How the Students' Competitive and Collaborative Styles of Learning are Affected by Personality Traits at the University Level

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ARTICLE DETAILS	ABSTRACT
History *Revised format:* *Nov 2021* *Available Online:* *Dec 2021* **Keywords** *Learning style,* *personality trait,* *competitive,* *collaborative*	Investigating how personality traits affect competitive and collaborative learning is the goal of the current study. When examining the influence of personality traits on learning styles, Big Five Theory was employed. Two hundred students were casually picked using the non-probability selection approach for this descriptive study design. After translation into the native language, a large-scale portfolio and the Grasha-Riechmann Scales of Student Learning Skills were utilized. Cronbach's alpha provided proficient estimation, pilot testing, and consistency, which all confirmed the instrument's validity ($\alpha = 0.94$). Five elements correlated with students' learning styles, including their personality traits. Students may benefit from a teaching approach that considers their unique characteristics and learning styles. Social training, academic achievement, and collaborative chances influenced personality traits and learning.

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Introduction

Personality and learning styles are examples of individual diversity. Learning and personality development are affected by these qualities for every learner. Different situations and environments shape our disposition. Various traits and distinguishing qualities distinguish one person from another (Khan, 2018; Joyce, 2020). When combined in a group, personality results from various traits, qualities, and temperaments. Various studies have studied the relationship between traits of personality and extra factors such as work routine, educational accomplishments, and knowledge (Busato et al., 1998; Chioqueta & Stiles 2005; Joyce, 2020; Chamorro Premuzic & Furnham, 2008; Molleman, 2005; Blickle, 1998). Directly and indirectly, pupils' performance is influenced by the synchronization of learning and personality traits. Individual personality qualities are expressed in pupils' actions, perceptions, and feelings. There are also distinct dimensions to these features. For example, openness to experience is one of the sub aspects

theorists have identified. Everyone also has unique personality qualities that influence their education (McAdams & Pals, 2006). Students' personality traits and styles of learning often interact in educational consciousness. The influence of personality traits on educational achievement has been proven by several researchers (Rashid et al., 2012; Kamarulzaman, 2012). Personality traits are crucial to achieve targeted aims and deal with unique situations (Caligiuri, 2000). In further arguments, personality traits ease education and encourage individuals to continue or abandon an activity (Blickle, 1998). These investigations, however, are confined to the associative level of cognition. In light of this link, people's conduct is also affected by the interaction of these characteristics. Although personality traits may not have a universally agreed-upon description, they are understood in specific conceptualizations (Halder et al., 2010; Khan, 2018). "The Big Five Theory" introduced a universal framework of traits of personality that was widely accepted. Extraversion, agreeableness, awareness, and neuroticism are among the five criteria listed. These big-five characteristics are the result of personality traits that have been categorized. According to psychologists, there are five big five personality traits (inventory). Traits of Personality and learning styles can be combined or mediated in research, although they have not been conducted in-depth. These investigations were conducted in foreign populations (Joyce, 2020). The investigation of personality traits and their impact on learning in Pakistan and other specific aspects. Therefore, Students' collaborative and competitive learning methods are being examined in the present study.

Literature Review

A literature review shows that personality traits have a great influence on concepts such as learning effectiveness, nationality configuration, work synchronization and morals, entrepreneurialism, anxiety, and stress, as well as happiness and involvement in procedure or trying to learn thoughts, such as informative action or engagement (Miller, 1991; Organ & Lingl, 1995; Chioqueta & Stiles 2005; Berings, De Fruyt & Bouwen, 2004; Barrick& Mount, 1993; Erdheim, Wang & Zickar, 2006; Blickle, 1998; Molleman, 2005; Busato et al., 1998; Chamorro-Premuzic & Furnham, 2008). In contrast, little research has examined the link between personality and learning styles. A wide range of researchers has identified the link between learning and personality types. Still, In general, people believe that only a dedication to learning may be insufficient for knowing properly. Instead of wasting too much time on the solitary topic, work may be finished more accurately by adopting various learning styles. It is possible to increase the intellectual drive amongst individuals by encouraging them to study in various ways. The disruption of personality traits significantly impacts learning attitudes and styles that manifest as habits as a somewhat abstract concept.

