

ADVANCE SOCIAL SCIENCE ARCHIVE JOURNAL
Available Online: https://assajournal.com
Vol. 05 No. 01. Jan-March 2026.Page# 9025-9049
Print ISSN: 3006-2497 Online ISSN: 3006-2500
Platform & Workflow by: Open Journal Systems
https://doi.org/10.5281/zenodo.24334562

Examine Differences Between Male and Female Students' Mean Scores about Personality Traits and Classroom Participation

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Abstract
With the time, world is shifting towards online approach more and more. Students are used to gain education traditionally by personally going to learning institutes but now they are shifting towards online education. The primary aim of the research is 1) To explore the significant difference between male and female students' mean scores on personality traits by gender 2) To investigate the significant difference between male and female students' mean scores on extroversion 3) To find out the significant difference between male and female students' mean scores on agreeableness 4) To perceive the significant difference between male and female students' mean scores on conscientiousness 5) To seek out the significant difference between male and female students' mean scores on neuroticism 6) To find out the significant difference between male and female students' mean scores on openness. It is a quantitative research design study. Specifically, the present study was focusing on two universities: Government College University Faisalabad (GCUF) and University of Agriculture (UAF), Faisalabad. Population of study consists of all students enrolled in BS in these universities. The study's sample comprises 365 students from public sector universities in the Faisalabad district who were enrolled in the social sciences and natural sciences programs faculties. Here, convenience can be seen in terms of student availability and researcher access. The supervisor was given the questionnaires to ensure that the questionnaires were subscribed accordingly. The examiner compared, analyzed the form, the language, comprehension and efficacy. Tool was validated by the five faculty members of the Arts and Social Sciences and Natural Sciences from both universities. Cronbach's alpha coefficient was used to check reliability and figure out internal reliability. The number of items in instrument were 51 and Cronbach's Alpha value was .980, indication high internal consistency. Data was collected personally by the researcher. Data was entered and analyzed using SPSS, Descriptive Statistics and inferential statistics (frequency, percentage, mean t-Test,

ANOVA) were used to summarize data. Students should be recognized and appreciate who actively participate in class discussions/activities. Students should be encouraged with different personalities and backgrounds to participate, ensuring diverse range of perspectives in the discussions.

Keywords: Openness, Extroversion, Agreeableness, Neuroticism, and Consciousness.

Introduction

Extroversion and neuroticism were the first of these dimensions to be identified by early trait theorists, before being incorporated into the modern Big Five model. Extravert tend to be sociable, talkative, communicative, and friendly, as well as active, bold, assertive, and stimulating; introverts, by contrast, tend to be more reserved, less active, and more independent. Some research supports a positive association between extroversion and academic success, though other studies report a negative correlation with achievement in higher education Felder and Silverman's (1988).

Consciousness students tend to demonstrate stronger cognitive engagement and place greater value on academic achievement, reflecting characteristics such as purposefulness, thoroughness, organization, discipline, and dependability. Agreeable individuals tend to be gentle, cooperative, courteous, tolerant, and generous, qualities that support strong interpersonal relationships, while students lower in agreeableness tend to be more aggressive and less cooperative (Hoi, 2021).

Neuroticism reflects emotional instability; individuals who score high on this trait tend to experience anxiety, fear, sadness, anger, and embarrassment more readily, while emotional stability is associated with empathy, autonomy, and emotional control. Students who score lower on neuroticism tend to perform better in group learning settings, and several studies report a negative association between neuroticism and academic performance, although at least one study found no such relationship by Felder and Silverman's (1988).

Openness to experience, the final Big Five trait, is associated with heightened emotional responsiveness to situations, as well as creativity, sophistication, and curiosity. This creativity appears closely tied to cognitive ability and academic achievement: one study linked openness to academic outcomes through its association with cognitive ability, while another found that the aesthetic interest, creativity, and intellectual curiosity associated with openness were closely tied to student achievement (Hoi, 2021).

While the Big Five model may not capture personality in its entirety, overlooking dimensions such as emotional stability would leave the mechanisms underlying personality stability poorly understood. The evidence linking personality traits to academic achievement is well established, though further research is needed to deepen this understanding. Existing findings suggest that conscientious students persistently self-disciplined and achievement-oriented show a particularly strong association with academic success, and that understanding both the positive and negative effects of conscientiousness, openness, and neuroticism can help learners.

Consciousness reflects thoughtfulness, impulse control, socially responsible behavior, and goal-directed action. extroversion describes friendliness, sociability, assertiveness, and emotional expressiveness; highly extroverted individuals tend to draw energy from social settings. Agreeableness encompasses trustworthiness, helpfulness, altruism, kindness, and generosity. Neuroticism reflects a tendency toward anger, sadness, emotional instability, and negative affect more broadly (John & Srivastava, 1999).

Statement of the Problem

Personality development is a complex and demanding process that involves acquiring the positive values and attributes associated with success and personal growth (Sharma, 2021). Classroom

participation plays a central role in this process: students who participate actively tend to be more attentive, interested, and motivated, which in turn strengthens academic outcomes. Participation allows students to engage more fully with their education and to interact meaningfully with peers and instructors (Xu, Chen, & Chen, 2020). Developing the qualities associated with personal growth requires a range of experiences, including full participation in the classroom (Kahu & Nelson, 2018). The learning environment therefore plays a significant role in shaping the relationship between personality traits and classroom participation among university students, nurturing both their behavior and their broader personal development.

Research Objectives

1) To explore the significant difference between male and female students' mean scores on personality traits by gender
2) To investigate the significant difference between male and female students' mean scores on extroversion
3) To find out the significant difference between male and female students' mean scores on agreeableness
4) To perceive the significant difference between male and female students' mean scores on conscientiousness
5) To seek out the significant difference between male and female students' mean scores on neuroticism
6) To find out the significant difference between male and female students' mean scores on openness

Research Hypotheses

Ho1: There is no significant difference between male and female students' mean scores on personality traits by gender.
Ho2: There is no significant difference between male and female students' mean scores on extroversion.
Ho3: There is no significant difference between male and female students' mean scores on agreeableness.
Ho4: There is no significant difference between male and female students' mean scores on conscientiousness.
Ho5: There is no significant difference between male and female students' mean scores on neuroticism.
Ho6: There is no significant difference between male and female students' mean scores on openness.

