



The Interplay of Agreeableness and Self-Esteem, in Predicting Academic Competence among Undergraduates

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ABSTRACT

The purpose of this study was to explore the relationship between agreeableness, self-esteem, and academic competence among undergraduate students that was examined in current research. Young adulthood, especially during university life, presents both academic and personal challenges that can significantly influence students' self-esteem, either positively or negatively, depending on their adaptability and background. Undergraduate students from various private and government institutions enrolled in various departments make up the population of interest. Correlational research design was used to identify the relationship between these variables and the participants were taken from the different public

and private universities. A convenience sampling was used to obtain the data in where 125 males and 125 were females (N= 250) and the mean age was M= 21.12. To measure agreeableness, self-esteem, and academic competence, indigenous scales were used such as Big Five Inventory (Rehman & Johnson, 2019), Self-Esteem Scale (Zafar & Saleem, 2012), and Academic Competence (Jabeen & Afridi, 2019) scale were administered. Pearson Product analysis was used to check the correlation, Regression analysis to find the predictability and t test analysis were applied to find out the gender difference. The findings of this study indicated the positive relationship between agreeableness personality traits and academic competence ($r=0.28^{**}$) whereas the negative relationship between self-esteem and academic competence ($r= -0.17^{**}$). The results of this study have significant ramifications for university students, teachers, and mental health specialists. Intervention to help students improve their academic performance and self-esteem can be devised by recognizing the link between agreeableness, self-esteem, and academic competence.

Keywords: Agreeableness, Self-Esteem, Academic Competence, University Students, Undergraduate

INTRODUCTION

Young adulthood is a phase where students transition into a new chapter of life, facing not only academic challenges but also personal growth. University life, with its new social dynamics and academic pressures, can significantly impact a student's self-esteem. Students often enter university from different regions, which exposes them to diverse perspectives and can either boost or diminish their self-esteem. Some students feel excited, leading to higher self-esteem, while others feel anxious about the independence required, resulting in lower self-esteem. In Pakistan, the education system plays a role, as universities offer co-education, which is different from the gender-segregated schooling up to the intermediate level. This shift can be challenging, especially for students from conservative backgrounds where communication between genders is restricted (Zafar et al., 2012).

Male students tend to report higher self-esteem compared to females, influenced by societal norms (Malik, 2013). Teacher assessments also contribute to students' self-esteem. Students may feel demotivated if they don't receive enough attention or fail to meet expectations (Arshad et al., 2015). Some students are more anxious, requiring constant approval from peers or teachers, leading to low self-esteem (Dar & Wani, 2017). These emotional and academic challenges can affect academic competence, which is defined as the ability to apply knowledge and skills effectively (Tuononen & Parpala, 2021). Low self-esteem often correlates with lower academic competence, as students with low confidence struggle to utilize their academic abilities (Aryana, 2010).

University assessments, including presentations, aim to build students' confidence. Peer comparison can influence self-esteem as students may feel inferior if they receive lower grades than their classmates (Ketata et al., 2021). However, some students focus on mastering concepts rather than obsessing over grades, which

research shows leads to greater long-term success (Delgadova, 2015). Participation in co-curricular activities also impacts both self-esteem and academic competence. While some students engage in activities to build confidence, others may neglect academics, which can affect their overall academic performance (Arshad et al., 2015).

Personality traits, such as agreeableness, influence how students interact with others and approach their studies. People with high agreeableness are generally more empathetic, cooperative, and supportive, leading to higher self-esteem. Their collaborative nature also helps in academic settings, making them more successful in achieving academic goals (Soto, 2018; Laursen et al., 2002). However, because agreeable individuals often prioritize others' needs, they might struggle with time management, which can impact their grades (Chowdhury & Amin, 2006). These individuals tend to have higher self-esteem, though it can fluctuate depending on their experiences with friends or if they feel unappreciated or betrayed (Zafar et al., 2012). The study focuses on the role of agreeableness in shaping self-esteem and academic competence, exploring how these factors interconnect.