Personality traits are crucial to achieve targeted aims and deal with unique situations (Caligiuri, 2000). Blickle (1998) argues that personality traits can influence learning behavior and drive individuals to engage in or leave an activity. Learning is undoubtedly an informative process that relies on memory, attention, observation, and reasoning. As opposed to this, learning refers to the systematic organization of mental functions in response to external stimuli. Working as an agent through this process is typically influenced by personality traits. In this way, they affect learning attitudes (De Raad & Schouwenburg, 1998). Personality traits influence learning styles, which is strong.

Personality

An Individual's unique features and temperament and the combination of those characteristics that make them stand out in different situations are referred to as "personality" (Phares, 1991). It is described as the unique adaptability, specific affiliation with life, and cultural differences of each human being (Hogan, Hogan & Roberts, 1996; McAdams & friends, 2006). Diverse qualities and elements with different meanings are used to describe personality. Extraversion, neuroticism, and paranoia are the personality traits that J Eysenck (1967) referred to about the notion of biological

stimuli. To increase human stimulation levels, H. J. Eysenck proposed a variety of approaches. So, extraversion wants a constant stimulation stream to keep their energy levels up. As a result, they are talkative, emotional, energetic, courteous, and social. But individuals also appear to be very emotional and neurotic; they are timid, disturbed, and insecure; they are nervous or troubled; they distrust people even when they are in traditional settings. In addition, androgenic adrenaline is strongly linked to psychotic traits of personality. Consequently, a link has been shown between personality and the different aspects, including consideration and memory. They also overpowered several other variables (Erdheim, Wang & Zickar, 2006; Daderman, 1999). Even though traits of personality are not universally acknowledged, there is general agreement on five components that constitute traits of personality (Ackerman & Heggestad, 1997; Goldberg, 1990; Costa & McCrae, 1995, 1997; Digman, 1990; McCrae & Costa, 2005; Busato et al. 1998).

Big-Five Traits of Personality
Over discrimination, hard inquiry, and objective-driven questions, improved personalism investigation led to the improvement of the Five-Factor Model (FFM).ob Several examples were analyzed, and the results were determined to be accurate. They include extraversion, conscientiousness, agreeableness, openness, and neuroticism (Burke & Witt, 2004; Barrick and Mount, 1993; McCraea& John, 1992; Busato et al., 1998; Harris &Lee, 2004; Heller, decide & Watson, 2002).

Conscientiousness
Labor, success-orientation, heedfulness, and persistence are the most common characteristics linked with this attribute (Barrick & Mount, 2001; Erdheim, Wang & Zickar, 2006). Relationships between personality and responsibility, organization, and performance are evident. However, those with a lower responsibility appear to be undisciplined, unorganized, delaying, and careless (Costa &McCrae, 1995).

Agreeableness
Stereotypical qualities such as compassion, self-sacrifice, or moral support are on the one hand; apathy, aggressiveness, self-concern, and protectiveness are on the other hand (Barrick & Mount, 2001; Erdheim, Wang & Zickar, 2006). Friendship-oriented individuals are trustworthy, fast, and humble. Those with low respect for others display aggressive, competitive, untrustworthy, and doubtful qualities (Graziano, Jensen-Campbell & Hair, 1996; Bono, Boles, decide & Lauver, 2002).

Openness
Openness is a quality shared by those who like discipline and unsophisticated innovative thought, creativeness, diversity, discerning, uniqueness, a sagacity of amazement, and complexity (Erdheim, Wang & Zickar, 2006; Barrick & Mount, 2001). From 5 major personality traits, this one has the finest psychosomatic component in that regard: inventive and inventive people who are boastful and determined, as well as unique and self-reflective individuals who are regarded to be indifferent (Costa & McCrae, 1995; Bond et al., 2002).

Neuroticism
On the other hand, neurotic persons tend to overestimate negative feelings such as guilt and anger. Persons with a high level of emotional distress are agitated and anxious in this way. Mentally healthy individuals are enthusiastic and calm (Costa & McCrae, 1995).

Extraversion
An important personality trait is self-assurance, which comprises five factors: social will, communicativeness, aggressiveness, and determination (Barrick & Mount, 2001). A great notch

of socializing makes a person favorable, emotionally, passionate, dominating, and forceful. In contrast, a low degree of socialization makes a person introverted, timid, relaxed, and usually secluded, according to research (Bond et al., 2002).