Significance of the Study

It contributes to human psychology with examining the role personality traits play in shaping classroom behavior, and it may help students better understand and engage with online educational systems. Its findings can guide higher-education officials in identifying gaps in their online teaching methods and in designing more engaging learning environments, and can support academic professors, counsellor, and administrative departments in offering more effective guidance to students. While prior research has established comparatively little is known about how these three factors interact jointly. This study aims to address those examining traits, thereby enriching the existing literature and helping educators and instructional designers create more effective, individually responsive learning environments.

Limitations

This study was constrained by limited time and financial resources, which led the researcher to focus on Government-sector universities within the Faisalabad district.

Delimitation

- Two public-sector universities within the Faisalabad district, out of the several government universities located there were taken by the researcher.
- Within these universities, the researcher selected faculties of Arts and Natural Sciences for sample.
- From these faculties, the study focused on the subjects of arts and social as well as natural sciences.
- Data were collected from a sample of respondents drawn from all selected departments.
- Both male and female students from all selected departments were included in the sample.

Review of Literature

Students' personality profiles play a significant role in explaining variation in classroom participation, encompassing traits such as openness, extroversion, introversion, and conscientiousness, among others (Vattøy, 2020). Students with more extraverted, outgoing personalities tend to participate more actively in classroom settings, and research links active participation to stronger academic performance, critical thinking, and knowledge retention. These students tend to thrive in social settings, actively engaging in discussion and drawing satisfaction from collaborative learning (Demir, 2020). Students with more introverted tendencies, by contrast, often favor quieter forms of participation, such as attentive listening or written contributions. Conscientiousness, associated with goal-directed behavior, similarly shapes how students engage in the classroom.

Regular, active participation supports students' educational development (Putarek & Pavlin, 2019) and fosters the success. Because every educational setting brings together students with diverse personality profiles, this diversity enriches the range of perspectives and communication styles present in the classroom. Educators must therefore remain attentive to these differences in order to create an inclusive environment that supports engagement across the full range of student personalities (Cataudella, 2021).

Instructors play a central role in shaping student participation, largely through their communication style, instructional strategies, and classroom management approach (Kennedy & Pek, 2023). Instructors who foster an inclusive, supportive classroom atmosphere tend to see higher levels of student engagement, in particular, personality development, shaped by academic experience, social interaction, and personal challenge (Rohi & Muslim, 2023). Instructors also help create space for open, respectful dialogue, encouraging students to share their perspectives and articulate their reasoning without fear of judgment.

Instructors who demonstrate genuine enthusiasm for their subject and commitment to their students' progress tend to inspire similar engagement in return, fostering a sense of belonging that motivates participation in class discussions and activities (Hoi, 2021). Conversely, instructors perceived as disengaged, unapproachable, or dismissive of student input can unintentionally discourage participation; students are less likely to engage when they anticipate that their contributions will be undervalued or met with a negative response (Rohi & Muslim, 2023). This underscores the importance of instructional Rose, 2019).

Self-efficacy a cornerstone of Social Cognitive Theory significantly shapes students' participation in classroom activities. Students with higher self-efficacy tend to engage more actively in classroom activities, drawing on their confidence to take a proactive approach to learning; they are more likely to ask questions, share opinions, and participate in discussions (Han et al., 2021).

Students with lower self-efficacy, by contrast, may hesitate to participate out of fear of failure or lack of confidence, often resulting in minimal engagement or outright avoidance (Zumbrunn et al., 2019). Understanding self-efficacy is therefore essential to understanding the broader dynamics of classroom participation and how it shapes students' willingness to engage in academic discourse.

Methodology

Research Method

A quantitative approach was adopted to address the study's research questions and test its hypotheses, allowing the researcher to analyze, explain, and draw conclusions from numerical data collected across the sampled universities.

Population

The study population consisted of university students enrolled in undergraduate (BS) programs at two universities Government College University Faisalabad as well as the University of Agriculture, Faisalabad.

Sample and Sampling

The sample comprised 365 students enrolled in social sciences programs at public-sector universities in the Faisalabad district, selected through convenience sampling based on student availability and researcher access. Although non-random, care was taken to ensure the sample reflected the broader student population.

Research Instrument

Data were collected using a single research instrument comprising two parts: the first assessed anxiety related to presentations in English, and the second assessed the coping strategies students used to manage this anxiety, along with related aspects of their physical health. To establish face and content validity, the questionnaire was reviewed by the study supervisor, who evaluated its structure, language, comprehensibility, and overall effectiveness.

Validity

The instrument was validated by five experts from GCUF.

Reliability

In this table 1 indicated reliability level:

Table 1

Reliability Statistics Test

***Reliability Statistics* Test**	**Items**
Cronbach's Alpha	No. of Items
.980	42

Data Collection

Data were collected by the researcher.

Data Analysis

Data were entered and analyzed using SPSS. Descriptive statistics (frequency, percentage, and mean) and inferential statistics (t-test and ANOVA) were used to summarize and interpret findings.

Data Analysis

Hypothesis Testing

Relationship between personality traits and classroom participation. Pearson correlation was used to test whether mean scores on personality traits and classroom participation are related.

Ho1: There is no significant difference between male and female students' mean scores on personality traits by gender.

Table 2

Personality Traits by Gender

Personality Traits	N	Mean	SD	df	t	Sig.
Male	155	3.15	0.34			
Female	190	3.20	0.34	343	1.82	.001

The difference was significant, t (343) = 1.82, p = .001, so the null hypothesis was rejected. Male students scored higher on personality traits overall than female students.

Ho2: There is no significant difference between male and female students' mean scores on extroversion.

Table 3

Extroversion by Gender

Extroversion	N	Mean	Sd	df	t	Sig.
Male	155	3.78	0.28			
Female	190	3.35	0.31	343	3.47	.000

The difference was significant, t (343) = 3.47, p < .001, so the null hypothesis was rejected. Male students scored higher on extroversion than female students.

Ho3: There is no significant difference between male and female students' mean scores on agreeableness.

