian Journal of Psychology*, 73(1), 87-102. https://www.tandfonline.com/doi/full/10.1080/00049530.2021.1883409

Amerstorfer, C. M., & Freiin von Münster-Kistner, C. (2021). Student perceptions of academic engagement and student-teacher relationships in problem-based learning. *Frontiers in Psychology, 12*, 4978. https://www.frontiersin.org/articles/10.3389/fpsyg.2021.713057/full

Arslan, G., & Duru, E. (2016). Initial development and validation of the School Belongingness Scale. *Child Indicators Research*, *10*, 1043-1058. https://link.springer.com/article/10.1007/s12187-016-9414-y

Brandt, N. D., Lechner, C. M., Tetzner, J., & Rammstedt, B. (2020). Personality, cognitive ability, and academic performance: Differential associations across school subjects and school tracks. *Journal of Personality*, *88(2)*, 249-265. https://onlinelibrary.wiley.com/doi/10.1111/jopy.12482

Cassidy, S. (2016). The Academic Resilience Scale (ARS-30): A new multidimensional construct

measure. *Frontiers in Psychology*, *7*, 1787.

https://www.frontiersin.org/articles/10.3389/fpsyg.2016.01787/full

Chmielewski, M.S., Morgan, T.A. (2013). Five-Factor Model of Personality. In: Gellman, M.D.,

Turner, J.R. (eds) *Encyclopedia of Behavioral Medicine*. Springer, New York, NY.

https://doi.org/10.1007/978-1-4419-1005-9_1226

Coates, H. (2005). The value of student engagement for higher education quality assurance.

Quality in Higher Education 11(1): 25–36.

https://www.tandfonline.com/doi/full/10.1080/13538320500074915?casa_token=za0hQq

ynyTkAAAAA%3AcMyMjYBfmMIIwvlEkAV5M0x5pBWUC_XrGneRHfXD25y3uPN

s4c9gxH5bNA2B6t0k4SMBjj5bDLxexg

Corazzini, L., Millemaci, E., & Navarra, P. (2021). The influence of personality traits on

university performance: Evidence from Italian freshmen students. *PLoS ONE*, *16*(11).

https://doi.org/10.1371/journal.pone.0258586

Costa Jr, P. T., & McCrae, R. R. (1995). Domains and facets: Hierarchical personality assessment

using the Revised NEO Personality Inventory. *Journal of Personality Assessment, 64*(1),

21-50. https://www.tandfonline.com/doi/abs/10.1207/s15327752jpa6401_2

Costa, P.T., & McCrae, R.R. (1992). Normal personality assessment in clinical practice: The

NEO personality inventory. *Psychological Assessment*, *4*, 5-13.

https://psycnet.apa.org/record/1992-25763-001

Cribbet, M., & Williams, P. (2013). Personality. *Encyclopedia of Behavioral Medicine*, 1458–

1463. https://doi.org/10.1007/978-1-4419-1005-9_975

Fleming, J., & Ledogar, R. J. (2008). Resilience, an evolving concept: A review of literature

    relevant to Aboriginal Research. *Pimatisiwin*.

    https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2956753/

Gall, T. L., Evans, D. R., & Bellerose, S. (2000). Transition to first-year university: Patterns of

    change in adjustment across life domains and time. *Journal of Social and Clinical*

    Psychology, 19(4), 544-567.

    https://guilfordjournals.com/doi/abs/10.1521/jscp.2000.19.4.544

Georgiades, K., Boyle, M. H., & Fife, K. A. (2013). Emotional and behavioural problems among

    adolescent students: The role of immigrant, racial/ethnic congruence and belongingness

    in schools. *Journal of Youth and Adolescence*, *42*, 1473-1492.

    https://link.springer.com/article/10.1007/s10964-012-9868-2

Gilbert, S., Chapman, J., Dietsche, P., Grayson, P., & Gardner, J. N. (1997). From best intentions

    to best practices: The first-year experience in canadian postsecondary education.