Styles of Learning
Interpretations of general public ideas in a larger context are notoriously difficult to agree on. Unconsciousness gets difficult to define every attempt (Shuell, 1986). Several commonalities characterize human learning. Taylor & Mac Kenney (2008) explain how learning needs specific behavioral changes over time (Schunk, 2012). According to Lafrancois (2000), learning occurs when ripening, tiredness, medicines, and physical traumas do not result in a reasonably lasting shift. People's behaviors change over time due to regular interactions, suggesting that learning is a very enduring phenomenon. In literature, knowledge is seen as a type of thinking and comprehending. Styles of Learning include shallow or intensive data analysis, methodical and periodic information management, total volume, archiving, and systems retrieving (Busato et al., 1998).

Their processes may determine a person's learning style to obtain and evaluate knowledge and information (Ekici, 2013). As a result, the most prevalent educational approaches may be classified into three categories: deep knowledge and data processing, acquiring, and simple information processing. When it comes to data collecting, students who have a performance-oriented mindset tend to be materialistically motivated by the prospect of receiving a high return on investment in terms of learning habits.

Wilsfok (2009) describes learning styles as distinct ways of thinking and managing knowledge. There are diverse workplace types and styles, such as group and individual work. Teachers might be prepared with worksheets and strict directions for their study projects. Pupils study individually when they are alone and isolated from other students. The teacher passes on information and benefits to the learner. Teachers offer the bulk of knowledge sources, encouragement, suggestions, and reviews in this type of learning. Materials and components should be readily available to students. Evaluations are generally based on several variables, and learning is beneficial on its terms. In collaborative learning, pupils work in small sets to attain a mutual objective. As a group work technique, collaborative learning reduces the incidence of such difficult conditions and spreads awareness and contentment in the high-performing workforce.

Methodology
The current study investigated the influence of personality traits on learning styles using a quantitative approach- questionnaire survey method. The convenience sampling approach was used to choose 200 students from the Bahauddin Zakariya University, Multan, for data gathering and analysis.

Data Collection
The data was collected in person at the Bahauddin Zakariya University Multan-the largest university in the southern region of Punjab Province, Pakistan. As the students filled out the survey form, the researcher advised them to complete it correctly and completely.

Instrumentation
As part of the instruments used to obtain student opinions on the influence of personality traits on the styles of learning, Grasha-Riechmann and Big Five Inventory Students Style of Learning Scales were administered. It was also localized into the Urdu language to ensure authenticity and dependability.

Validity and Reliability
The validity of the questionnaire was verified with the aid of an expert's judgment. Pilot testing was conducted on 20 students who were not part of the research to determine the dependability of the results. In terms of dependability, a value of 0.94 was found.

Analysis and Discussion of Results
The SPSS file contained the data of 200 students. We began by using exploratory factor analysis to identify the scale's components. Each of the seven subscales, each with 62 items, was split into five substitute scales of traits of personality and two styles of learning. There was a factor loading of more than 0.41 in all statements, the value of KMO was 0.85, and 0.94 was of reliability. Analyzing the data included descriptive (standard deviation, mean) and inferential (multiple regression and correlation) statistics.

Table 1: Standard Deviation and Central tendency of respondents concerning the influence of traits of personality on competitive and collaborative styles of learning

Factors	N Value	Mean Value	Standard Deviation
Agreeableness	200	1.9574	1.23624
Extraversion	200	1.9190	1.26157
Conscientiousness	200	2.3524	1.26815
Openness	200	2.3691	1.30698
Neuroticism	200	2.3970	1.40963
Competitive	200	1.7583	1.49175
Collaborative	200	2.5058	1.27853

Table 1 provides the mean value and standard deviation value of answers. There is a center point of 2.00 beneath three central values, which show a tendency of a discrepancy between respondents, and three central values, that indicate a tendency of contract among respondents. It is also worth noting that mean of the collaborative style of learning (2.5058) is higher than the mean of the competitive style of learning (1.7583).