Table 4

Agreeableness by Gender

Agreeableness	N	Mean	SD	df	t	Sig.
Male	155	2.60	0.60			
Female	190	3.34	0.47	343	13.47	.000

The difference was significant, t (343) = 13.47, p < .001, so the null hypothesis was rejected. Female students scored higher on agreeableness than male students.

Ho4: There is no significant difference between male and female students' mean scores on conscientiousness.

Table 5

Consciousness by Gender

Consciusness	N	Mean	SD	df	t	Sig.
Male	155	3.00	0.48			
Female	190	3.58	0.48	343	0.93	.091

The difference was not significant, t (343) = 0.93, p = .091, so the null hypothesis was retained. Male and female students did not differ meaningfully on conscientiousness.

Ho5: There is no significant difference between male and female students' mean scores on neuroticism.

Table 6

Neuroticism by Gender

Neuroticism	N	Mean	SD	df	t	Sig.
Male	155	2.69	0.17			
Female	190	3.33	0.13	343	23.81	.000

The contrast was positive, t (343) = 23.81, p < .001, so null hypothesis was rejected. Female students scored higher on neuroticism than male students.

Ho6: There is no significant difference between male and female students' mean scores on openness.

Table 7

Openness by Gender

Openness	N	Mean	SD	df	t	sig
Male	155	2.38	0.64			
Female	190	3.41	0.44	343	5.31	.000

The difference was significant, t (343) = 5.31, p < .001, so the null hypothesis was rejected. Female students scored higher on openness than male students.

Findings

Ho1: There is no significant difference between male and female students' mean scores on personality traits by gender.

The difference was significant, t (343) = 1.82, p = .001, so the null hypothesis was rejected. Male students scored higher on personality traits overall than female students.

Ho2: There is no significant difference between male and female students' mean scores on extroversion.

The difference was significant, t (343) = 3.47, p < .001, so the null hypothesis was rejected. Male students scored higher on extroversion than female students.

Ho3: There is no significant difference between male and female students' mean scores on agreeableness.

The difference was significant, t (343) = 13.47, p < .001, so the null hypothesis was rejected. Female students scored higher on agreeableness than male students.

Ho4: There is no significant difference between male and female students' mean scores on conscientiousness.

The difference was not significant, t (343) = 0.93, p = .091, so the null hypothesis was retained. Male and female students did not differ meaningfully on conscientiousness.

Ho5: There is no significant difference between male and female students' mean scores on neuroticism.

The contrast was positive, t(343) = 23.81, p < .001, so null hypothesis was rejected. Female students scored higher on neuroticism than male students.

Ho6: There is no significant difference between male and female students' mean scores on openness.

The difference was significant, t (343) = 5.31, p < .001, so the null hypothesis was rejected. Female students scored higher on openness than male students.

Conclusion

1) The difference was significant, so the null hypothesis was rejected. Male students scored higher on personality traits overall than female students.

2) The difference was significant, so the null hypothesis was rejected. Male students scored higher on extroversion than female students.

3) The difference was significant, so the null hypothesis was rejected. Female students scored higher on agreeableness than male students.

4) The difference was not significant, so the null hypothesis was retained. Male and female students did not differ meaningfully on conscientiousness.

5) The contrast was positive, so null hypothesis was rejected. Female students scored higher on neuroticism than male students.
6) The difference was significant, so the null hypothesis was rejected. Female students scored higher on openness than male students.

Discussion

Communication competence involves the ability to express ideas clearly through verbal, visual, non-verbal, and written channels, along with the capacity to listen and understand others in short, the ability to convey information effectively. Owens and Hite (2020) found a significant relationship between communication competence and engagement, a finding supported by Schunk and Mullen (2012).

Sun (2014) examined how online instructors and researchers reflect on and adapt their practices in response to the challenges of online language learning, drawing on quantitative and qualitative data from 141 university students. Learning outcomes, while noting limits to generalizing beyond the sample, and recommended further research into the specific difficulties students face in fully online language learning.

Dumford and Miller (2018) examined how online course delivery affects student engagement using least-squares regression, finding a positive relationship between online learning and student engagement. Given the growing prevalence of online learning in higher education, they emphasized the need to better understand engagement among students with access only to online instruction, and recommended further research into disciplinary differences in online curriculum use.

Personal growth during higher education unfolds as a continuous process shaped by both internal and external factors (Harjanto & Sumarni, 2021), significantly influencing students' sense of self and their engagement with their surroundings. Understanding this relationship more fully requires attention to both the individual characteristics that shape personality and the dynamics of engagement within educational settings, offering a more complete picture of their combined influence on the overall educational experience (Mandasari & Wahyudin, 2021).

Students' personality profiles play a significant role in explaining variation in classroom participation, encompassing traits such as openness, extroversion, introversion, and conscientiousness, among others (Vattøy, 2020). Students with more extraverted, outgoing personalities tend to participate more actively in classroom settings, and research links active participation to stronger academic performance, critical thinking, and knowledge retention. These students tend to thrive in social settings, actively engaging in discussion and drawing satisfaction from collaborative learning (Demir, 2020). Students with more introverted tendencies, by contrast, often favor quieter forms of participation, such as attentive listening or written contributions. Conscientiousness, associated with goal-directed behavior, similarly shapes how students engage in the classroom.

Recommendations

1) Universities should run workshops or seminars on personal development, covering communication skills, emotional intelligence, and self-awareness.
2) Guest speakers should be brought in to share insights on personal growth and development.
3) Students who actively participate in class discussions and activities should be recognized and encouraged.
4) Students of different personalities and backgrounds should be actively encouraged to participate, so that classroom discussions reflect a genuinely diverse range of perspectives.