METHODOLOGY

Study Design

The correlational design was used in the study which is used to find the association between agreeableness, self-esteem, and academic competence in university students.

Participant and Sampling Strategy

The sampling technique that was used in this study was convenience sampling technique because students sitting in the library, cafeteria, ground or any other area in the university were asked to fill out the forms for the study. Both male and female participants were equal and different universities were approached for data collection. In this study, data was collected from 250 participants by using the scale of Big five personality, self-esteem, and academic competence from undergraduate students of different universities which were private and government both. Both male and female participants were equal.

Table 1

Frequencies and Percentages of demographic Characteristics of the Participants (N=250)

Variables	F	%
Gender		
Boys	125	50
Girls	125	50
University		
Private	113	45.2
Government	137	54.8
Semester		
1 st	2	0.8
2 nd	28	11.2
3 rd	11	4.4

4 th	25	10
5 th	94	37.6
6 th	30	12
7 th	53	21.2
8 th	7	2.8
Marital Status		
Single	239	95.6
Married	11	4.4
Place of Residence		
Hostel	113	45.2
Personal Home	137	54.8
Family System		
Nuclear	168	67.2
Joint	82	32.8
Socioeconomic Status		
Lower	11	4.4
Middle	220	88
Upper	19	7.6

Note. f= frequency, %= percentage

Measures

Demographic Form

The demographic information which each participant filled in before starting reading the scales of variables included age (18-24), gender (male/female), marital status(single/married), place of residence (dormitory/personal home), family system (nuclear/joint), major (department/field), semester (1-8), university type (private/government), socioeconomic status (lower/middle/upper), number of siblings, father's education, occupation, and age, mother's education, occupation, and age, and birth order.

Agreeableness

For the agreeableness variable, items were taken from the Big-Five Personality Inventory scale total containing 44 items from which only items of agreeableness (F3) were chosen. The original scale was developed in English (John et al., 1991). There is strong evidence for the validity of the Agreeableness dimension of the BFI. The reliability of the Agreeableness dimension of the BFI has also been well-established.

Self-esteem

For self-esteem variable, a self-esteem scale including 59 items was used for the collection of data. This scale was developed by the professors at the University of Management and Technology (Zafar & Saleem, 2012).

Academic Competence

For the dependent variable i.e. academic competence, the academic competence scale was used which has 33 items consisting of study skills,

communication, management, and self-spiritual. The sub-factor Study Skills (F1) includes 1, 3, 4, 5, 7, 13, 14, 17, 19, 21, 28, 29, 30, and 38 items. The sub-factor Communication Skills (F2) includes 8, 22, 23, 24, 25, 26, 27, 31, and 35 items. The sub-factor Management Skills (F3) includes 12, 15, 16, and 20 items. The sub-factor Self-spiritual (F4) includes 2, 11, 18, 33, 34, and 36 items. This scale was developed by the professors at UMT (Jabeen & Afridi, 2019).

Procedure

For the research, topic was approved by the department of Clinical Psychology at the Superior University (SU). The demographics were used to get some personal information for the analysis of the variables from the participants involved in the study. Both private and government universities were used for the collection of data after taking permission from the institutions. First of all, the pilot study was conducted with 15 participants to check the response of the participants. The response was satisfactory, and then the data was collected. The questionnaires were distributed to the participants, and both male and female participants were equal. The instructions were given by explaining the aim and objectives of the study and how it helps out in determining their academic competence personality traits agreeableness, and self-esteem. The students were asked to fill out the scales. It took them to complete them in a maximum of 25 minutes and after that, the feedback was also taken from the participants. After that, the participants' responses were summed to obtain the total score of each scale. The total possible score against each tool was according to the standardized score through which the total score of each individual for each scale was analyzed. The final result of the study was dependent on the analysis of the tools filled out by the participants.