    Monograph series number 22. https://eric.ed.gov/?id=ED411920

Greenwood, C. R., Horton, B. T., & Utley, C. A. (2002). Academic engagement: Current

    perspectives on research and practice. *School Psychology Review*, *31*(3), 328-349.

    https://www.tandfonline.com/doi/abs/10.1080/02796015.2002.12086159

Harris, K., English, T., Harms, P. D., Gross, J. J., & Jackson, J. J. (2017). Why are extraverts

    more satisfied? Personality, social Experiences, and subjective well–being in college.

    European Journal of Personality. https://doi.org/10.1002/per.2101

Hattie, J. (2003). *Teachers Make a Difference, What is the research evidence?*.

    https://research.acer.edu.au/cgi/viewcontent.cgi?article=1003&context=research_confere

    nce_2003

Jackson, J. J., & Roberts, B. W. (2017). Conscientiousness. In T. A. Widiger (Ed.), *The Oxford Handbook of the Five Factor Model* (pp. 133–147). Oxford University Press. https://psycnet.apa.org/record/2017-30849-007

Klimstra, T. A., Luyckx, K., Germeijs, V., Meeus, W. H., & Goossens, L. (2012). Personality traits and educational identity formation in late adolescents: Longitudinal associations and academic progress. *Journal of Youth and Adolescence*, *41*, 346-361. https://link.springer.com/article/10.1007/s10964-011-9734-7

Korpershoek, H., Canrinus, E. T., Fokkens-Bruinsma, M., & de Boer, H. (2020). The relationships between school belonging and students' motivational, social-emotional, behavioural, and academic outcomes in secondary education: A meta-analytic review. *Research Papers in Education*, *35*(6), 641-680. https://www.tandfonline.com/doi/full/10.1080/02671522.2019.1615116

Krause, K. L., & Coates, H. (2008). Students' engagement in first-year university. *Assessment & Evaluation in Higher Education*, *33*(5), 493-505. https://www.tandfonline.com/doi/full/10.1080/02602930701698892?casa_token=DH_afE6ijQsAAAAA%3AyqYJ5Sq57hSmXub7gfPO6INtFnY7MAj4UjfKq8kQu-7IRIwAX5986wtmcWabB_fM3ol_h0yCLIRAJg

Lechner, C., Danner, D., & Rammstedt, B. (2017). How is personality related to intelligence and achievement? A replication and extension of Borghans et al. and Salkever. *Personality and Individual Differences*, *111*, 86-91. https://www.sciencedirect.com/science/article/pii/S0191886917300417

Lei, H., Cui, Y., & Zhou, W. (2018). Relationships between student engagement and academic achievement: A meta-analysis. *Social Behavior and Personality: An International*

Journal, *46*(3), 517–528.

https://www.researchgate.net/publication/324183400_Relationships_between_student_en

gagement_and_academic_achievement_A_meta-analysis

LePine, J. A. (2003). Team adaptation and postchange performance: Effects of team composition

in terms of members' cognitive ability and personality. *Journal of Applied Psychology,*

88(1), 27–39. https://doi.org/10.1037/0021-9010.88.1.27

LePine, J., Colquitt, J. A., & Erez, A. (2000). Adaptability to changing task contexts: Effects of

general cognitive ability, conscientiousness, and openness to experience. *Personnel*

Psychology, *53*(3), 563-593. https://doi.org/10.1111/j.1744-6570.2000.tb00214.x

Martin, A. J. (2013). Academic buoyancy and academic resilience: Exploring 'everyday' and

'classic' resilience in the face of academic adversity. *School Psychology International*,

34(5), 488-500.

https://www.frontiersin.org/articles/10.3389/fpsyg.2021.713057/full?&utm_source=Emai

l_to_authors_&utm_medium=Email&utm_content=T1_11.5e1_author&utm_campaign=

Email_publication&field=&journalName=Frontiers_in_Psychology&id=713057

Martin, A. J., & Marsh, H. W. (2008). Academic buoyancy: Towards an understanding of

students' everyday academic resilience. *Journal of School Psychology*, *46*(1), 53-83.