References

Ahmed, M., Guo, Q., Qureshi, M. A., Raza, S. A., Khan, K. A., & Salam, J. (2021). Do green HR practices enhance green motivation and proactive environmental management maturity in hotel industry?. International Journal of Hospitality Management, 94, 102852.
Aixia, D., & Wang, D. (2011). Factors influencing learner attitudes toward e-learning and development of e-learning environment based on the integrated e-learning platform. International Journal of e-Education, e-Business, e-Management and e-Learning, 1(3), 264.
Alaoutinen, S., & Smolander, K. (2010, June). Student self-assessment in a programming course using bloom's revised taxonomy. In *Proceedings of the fifteenth annual conference on Innovation and technology in computer science education* (pp. 155–159). ACM.
Alhamdawee, N. O. (2022). Importance of motivation in learning English language. Humanitarian and Natural Sciences Journal, 3(1). https://doi.org/10.53796/hnsj3154
Ali, M., & Raza, S. A. (2017). Service quality perception and customer satisfaction in Islamic banks of Pakistan: the modified SERVQUAL model. Total Quality Management & Business Excellence, 28(5-6), 559-577.
Anjum, S. (2020). Impact of internship programs on professional and personal development of business students: a case study from Pakistan. Future Business Journal, 6(1).
Anwar, M., Khan, A., & Sultan, K. (2020). The Barriers and Challenges Faced by Students in Online Education during Covid-19 Pandemic in Pakistan. Gomal University Journal of Research, 36(1), 52-62.
APA Dictionary of Psychology. (2018). https://dictionary.apa.org/personality Apostolov, N., & Geldenhuys, M. (2022). The role of neuroticism and conscientious facets in academic motivation. Brain and Behavior, 12(8). https://doi.org/10.1002/brb3.2673
Atashrouz, B., Pakdaman, S. H., & Asgari, A. (2008). Prediction of academic achievement from attachment rate. *Journal of Family Research*, 4(2), 193–203.
Atkinson, S. (2004). A comparison of pupil learning and achievement in computer aided learning and traditionally taught situations with special reference to cognitive style and gender issues. Educational Psychology, 24(5), 695-679.
Aziz, F., Quraishi, U., & Kazi, A. (2018). Factors behind classroom participation of secondary school students: A gender-based analysis. Universal Journal of Education Research, 6(2), 211-217.
Baker, K. Q., & Moyer, D. M. (2019). The relationship between students' characteristics and their impressions of online courses. American Journal of Distance Education, 33(1), pp.16-28.
Barchard, K. A. (2003). Does emotional intelligence assist in the prediction of academic success? *Educational and psychological measurement*, 63(5), 840–858.
Barclay, S. (2021). BBC School Broadcasting, Progressivism in Education and Literacy 1957- 1979: Westminster Research. https://doi.org/10.34737/vw731
Barkhi, R., & Brozovsky, J. (2003). The influence of personality type on a distance course in accounting. *Journal of Educational Technology Systems*, 32(2–3), 179–198. https://doi.org/10.2190%2FDUVG-JKJY-X1VH-2RNV
Barrick, M.R. and Mount, M.K. The Big Five personality dimensions and job performance: A meta-analysis. Personnel Psychology (1991) 44, 1-26.AS
Bartling, C. A. (1988). Longitudinal changes in the study habits of successful college students. *Educational and psychological measurement*, 48(2), 527–535.
Bates, R., & Khasawneh, S. (2007). Self-efficacy and college students' perceptions and use of online learning systems. *Computers in Human Behavior*, 23(1), 175–191.
Berge, Z. L., & Mrozowski, S. (2001). Review of research in distance education, 1990 to 1999. *American Journal of Distance Education*, 15(3), 5–19.

Bettinger, Eric P., Lindsay Fox, Susanna Loeb, and Eric S. Taylor. 2017. "Virtual Classrooms: How Online College Courses Affect Student Success." American Economic Review, 107 (9): 2855-75.
Bhagat et al. Study on personality dimension negative emotionality affecting academic achievement among Malaysian medical students studying in Malaysia and overseas. Advances in Medical Education and Practice.11 June 2016 Volume 2016: 7 Pages
Bhagat V, Nayak RD. Neuroticism and academic performance of medical students. Int J Humanit Soc Sci Invent. 2014; 3(1): 51–55.
Bleidorn, W., Hopwood, C. J., & Lucas, R. E. (2016). Life events and personality trait change. Journal of Personality, 86(1), 83–96. https://doi.org/10.1111/jopy.12286
Blickle G. Personality traits, learning strategies and performance. European Journal of personality.1996: 10(5); 337-52.
Blickle, G. (1998). Personality traits, learning stratigies, and performance. *European Journal of personality*, 10(5), 337–352.
Bratko, D., Chamoro, T., & Saks, Z. (2006). Personality and school performance: Incremental validity of selfand peer-ratings over intelligence. Personality and Individual Differences, 41, 131-142.
Brown GS, Englert P, Sisarich H. Differences in personality traits across ethnic groups within New Zealand and across an international sample. New Zealand Journal of Psychology.2005: 34(2); 77.
Busato, V. V., Prins, F. J., Elshout, J. J., & Hamaker, C. (1998). The relation between learning styles, the Big Five personality traits and achievement motivation in higher education. *Personality and individual differences*, 26(1), 129–140.
Cao, C., & Meng, Q. (2020). Exploring personality traits as predictors of English achievement and global competence among Chinese university students: English learning motivation as the moderator. Learning and Individual Differences, 77, 101814. https://doi.org/10.1016/j.lindif.2019.101814
Caspi, A., Roberts, B. W., & Shiner, R. L. (2005). Personality development: Stability and change. *Annual Review of Psychology*, 56, 453–484.
Caspi, A., Roberts, B. W., & Shiner, R. L. (2005). Personality development: Stability and change. Annual Review of Psychology, 56, 453-484.
Cataude, S., Carta, S. M., Mascia, M. L., Masala, C., Agus, M., & Penna, M. P. (2021). Teaching in Times of the COVID-19 Pandemic: A Pilot Study on Teachers' Self-Esteem and Self-Efficacy in an Italian Sample. International Journal of Environmental Research and Public Health, 18(15), 8211.
Cattell RB, Kline PE. The scientific analysis of personality and motivation. Academic Press; 1977.
Cattell, R.B., Eber H.W., and Tatsuka, M.M. The handbook of the sixteen-personality factor questionnaire. Champaign, I L: Institute for Personality and Ability Testing. (1970).
Chamorro-Premuzic, T, and Furnham, A. A possible model for explaining the personality-intelligence interface. British J of Psychology (2004), 95, 249–264.
Chamorro-Premuzic, T., & Furnham, A. (2003). Personality predicts academic performance: Evidence from two longitudinal university samples. *Journal of research in personality*, 37(4), 319–338.
Chen, P. S. D., Lambert, A. D., & Guidry, K. R. (2010). Engaging online learners: The impact of Web-based learning technology on college student engagement. Computers & Education, 54(4), 1222-1232.
Chen, X., He, J., Swanson, E., Cai, Z., & Fan, X. (2021). Big Five Personality Traits and Second Language Learning: A Meta-analysis of 40 Years' Research. Educational Psychology Review, 34(2), 851–887. https://doi.org/10.1007/s10648-021-09641-6