Statistical Analysis

Data was entered into the SPSS (Statistical Package for Social Sciences) software which was then analyzed by using different methodologies. Data was analyzed by using descriptive statistics to find the ranges and percentages of demographic variables. Descriptive and inferential were also used to analyze the results. Correlational analysis, regression analysis and t-test were used to find the association and differences between agreeableness, self-esteem, and academic competence in university students.

Ethical Consideration

The permission for using scales (Agreeableness, self-esteem, and academic competence) was taken by the authors of scales. The consent from different universities in Lahore was also taken for data collection. The informed consent was obtained from participants after explaining to them the purpose and procedure of the research. Participants were asked to withdraw anytime and can also ask questions during filling out the form. Confidentiality was maintained by not asking for their names.

RESULTS

Table 2

Relationship among Agreeableness, Low Self-esteem, Academic Competence, Study Skills, Communication, Management, and Self-Spiritual in University Students

Note. ** Correlation is significant at the 0.01 level. M= mean, SD= standard deviation,

Variables	N	M	SD	1	2	3	4	5	6	7
BFI_TOTAL	250	19.6	5.54	-	0.20*	0.22*	0.28*	0.21*	0.23**	0.18**
		3			*	*	*	*		
LSES_TOTA L	250	13.7	6.76	-	-	-	-	-	-	-
		8				0.19*	0.17*	0.18*	0.13*	0.20**
						*	*	*		
ACS_TOTAL	250	67.4	19.6	-	-	-	-	0.94*	0.89**	0.70**
		0	4					*		
Study Skills	250	23.7	8.27	-	-	-	-	-	0.79**	0.61**
		5								
COM	250	16.3	5.15	-	-	-	-	-	-	0.53**
		9								
Management	250	6.33	2.52	-	-	-	-	-	-	-
Self-Spiritual	250	11.9	3.62	-	-	-	-	-	-	-
		6								

n= sample. BFI=Big Five Inventory (Agreeableness), LSES=Low Self-esteem, ACS=Academic Competence, COM=Communication Skills

The findings suggest that Agreeableness has a positive correlation with low self-esteem, indicating that students with higher levels of Agreeableness are more likely to experience lower self-esteem. However, Agreeableness also shows a significant positive correlation with academic competence, suggesting that students with high Agreeableness are more academically competent. Study skills, communication, management, and self-spirituality—key sub-factors of academic competence—are all positively correlated with Agreeableness, meaning students with high Agreeableness are more likely to possess strong study, communication, management, and self-spiritual skills. Additionally, study skills have a negative correlation with low self-esteem, indicating that students with higher self-esteem tend to have better study skills.

Further, communication skills are positively correlated with Agreeableness and academic competence, while negatively correlated with low self-esteem, showing that students who communicate well are less likely to experience low self-esteem. Management skills also correlate positively with Agreeableness and academic competence, and they are negatively associated with low self-esteem. Similarly, self-spirituality is positively correlated with Agreeableness and academic competence, and it has a negative correlation with low self-esteem. The results highlight the interconnections between personality traits, academic competence, and self-esteem, suggesting that students who are more agreeable tend to perform better academically and have higher self-esteem, particularly through their study, communication, management, and self-spiritual skills.

Table 3

Regression analysis was done to find out whether agreeableness and self-esteem is a significant predictor of academic competence or not.

Regression analysis of agreeableness and self-esteem on Academic Competence

Predictor	B	SE	β	t	p
Agreeableness	1.18	.21	.33	5.57	<.00
Self-esteem	-.71	.18	-.24	-4.08	<.00

The findings revealed that the overall model was significant, $F(2, 20.10) = 78.2$, $p < .001$, which implied that both agreeableness and self-esteem were an influential indicator of academic competence. The R^2 was calculated to be 0.37, which indicates that 37.4 percent of the difference in the scores of academic competences was attributed to the amount of agreeableness and self-esteem experienced by the participants. This significant percentage implies that agreeableness and self-esteem are a major factor that play role in academic competences. The negative sign with beta value indicated that low self-esteem is a negative predictor of academic competence which means that if one-point increase in the low self-esteem scores, that will cause .71 decrease in academic competence.