https://www.sciencedirect.com/science/article/pii/S0022440507000131?casa_token=YC4

marOebEYAAAAA:YV4xUi7boz7vSRXjNUlYa58zo4h86aDk5lLrJz5aazoSvjCdD9BHl

Fad8KZaB0lhiydrd69H9BI

Martin, A. J., & Marsh, H. W. (2006). Academic resilience and its psychological and educational

correlates: A construct validity approach. *Psychology in the Schools*, *43*(3), 267-281.

https://onlinelibrary.wiley.com/doi/abs/10.1002/pits.20149?casa_token=5RMi5BLtQoM
AAAAA:qpZL_D3OUnzce-
S8NrL8xUJY06i0aitNvVMZcrAQFdzKgGLBQQwP1B3JjDw7fxZbtn_9xwjgFCqdRykd

Matz, S., Chan, Y. W. F., & Kosinski, M. (2016). Models of personality. *Emotions and
Personality in Personalized Services: Models, Evaluation and Applications*, 35-54.
https://link.springer.com/chapter/10.1007/978-3-319-31413-6_3

McCown, W., & Johnson, J. (1991). Personality and chronic procrastination by university
students during an academic examination period. *Personality and individual differences*,
12(5), 413-415. https://www.sciencedirect.com/science/article/abs/pii/019188699190058J

McKenzie, J. (1989). Neuroticism and academic achievement: The Furneaux factor. *Personality
and Individual Differences*, *10*(5), 509-515.
https://www.sciencedirect.com/science/article/abs/pii/0191886989900329

McMillan, W. (2013). Transition to university: the role played by emotion. *European Journal of
Dental Education*, *17*(3), 169-176.
https://onlinelibrary.wiley.com/doi/full/10.1111/eje.12026?casa_token=FUEEBP-
L2YgAAAAA%3AQIGRqfSGmK-
ysQDLGUqqTwLf5CnE3DzIdwkdl8fMWT3TDemYU0ak4x4R2xhJ11Vo_9FfET9P8CF
T1hDN

Nechita, F., Alexandru, D. O., Turcu-Ştiolica, R., & Nechita, D. (2015). The influence of
personality factors and stress on academic performance. *Current Health Sciences
Journal*, *41*(1), 47-61. https://doi.org/10.12865/CHSJ.41.01.07

Noftle, E. E., & Robins, R. W. (2007). Personality predictors of academic outcomes: big five correlates of GPA and SAT scores. *Journal of Personality and Social Psychology*, *93*(1), 116. https://pubmed.ncbi.nlm.nih.gov/17605593/

Osterman, K. F. (2010). Teacher practice and students' sense of belonging. *International Research Handbook on Values Education and Student Wellbeing*, 239-260. https://link.springer.com/chapter/10.1007/978-90-481-8675-4_15

Parker, H., Hughes, A., Marsh, C., Ahmed, S., Cannon, J., Taylor-Steeds, E., ... & Page, N. (2017). Understanding the different challenges facing students in transitioning to university particularly with a focus on ethnicity. *New Directions in the Teaching of Physical Sciences, 12*. https://eprints.kingston.ac.uk/id/eprint/40299/

Perez, W., Espinoza, R., Ramos, K., Coronado, H. M., & Cortes, R. (2009). Academic resilience among undocumented Latino students. *Hispanic Journal of Behavioral Sciences*, *31*(2), 149-181. https://journals.sagepub.com/doi/abs/10.1177/0739986309333020?casa_token=MYVY7i7nVxQAAAAA:qZ3PFJV1rqALIDccuDWTyaA3HGKTenRHNUthxQZTmFQC893ym_UAV6VmUZFVKISgvsEhO9_lhK2ZZw