Chomoro-Premuzic, T. & Furnham, A. (2003 a). Personality predicts academic performance: Evidence from two longitudinal university samples. Journal of Research in Personality, 37(4), 319_338.
Chomoro-Premuzic, T. & Furnham, A. (2003 b). Personality traits and academic exam performance. European Journal of Personality, 17, 237-250.
Chowdhury M. Students' Personality Traits and Academic Performance: A Five-Factor Model Perspective. College Quarterly.2006: 9(3); n3.
Christenson, S. L., Reschly, A. L., & Wylie, C. (2012). Handbook of Research on Student Engagement. In Springer eBooks. https://doi.org/10.1007/978-1-4614-2018-7
Conard, M. (2006). Aptitude is not enough: How personality and behavior predict academic performance. Journal of Research in Personality, 40, 339-346.
Conard, M. A. (2006). Aptitude is not enough: How personality and behavior predict academic performance. *Journal of Research in Personality*, 40(3), 339–346.
Cooper, S.E., and Miller, J.A. MBTI learning style-teaching style discongruencies, Educational and Psychological Measurement, (1991).51, 699-707.
Costa , P. T., Jr., & McCrae , R. R. (1992). Revised NEO Personality Inventory (NEO-PI-R) and NEO FiveFactor Inventory (NEO-FFI). Professional Manual. Odessa, FL: Psychological Assessment Resources.
Costa , P. T.Jr, Terracciano, A., & McCrae, R. R. (2001). Gender differences in personality traits across cultures: robust and surprising findings. *Journal of personality and social psychology*, 81(2), 322.
Costa Jr PT, Terracciano A, McCrae RR. Gender differences in personality traits across cultures: robust and surprising findings. Journal of personality and social psychology. 2001 Aug; 81(2):322.
Costa, T and Mc Crae, R.R. Normal personality assessment in clinical practice: The NEO Personality Inventory. Psychological Assessment (1992) 4, 5-13.
Cummings, C., Mason, D., Shelton, K., & Baur, K. (2017). Active learning strategies for online and blended learning environments. In IGI Global eBooks (pp. 88–114). https://doi.org/10.4018/978-1-5225-1803-7.ch006
Darby, J. (2023). What are the big 5 personality traits? Thomas International. https://www.thomas.co/resources/type/hr-guides/what-are-big-5-personality-traits
De Raad B, Schouwenburg HC. Personality in learning and education: A review. European Journal of personality. 1996:10(5); 303-36.
De Raad, B. and Schouwenburg, C. Personality in learning and education: a review. European J of Personality, (1996) 10, 303-336.
De Young, Peterson and Higgins. Sources of Openness/Intellect: Cognitive and Neuropsychological Correlates of the Fifth Factor of Personality, Journal of Research in Personality, 2005:73; 825-258.
Demir, S. (2020). Role of Self-Efficacy in Job Satisfaction, Organizational Commitment, Motivation and Job Involvement. Eurasian Journal of Educational Research, 20(85), 205–224.
Deng, R., Benckendorff, P., & Gannaway, D. (2019). Learner engagement in MOOCs: Scale development and validation. British Journal of Educational Technology, 51(1), 245–262. https://doi.org/10.1111/bjet.12810
Dewaele, J. (2002). Psychological and sociodemographic correlates of communicative anxiety in L2 and L3 production. International Journal of Bilingualism, 6(1), 23–38. https://doi.org/10.1177/13670069020060010201

Dewaele, J.-M., & MacIntyre, P. (2019, May 29). The predictive power of multicultural personality traits, learner and teacher variables on foreign language enjoyment and anxiety (M. Sato & S. Loewen, Eds.). Eprints.bbk.ac.uk; Routledge. http://eprints.bbk.ac.uk/24442/ .

Di Fabio, A., & Palazzeschi, L. (2009). An in-depth look at scholastic success: Fluid intelligence, personality traits or emotional intelligence? *Personality and Individual Differences*, 46(5–6), 581–585.

Diener, E., Lucas, R., & Cummings, J. (2019). 16.1 personality traits. Pressbooks. https://openpress.usask.ca/introductiontopsychology/chapter/personality-traits/

Dinçer, A., Yeşilyurt, S., Noels, K. A., & Lascano, D. I. V. (2019). Self-Determination and Classroom Engagement of EFL Learners: A Mixed-Methods Study of the Self-System Model of Motivational Development. SAGE Open, 9(2), 215824401985391. https://doi.org/10.1177/2158244019853913

Dixson, M. D. (2015). Measuring student engagement in the online course: The Online Student Engagement Scale (OSE). Online Learning, 19(4). https://doi.org/10.24059/olj.v19i4.561

Dotterer, A. M., & Lowe, K. (2011). Classroom context, school engagement, and academic achievement in early adolescence. Journal of Youth and Adolescence, 40(12), 1649–1660. https://doi.org/10.1007/s10964-011-9647-5

Duckworth, A. L., & Seligman, M. E. P. (2005). Self-discipline outdoes IQ in predicting academic performance of adolescents. Psychological Science, 16,

Duff, A., Boyle, E., Dunleavy, K., & Ferguson, J. (2004). The relationship between personality approach to learning and academic performance. *Personality and individual differences*, 36(8), 1907–1920.

Duff, A., Boyle, E., Dunleavy, K., & Ferguson, J. (2004). The relationship between personality, approach to learning and academic performance. Personality and Individual Differences, 36, 1907-1920.

Dunsmore, J. A. (2005). An investigation of the predictive validity of broad and narrow personality traits in relation to academic achievement. A dissertation Ph D. University of Tennessee, Knoxville.