Table 4

Mean, Standard Deviation, t-value, Sig. Value, 95% Confidence Interval of the Difference, and Cohen's d

Variable	Gender				Sig.		95%		Cohen's d
	Male (N=125)		Female (N=125)		T	p	Lower	Upper	
	M	SD	M	SD					
BFI_TOTAL	19.16	5.89	20.11	5.15	-	0.17	-2.33	0.42	-2.73
SES_TOTAL	12.79	6.74	14.76	6.65	-	0.02*	-3.64	-0.30	-3.94
ACS_TOTAL	64.52	19.21	70.28	19.72	-	0.02*	-10.60	-0.90	9.7
Study Skills	22.60	7.93	24.91	8.48	-	0.02*	-4.35	-0.26	-4.61
COM.	15.65	4.92	17.12	5.30	-	0.02*	-2.74	-0.19	-2.93
Management	6.49	2.52	6.16	2.52	1.02	0.30	-0.30	0.95	-1.25
Self-Spiritual	11.53	3.93	12.38	3.25	-	0.06	-1.74	0.05	-1.79

Note. N=no. of participants, M=mean, SD=Standard Deviation, BFI=Big Five Inventory (Agreeableness), SES= Self-esteem Scale, ACS=Academic Competence Scale, COM=Communication Skills

Table 6 shows that there were non-significant differences in agreeableness personality traits with gender. There were significant differences in low self-esteem

with gender. The mean of female was 14.76 and male was 12.79 which indicates that females have more low Self-esteem as compared to males. There were significant differences in academic competence with gender. The mean of female was 70.28 and males were 64.5 which indicate that females have high academic competence as compared to males. There were significant differences in study skills with gender. The mean of female was 24.91 and male was 22.60 which indicates that females have high study skills as compared to males. There were significant differences in communication with gender. The mean of female was 17.12 and male was 15.65 which indicates that females have high communication skills as compared to males. There were non-significant differences in management skills with gender. There were non-significant differences in self-spiritual skills with gender.

DISCUSSION

University students are a diverse mixture of people from a variety of socioeconomic backgrounds, cultures, and geographies. According to studies, university students face a variety of psychological and academic challenges that might have an impact on their general well-being and academic success (Furr et al., 2001). The project intends to provide insights into the psychological and academic experiences of university students, by investigating the variables. University students are young people pursuing a degree or certificate in a particular field. University students, on the other hand, confront a variety of problems that might have an impact on their academic success and overall well-being (Hyseni et al., 2018). The academic workload, which may be daunting and unpleasant at times, is one of the most prevalent obstacles. Students are expected to attend lectures, complete homework, prepare for tests, and frequently juggle many courses at the same time (Shao et al., 2019). Furthermore, students may suffer with time management, procrastination, and motivation, making it difficult to keep up with their studies (Salmela et al., 2009). University students may suffer personal difficulties such as family problems, health issues, or relationship problems. These difficulties can be tough to manage while maintaining academic commitments (Shao et al., 2019).

The current study investigates the relationship between Agreeableness, Self-Esteem, and Academic Competence in University students. A population of 250 university students was recruited for data collection, of which 125 were female and 125 were male ($N = 250$). Three scales of Big Five Inventory (BFI), Self-Esteem, and Academic Competence were used to collect data from university students along with a demographic sheet. Agreeableness items were taken from the Big Five Inventory scale, entire self-esteem scale, and the entire academic competence scale was taken for the study. Students from both private ($N=113$) and government ($N=137$) universities were included in this study. Some other demographic variables including marital status, place of residence, and family type are used to understand how these variables relate to the main variables of Agreeableness, Self-Esteem, and Academic Competence.