Perry, C., & Allard, A. (2003). Making the connections: transition experiences for first-year education students. *The Journal of Educational Enquiry*, *4*(2). https://ojs.unisa.edu.au/index.php/EDEQ/article/view/525

Richardson, A., King, S., Garrett, R., & Wrench, A. (2012). Thriving or just surviving? Exploring student strategies for a smoother transition to university. A practice report. *Student Success*, *3*(2), 87. https://fyhejournal.com/article/download/132/138/132-1-722-1-10-20120727.pdf

Rosander, P. (2013). The importance of personality, IQ and learning approaches: predicting

    academic performance (Doctoral dissertation, Lund University).

    https://lup.lub.lu.se/search/files/3152866/3217378.pdf

Rudd, G., Meissel, K., & Meyer, F. (2021). Measuring academic resilience in quantitative

    research: A systematic review of the literature. *Educational Research Review*, *34*,

    100402. https://doi.org/10.1016/j.edurev.2021.100402

Salmon, C. (2012). Birth order, effect on personality, and behaviour. *Encyclopedia of Human*

    Behavior (Second Edition).

    https://www.sciencedirect.com/science/article/abs/pii/B9780123750006000641?via%3Di

    hub

Schretlen, D. J., Pearlson, G. D., & Gordon, B. (2010). A neuropsychological study of

    personality: Trait openness in relation to intelligence, fluency, and executive functioning.

    Journal of Clinical and Experimental Neuropsychology, *32*(10), 1068.

    https://doi.org/10.1080/13803391003689770

Sengsouliya, S., Soukhavong, S., Silavong, N., Sengsouliya, S., & Littlepage, F. (2020). An

    investigation on predictors of student academic engagement. *European Journal of*

    Education Studies.

    https://www.researchgate.net/publication/360236354_AN_INVESTIGATION_ON_PRE

    DICTORS_OF_STUDENT_ACADEMIC_ENGAGEMENT

Shi, B., Dai, D. Y., & Lu, Y. (2016). Openness to experience as a moderator of the relationship

    between intelligence and creative thinking: A study of Chinese children in urban and rural

    areas. *Frontiers in Psychology*, *7*, 182359. https://doi.org/10.3389/fpsyg.2016.00641

Soto, C. J., & John, O. P. (2017). Short and extra-short forms of the Big Five Inventory–2: The BFI-2-S and BFI2-XS. *Journal of Research in Personality*, *68*, 69-81. https://www.sciencedirect.com/science/article/pii/S0092656616301325

Spengler, M., Brunner, M., Martin, R., & Lüdtke, O. (2016). The role of personality in predicting (change in) students' academic success across four years of secondary school. *European Journal of Psychological Assessment*. https://econtent.hogrefe.com/doi/abs/10.1027/1015-5759/a000330?journalCode=jpa

Strayhorn, T. L. (2012). College students' sense of belonging: A key to educational success. *Routledge*. Retrieved from https://www.routledge.com/

Tackett, J., Hernandez, M., & Eisenberg, N. (2019). Agreeableness. In D. P. McAdams, R. L. Shiner, & J. L. Tackett (Eds.), *Handbook of Personality Development* (1 ed., pp. 171-185). The Guilford Press. https://psycnet.apa.org/record/2018-63285-010

Trapmann, S., Hell, B., Hirn, J. O. W., & Schuler, H. (2007). Meta-analysis of the relationship between the Big Five and academic success at university. *Zeitschrift für Psychologie/Journal of Psychology*, *215*(2), 132-151. https://econtent.hogrefe.com/doi/abs/10.1027/0044-3409.215.2.132

Viñas, F. (2014). Introvert/Introversion. In: Michalos, A.C. (eds) *Encyclopedia of Quality of Life and Well-Being Research*. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-0753-5_1534

Voelkl, K. E. (1997). Identification with school. *American Journal of Education*. https://doi.org/10.1086/444158