Dunsmore, J. A. (2005). *An investigation of the predictive validity of broad and narrow personality traits in relation to academic achievement* (Doctoral dissertation, University of Tennessee, Knoxville).

Engelbrecht, J., Llinares, S., & Borba, M. C. (2020). Transformation of the mathematics classroom with the internet. ZDM, 52(5), 825–841.

Entwistle, N and Tait, H. Approaches and study skills inventory for students. Centre for Research on Learning and Instruction. University of Edinburgh. (1996).

Entwistle, N. Motivational factors in students' approaches to learning in: Learning strategies and learning styles. In R.R. Schmeck (Ed) New York: Plenum Press. pp. (1988) 21-49.

Entwistle, N., &. Tait, H. (1996). Identifying students at risk through ineffective study strategies. *Higher education*, 31(1), 97–116.

Eysenck, H J. Dimensions of personality: criteria for a taxonomic paradigm. Personality and Individual Diff, (1991). 12: 773-90.

F. Aziz, A.S. Kazi, Role of teachers in students' classroom participation in universities. International Journal of Education, Engineering & Reflection, 4 (1) (2019) 46–57.

Fahy, P. J., & Ally, M. (2005). Student learning style and asynchronous computer-mediated conferencing (CMC) interaction. *The American Journal of Distance Education*, 19(1), 5–22.

Felder, R. M. (1993). Reaching the Second Tier--Learning and Teaching Styles in College Science Education. *Journal of college science teaching*, 22(5), 286–90.

Felder, R. M., & Silverman, L. K. (1988). Learning and teaching styles in engineering education. *Engineering education*, 78(7), 674–681.
Felder, R. M., & Soloman, B. A. (2004). *Index of Learning Styles*. Retrieved from http://www4.ncsu.edu/unity/lockers/users/f/felder/public/ILSpage.html
Felder, R. M., & Spurlin, J. (2005). Applications, reliability and validity of the index of learning styles. *International journal of engineering education*, 21(1), 103–112.
Finn, J. D. (1989). Withdrawing from school. Review of Educational Research, 59(2), 117– 142. https://doi.org/10.3102/00346543059002117
Fleeson W, Gallagher P. The implications of Big Five standing for the distribution of trait manifestation in behavior: Fifteen experience-sampling studies and a meta-analysis. Journal of personality and social psychology. 2009 Dec; 97(6):1097.
Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: potential of the concept, state of the evidence. Review of Educational Research, 74(1), 59–109. https://doi.org/10.3102/00346543074001059
Furnham A, Mitchell J. Personality, needs, social skills and academic achievement: A longitudinal study. Personality and Individual Differences.1991:12(10); 1067-73.
Furnham, A., Chamorro-Premuzic, T., & Mc Dougall, F. (2003). Personality, cognitive ability, and beliefs about intelligence as predictors of academic performance. *Learning and Individual Differences*, 14(1), 47–64.
Furnham, A., Zhang, J., & Chamoro, T. (2006). The relationship between psychometric and self-estimated intelligence, creativity, personality and academic achievement. Imagination, cognition and personality, 25(2), 119-145.
Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. Journal of Educational Psychology, 95(1), 148–162. https://doi.org/10.1037/0022-0663.95.1.148
Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking, cognitive presence, and computer conferencing in distance education. American Journal of distance education, 15(1), 7-23.
Ghorbani, M., & Semiyari, S. R. (2020). The Impact of the Big Five Personality Traits and Motivational Self-System on Iranian EFL Learners' Intended Effort: An Investigation into McAdams' Model of Personality. RELC Journal, 53(1), 24–39. https://doi.org/10.1177/0033688220933011
Giluk, T. L., & Postlethwaite, B. E. (2014). Big Five personality and academic dishonesty: A meta-analytic review. Personality and Individual Differences, 72, 59–67. https://doi.org/10.1016/j.paid.2014.08.027
Godoń, R. (2004). Understanding, personal identity and education. Journal of philosophy of education, 38(4), 589-600.
Goff M, Ackerman PL. Personality-intelligence relations: Assessment of typical intellectual engagement. Journal of Educational Psychology.1992: 84(4); 537.
Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American psychologist*, 48(1), 26.
Goldberg, L. R. The Development of markers for the big five-factor structure, psychological Assessment, (1992). 4, 26-42.
Gorgun, G., Yildirim, S.N. & Epp, C.D. (2022). Predicting Cognitive Engagement in Online Course Discussion Forums. International Educational Data Mining Society. 10 (2).
Hair , E. C., & Graziano, W. G. (2003). Self –esteem, personality and achievement in high school: A prospective longitudinal study in texas . Journal of Personality, 71, 971- 994.