The result showed that Agreeableness has a positive significant correlation

with low level of self-esteem ($r=0.20^{**}$, $p<0.05$). This indicates that students, who have high Agreeableness personality traits, are more likely to have low self-esteem. Studies have shown that Agreeableness is negatively associated with self-esteem, which indicates that students who score high on Agreeableness tend to have low self-esteem (Li et al., 2019). Agreeableness has a significant positive correlation with Academic Competence ($r=0.28^{**}$, $p<0.05$). This indicates that students, who have high agreeableness personality traits, are more prone to be academically competent. Literature shows that Agreeableness is positively associated with academic performance, which indicates that students who score high on Agreeableness tend to have higher levels of academic competence (Poropat, 2009). Low self-esteem has a negative significant correlation with academic competence ($r=-0.17^{**}$, $p<0.05$). This indicated that students, who are more competent academically, are more likely to have high self-esteem. The study conducted by Orth et al., (2008) which found that self-esteem is positively associated with academic achievement, which indicates that individuals who have higher levels of academic competence tend to have higher levels of self-esteem.

The sub-factors of academic competence are study skills, communication skills, management skills, and self-spiritual skills. Study skills have a positive significant correlation with the Agreeableness personality trait ($r=0.21^{**}$, $p<0.05$). This indicates that students, who have high Agreeableness personality traits, are more likely to have high study skills. Previous studies has shown that there is a positive relationship between agreeableness and study skills which indicates that individuals who have high agreeableness personality traits are more conscientious and organized, which results in good study skills (Poropat, 2009). Study skills have a significant negative correlation with low self-esteem ($r=-0.18^{**}$, $p<0.05$). This indicates that students, who have low self-esteem, are more likely to have low study skills. The study conducted by Richardson et al., (2012) which found that self-esteem has positive association with academic achievement and study skills, which indicates that individuals who have higher levels of self-esteem are more likely to have higher levels of study skills. Study skills have a positive significant correlation with academic competence ($r=0.94^{**}$, $p<0.05$). This indicates that students, who have high study skills, are more likely to have high academic competence. Literature shows that study skills have positive relationship with academic achievement, indicating that individuals who have higher levels of study skills tend to have higher levels of academic competence (Zeidner et al., 2000).

Communication has a significant positive correlation with Agreeableness personality traits ($r=0.23^{**}$, $p<0.05$). This indicates that students, who have high Agreeableness personality traits, tend to be more communicative. Literature shows that Agreeableness has positive relationship with communication skills and behaviors, which show that individuals with high Agreeableness score are generally more expressive in communication (Graziano & Tobin, 2009). Communication has a significant negative correlation with self-esteem ($r=-0.13^{**}$, $p<0.05$). This indicates that students, who have high communication, are more likely to have high self-

esteem. There is no clear evidence of a significant negative relationship between communication and low self-esteem, but there is a suggestion that communication skills may be a protective factor against low self-esteem (Tausczik & Pennebaker, 2010). Communication has a significant positive correlation with academic competence ($r=0.89^{**}$, $p<0.05$). This indicates that students, who have high academic competence, are more likely to be communicative. The study by Stuhlman and Pianta (2009), which indicate that students who have high communication skills tend to be more academically competent. Communication has a significant positive correlation with study skills ($r=0.79^{**}$, $p<0.05$). This indicates that students, who have high study skills, tend to be more communicative. Some studies make the evidence that communication skills can lead an individual to effective study skills (Kitsantas et al., 2011).