Table 2: Pearson's Correlation between competitive and collaborative styles of learning with five factors of traits of personality

Factors	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness	Collaborative	Competitive
Extraversion	1						
Agreeableness	.97**						
Conscientiousness	.95**	.95**					
Neuroticism	.97**	.96**	.94**				
Openness	.95**	.93**	.94**	.97**			
Collaborative	.94**	.91**	.95**	.95**	.97**		
Competitive	.93**	.94**	.89**	.90**	.85**	.84**	1

** Correlation is significant at the level of value 0.01 (2-tailed).

The Pearson's r was conducted to determine the connection between the characteristics of extraversion, agreeableness, neuroticism, openness, conscientiousness, competitiveness, and collaboration. There was a strong positive association between variables at a significant level of

p< .001. As a whole, there was an important link between traits of personality and competitive and collaborative styles of learning.

Table 3: Multiple Regression foretelling influences of personality traits on Collaborative Styles of learning

Factors	β	t-values	p-values
Extraversion	.314	5.991***	.000
Agreeableness	-.561	-.11.485***	.000
Conscientiousness	.517	15.992***	.000
Neuroticism	.066	1.146	.254
Openness	.624	13.568***	.000
*p<.05, **p <.01, ***p<.001		R Square =.883	F = 4542.146***

F=4542.146, df=4.395, P=.000, and R Square=.883 were obtained via multiple regression to examine how personality traits affect collaborative learning styles. It was shown that personality traits had such a favorable and substantial impact on the collaborative style of learning (P=.000). Neuroticism was determined to be statistically insignificant at B =.066, whereas Agreeableness was shown to be significant at B =-.561.

Table 4: Multiple regression foretelling the influence of the traits of personality on Competitive Styles of learning

Factors	β	t-values	p-values
Extraversion	.788	7.138***	.000
Agreeableness	.985	9.572***	.000
Conscientiousness	-.061	-.877	.382
Neuroticism	.117	.972	.333
Openness	-.692	-7.133***	.000
*p<.05, **p <.01, ***p<.001		R Square = .843	F= 1306.839***

Table 4 shows the effects of personality traits on the competitive learning style, with F=1306.839, df =4.395, P =.000, and R Square=.843 as the findings. Except for openness (B = -.692) and conscientiousness (B = -.061), traits of personality have a positive, substantial influence on the competitive style of learning, and the effect is statistically substantial (P =.00).

Conclusion

Our study found that personality traits significantly influenced competitive and collaborative learning styles. The mean value of the collaborative learning style is higher than the competitive learning style, indicating that the students are more attentive in this style of learning because they possess the traits of personality associated with it. Cooperation fosters interpersonal interactions, boosts social sustenance, and improves self-esteem (Prince, 2004). To describe the dynamic link between personalities and learning styles, a Pearson Correlation was calculated. Apart from neuroticism, the results of Multiple Regression indicated that the variables of personality traits such as Agreeableness, extraversion, openness, and conscientiousness all play a role in influencing collaborative learning style. Still, conscientiousness did not influence competitive learning.

According to the results of our study, students at the Bahauddin Zakariya University are less interested in competing over collaborating when it comes to their learning style. While according to Albert (2009), students' academic performance is enhanced by good social behavior at the University of Georgia exhibiting better social behaviors. Competitive learning style characteristics such as consistency, carelessness, detachment, and reserve are less common among students at this university than others. In Johnson, Johnson, and Smith's (1998) study, cooperation was also more effective than individual labor across the board. According to the study's analysis, no gender-based disparities in answers were identified. In addition, an important link was discovered between five

personality traits and two learning styles, indicating that personality traits indeed influence students' learning styles. Two forms of learning were also shown to be associated with five personality traits, indicating that students' personalities may affect their types of learning. However, students at Bahauddin Zakariya University with personality traits such as ingenuity or friendliness are also confident and are more likely to engage in collaborative learning than those with personality traits such as consistency or carelessness, which are more likely to do so engage in competitive learning.

Recommendations
In the light of our findings, the following recommendations are put forward:

1. To grow and improve their cooperative personality qualities, students need to have many collaborative work opportunities.
2. It is necessary to allocate time for learners' group activities.
3. Policymakers should create curricula based on students' personality traits, tendencies, and inclinations.
4. Students' social development must be prioritized to better adapt their behavior to social norms and values.
5. Students should develop organizational and management abilities as part of their personal growth.

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