Hakimi S, Hejazi E, Lavasani MG. The relationships between personality traits and students' academic achievement. Procedia-Social and Behavioral Sciences.2011: 29; 836-45.
Hamburger, Y., & Ben-Artzi, E. (2003). Loneliness and Internet use. *Computers in human behavior*, 19(1), 71–80.
Harjanto, A. S., & Sumarni, S. (2021). Teachers' Experiences on Use of Google Classroom. English Language and Literature International Conference, Proceedings, 3(0), 172–178.
Hart, S. R., Stewart, K., & Jimerson, S. R. (2011). Student Engagement in Schools questionnaire [Dataset]. In PsycTESTS Dataset. https://doi.org/10.1037/t43831-000
Hattie, J., & Anderman, E. M. (2012). International Guide to Student Achievement. Routledge.
Henry, K. L., Knight, K. E., & Thornberry, T. P. (2011). School disengagement as a predictor of dropout, delinquency, and problem substance use during adolescence and early adulthood. Journal of Youth and Adolescence, 41(2), 156–166. https://doi.org/10.1007/s10964-011-9665-3
Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. Psychological Review, 94(3), 319–340. https://doi.org/10.1037/0033-295x.94.3.319
Hogan. A psychoanalytic perspective on the five-factor model of personality. In J. S. Wiggins (Ed.), the five-factor model of personality (pp. 163-179). New York: Guildford Press. (1996).
Homayoni, A. & Abdolahi, M. (2003). Investigating correlation between learning styles, cognitive styles and their roles in academic achievement of students. *Journal of Psychology*, 2, 179–197.
Hoswini, F. A., & Latifan, M. (2009). The Prediction of goal orientation by five factors model of personality among Shiraz university students. *Journal of Psychological Studies*, 5(1), 73–94.
Howard, J and Howard, M. An introduction to the five-factor model of personality for human resource professionals. (1998). Available on: www.centacs.com/quik-pt3.htm, site accessed 7.6.1999.
Huang, C. (2019). Social network site use and Big Five personality traits: A meta-analysis. Computers in Human Behavior, 97, 280–290. https://doi.org/10.1016/j.chb.2019.03.009 Islam, M. (2013). L2 motivational self-system and relational factors affecting the L2 motivation of Pakistani students in the public universities of Central Punjab, Pakistan. (Doctoral dissertation) University of Leeds, UK. https://etheses.whiterose.ac.uk/5054/
Ibrahimoglu, N., Unaldi, I., Samancioglu, M., & Baglibel, M. (2013). The relationship between personality traits and learning styles: a cluster analysis. *Asian Journal of Management Sciences and Education*, 2(3), 93–108.
John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. *Handbook of personality: Theory and research*, 2(1999), 102–138.
John, O. P., Donahue, E. M. & Kentle, R. L. (1991). *The Big Five Inventory-Versions 4a and 54*. Berkeley, CA: University of California, Berkeley, Institute of Personality and Social Research.
John, R., John, R., & Rao, Z. (2020). THE BIG FIVE PERSONALITY TRAITS AND ACADEMIC PERFORMANCE. Journal of Law and Social Studies, 2(1), 10–19. https://doi.org/10.52279/jlss.02.01.1019 John, O. P., & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), Handbook of personality: Theory and research (Vol. 2, pp. 102–138). New York: Guilford Press. https://fetzer.org/sites/default/files/images/stories/pdf/selfmeasures/PersonalityBigFiveInventory.pdf
Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: a qualitative and quantitative review. *Journal of applied psychology*, 87(4), 765.
Jung, C. G. (1971). Psychological types. The collected works of CG Jung. *Princeton University Press*, 18(6), 169–170.

Kahu, E. R., & Nelson, K. (2018). Student engagement in the educational interface: Understanding the mechanisms of student success.Higher education research & development, 37(1), pp.58-71.
Kappe, R., & van der Flier, H. (2010). Using multiple and specific criteria to assess the predictive validity of the Big Five personality factors on academic performance. *Journal of Research in Personality*, 44(1), 142–145.
Karen, K; Thisjs M; Schakel, L The relationship of emotional intelligence with academic intelligence and the Big- Five, European j of Personality, (2002). vol. 16, number 2, March/April
Kelland, M. D. (2022). 10.7: Paul Costa and Robert McCrae and the Five-Factor Model of Personality.SocialSciLibreTexts.
https://socialsci.libretexts.org/Bookshelves/Psychology/Personality_Theory_in_a_Cultual_Context_(Kelland)/10%3A_Trait_Theories_of_Personality/10.07%3A_Paul_Costa_and_Robert_McCrae_and_the_Five-Factor_Model_of_Personality
Kennedy, J., & Pek, S. (2023) student participation, and universities' deliberative capacity. Studies in Higher Education, 48 (1) 63–82.
Khaskheli, A., Jiang, Y., Raza, S. A., Qureshi, M. A., Khan, K. A., & Salam, J. (2020). Do CSR activities increase organizational citizenship behavior among employees? Mediating role of affective commitment and job satisfaction. Corporate social responsibility and Environmental Management, 27(6), 2941-2955.
Khormaii, F., & Kheir, M. (2006). Personality factors, motivational orientations and cognitive learning strategies, a causal model. *Journal of Social Sciences and Humanities of Shiraz University*, 25(4), 79–97.
Kim, K. S., & Moore, J. (2005). Web–based learning: Factors affecting students' satisfaction and learning experience. *First Monday*, 10(11). https://doi.org/10.5210/fm.v10i11.1294
Kim, T., & Kim, Y. (2016). The impact of resilience on L2 learners' motivated behavior and proficiency in L2 learning. Educational Studies, 43(1), 1–15. https://doi.org/10.1080/03055698.2016.1237866
Klinkozs, W., Sekowski, A., & Brambring, M. (2006). Academic achievement and personality in university students who are visually impaired. Journal of Visual Impairment Blindness, 100(11), 666-675.
Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of management learning & education*, 4(2), 193–212.
Kolb, B. (1984). Functions of the frontal cortex of the rat: a comparative review. *Brain Research Reviews*, 8(1), 65–98.
Komarraju M, Karau SJ, Schmeck RR. Role of the Big Five personality traits in predicting college students' academic motivation and achievement. Learning and individual differences. 2009: 119(1); 47-52.
Komarraju, M., Karau, S. J., & Schmeck, R. R. (2009). Role of the Big Five personality traits in predicting college students' academic motivation and achievement. *Learning and individual differences*, 19(1), 47–52.
Komarraju, M., Karau, S. J., & Schmeck, R. R. (2009). Role of the big five personality traits in predicting
FROOHJHVWXGHQW¶VDFDGHPLFPRWLYDWLRQDQGDFKLHYHPHQW Learning and Individual Differences, 19, 47-52.
Krejcie ,R. V., Morgan , D.W (1970). Determine sample size for research actives, Journal of education & psychological measure , 3, 607-670.

Krishnamurthy, R., Hass, G. A., Natoli, A. P., Smith, B. L., Arbisi, P. A., & Gottfried, E. D. (2021). Professional Practice Guidelines for Personality Assessment. Journal of Personality Assessment, 104(1), 1–16. https://doi.org/10.1080/00223891.2021.1942020

Kuh, G. D. (2001). Assessing what really matters to student Learning inside the National Survey of Student Engagement. Change: The Magazine of Higher Learning, 33(3), 10–17. https://doi.org/10.1080/00091380109601795

Laidra, K., Pullmann, H., & Allik, J. (2007). Personality and intelligence as predictors of academic achievement: A cross-sectional study from elementary to secondary school. *Personality and individual differences*, 42(3), 441–451.