Management has a significant positive correlation with Agreeableness personality traits ($r=0.18^{**}$, $p<0.05$). This indicates that students, who have high Agreeableness personality traits, are likely to have high management skills. There are some studies which explain the positive association between Agreeableness and management skills, but this relationship seemed complex because it is mostly related with conscientiousness (Judge & Bono, 2001). Management has a significant negative correlation with low self-esteem ($r=-0.20^{**}$, $p<0.05$). This indicates that students, who have high management skills, tend to have less low self-esteem. There are some studies which explain the negative relationship between low self-esteem and management skills, but this relationship seemed complex as it is mostly related with other factors (Judge & Bono, 2001). Management has a significant positive correlation with academic competence ($r=0.70^{**}$, $p<0.05$). This indicates that students, who have high academic competence, are more likely to have high management skills. There are some studies which explain the positive association between management skills and academic competence, but it is connected with other factors such as motivation and self-regulation (Schmidt & Hunter, 1998). Management has a significant positive correlation with study skills ($r=0.61^{**}$, $p<0.05$). This indicates that students, who have high study skills, are likely to have high management skills. There are some studies which explain the positive association between management skills and study skills, but there is no clear description on it (Duckworth & Seligman, 2005). Management has a significant positive correlation with communication ($r=0.53^{**}$, $p<0.05$). This indicates that students, who have high communication skills, are more likely to have high management skills. The studies show that there may be a positive relationship between management and communication skills, because high communication skills are an important component of high management skills (Kane-Urrabazo, 2006).

Self-spiritual has a significant positive correlation with Agreeableness personality traits ($r=0.42^{**}$, $p<0.05$). This indicates that students, who have high Agreeableness personality traits, are more likely to have high self-spiritual skills. There are some studies which explain that there may be a positive relationship between self-spiritual skills and agreeableness, as individuals who have high

agreeableness personality traits tend to be empathetic and compassionate, which may result in high spirituality (Sharma, 2013). Self-spiritual has a negative correlation with low self-esteem ($r=-0.09$, $p>0.05$). This indicates that students, who have high self-spiritual skills, are more likely to have high self-esteem. The study has found that there is a negative correlation between self-spiritual skills and low self-esteem which shows that there is a link between spirituality and lower level of self-esteem i.e. positive mental health outcomes (Koenig, 2014). Self-spiritual has a significant positive correlation with academic competence ($r=0.79^{**}$, $p<0.05$). This indicates that students, who have high academic competence, are more likely to have high self-spiritual skills. The study was conducted by Jaramillo-Sierra and Sánchez-Sánchez (2016), who had found that students with higher levels of spirituality had higher academic achievement. Self-spiritual has a significant positive correlation with study skills ($r=0.66^{**}$, $p<0.05$). This indicates that students who have high study skills are more prone to self-spirituality. There are several studies which explain a positive relationship between management skills and study skills, which indicates that effective management skills, such as time management, organization, and goal-setting, results in academic success and it can also help students in developing good study habits (Mamun & Rahman, 2020). Self-spiritual has a significant positive correlation with communication ($r=0.66^{**}$, $p<0.05$). This indicates that students, who have high communication skills, are likely to have high self-spiritual skills. According to a study by Kumar and Gupta (2015), there is a positive relationship between communication skills and self-spirituality, which indicates that individuals who are more communicative may have a higher level of self-spirituality. Self-spiritual has a significant positive correlation with management ($r=0.45^{**}$, $p<0.05$). This indicates that students, who have high self-spiritual skills, are more likely to have high management skills. Research shows that if an individual have higher levels of self-awareness, mindfulness, and spiritual well-being, are more likely to manage their thoughts, emotions, and behaviors, which results in managing tasks, relationships, and teams more effectively (Van den Berghe et al., 2021).

There were significant differences in low self-esteem with gender. Females ($M=14.76$) have more low Self-esteem as compared to males ($M=12.79$). The research supports the results, which shows that there are gender differences in self-esteem, as females reported lower levels of self-esteem than males (Orth et al., 2010). There were significant differences in academic competence with gender. Females ($M=70.28$) have high academic competence as compared to males ($M=64.5$). There were significant differences in study skills with gender. Females ($M=24.91$) have high study skills as compared to males ($M=22.60$). The research supports the results, which shows that there are gender differences in academic achievement and skills, as females have high performance as compared to males in these areas (Hyde, 2005). There were significant differences in communication with gender. Females ($M=17.12$) have high communication skills as compared to males ($M=15.65$). Previous studies have shown that females have high verbal communication skills as compared to males, whereas several studies have attributed communication skills

with socialization and societal expectations (Hall, 2018).

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