Laidra, K., Pullmann, H., & Allik, J. (2007). Personality and intelligence as predictors of academic achievement : Across-sectional study from elementary to secondary school. Personality and Individual Differences, 1-11.

Lampropoulos, G., Anastasiadis, T., Siakas, K., & Siakas, E. (2022). The Impact of personality traits on social media use and engagement: An overview. International Journal on Social and Education Sciences, 4(1), 34–51. https://doi.org/10.46328/ijonses.264

Lang, J. M. J. (2015). A cross-generational examination of learner engagement and agency in non-traditional music education programs. Scholarship@Western. https://ir.lib.uwo.ca/etd/3172/

Lee, J. S. (2013). The relationship between student engagement and academic performance: is it a myth or reality? The Journal of Educational Research, 107(3), 177–185. https://doi.org/10.1080/00220671.2013.807491

Lee, J. S., & Drajati, N. A. (2019). Affective variables and informal digital learning of English: Keys to willingness to communicate in a second language. Australasian Journal of Educational Technology, 35(5).

Leslie, G. P.(2022). Increasing the Engagement of Middle School Males Enrolled in a Foreign Language Class. (Doctoral dissertation). Retrieved from https://scholarcommons.sc.edu/etd/6749

Lim, A. G. (2023). Big Five Personality traits: The 5-Factor Model of Personality. Simply Psychology. https://www.simplypsychology.org/big-five-personality.html Main, P. (2023, February 14). John Dewey's Theory. Structural Learning. https://www.structural-learning.com/post/john-deweys-theory

Litzinger, T. A., Lee, S. H., Wise, J. C., & Felder, R. M. (2007). A psychometric study of the index of learning styles. *Journal of Engineering Education*, 96(4), 309–319.

Liu, T. C., & Graf, S. (2009). Coping with mismatched courses: students' behaviour and performance in courses mismatched to their learning styles. *Educational Technology Research and Development*, 57(6), 739.

Lounsbury, J. W. Sundstrum, E.,Gibson, L. W., & Loveland, J. L (2003b). Broad versus narrow personality traits in predicting academic performance of adolescents. Learning and individual differences, 14(1), 65- 75.

Lounsbury, J. W., Tatum, H., Gibson, L. W., Park, S. H., Sundstorm, E., Hamrick, F., & Wilburn, D. (2003a). The development of a big five adolescent personality scale. psychoeducational assessment, 21, 111-133.

Lounsbury, J. W., Tatum, H., Gibson, L. W., Park, S. H., Sundstrom, E. D., Hamrick, F. L., & Wilburn, D. (2003). The development of a Big Five adolescent personality inventory. *Journal of Psychoeducational Assessment*, 21(2), 111–133.

M. A. (2020). Motivation in language learning and teaching. African Educational Research Journal, 8(2), 62-71. https://files.eric.ed.gov/fulltext/EJ1274645.pdf

Mandasari, B., & Wahyudin, A. Y. (2021). Flipped Classroom Learning Model: Implementation and Its Impact on 4.
Martin, J. H., Montgomery, R. L., & Saphian, D. (2006). Personality, achievement test scores, and high school percentile as predictors of academic performance across four years of coursework. *Journal of research in Personality*, 40(4), 424–431.
Martinović, A., & Burić, I. (2021). L2 motivation. Journal for Foreign Languages, 13(1), 409– 426. https://doi.org/10.4312/vestnik.13.409-426 Mercer, S., & Dörnyei, Z. (2020). Engaging language learners in contemporary classrooms. https://doi.org/10.1017/9781009024563
Matthews, G., & Zeidner, M. (2004). Traits, states and the trilogy of mind: An adaptive perspective on intellectual functioning. In D. Y. Dai & R. J. Sternberg (eds.). *Motivation, emotion, and cognition: Integrative perspectives on intellectual functioning and development* (pp. 143–174). New York: Routledge.
Mc Crae R, John OP. (1992). An Introduction to the Five-Factor Model and Its Applications; Wiley Online Library Pages: 175-215 First Published: June
McCrae, R. & John, O. P. (1992). An introduction on five factor model and its implications. Journal of Personality, 60, 169-175.
McCrae, R. R., & Costa, P. T. (1989). Reinterpreting the Myers-Briggs type indicator from the perspective of the five-factor model of personality. *Journal of personality*, 57(1), 17–40.
McCrae, R. R., Costa, P. T., Terracciano, A., Purker, W. D., Mills, C. J., De Fruyt, F., & Mervielde, I. (2002). personality traits development from age 12 to age 18: Longitudinal, cross-sectional and cross cultural analyses. Journal of Personality and Social Psychology, 83(6), 1456-1468.
Melissa, C., Sampo, C. & Paunonen, V. (2007). Big five personality predictors of post secondary academic performance. Personality and Individual Differences, 43, 437-448.
Mitchelson JK, Wicher EW, Le Breton JM, Craig SB. Gender and ethnicity differences on the Abridged Big Five Circumplex (AB5C) of personality traits: A differential item functioning analysis. Educational and Psychological Measurement. 2009 Aug; 69(4): 613-35.
Moore, M. G., & Kearsley, G. (2005*). Distance education: A systems view of online learning*. Cengage Learning.
Mount MK, Barrick MR. The Big Five personality dimensions: Implications for research and practice in human resources management. Research in personnel and human resources management.1995:13(3); 153-200.
Mount, M and Barrick, M. The Big five personality dimensions: Implications for research and practice in human resource management. Research in Personnel and Human Resource Management (1995). 13, 153-200.
Mulalic, A., & Obralic, N. (2017). Correlation between Personality Traits and Language Learning Strategies among IUS Students. Journal of Applied Linguistics and Language Research, 4(5), 76–84.
Munir, Qureshi & Ali … Classroom Participation And Han, J., Geng, X., & Wang, Q. (2021). Sustainable Development of University EFL Learners' Engagement, Satisfaction, and Self-Efficacy in Online Learning Environments: Chinese Experiences. Sustainability, 13(21), 11655.
Musgrave- Marquart, D., Broomley, S.P., and Dalley, M.B. Personality, academic attribution and substance use as predictors of academic achievement in college students. J of Social Behaviour and Personality, (1997) 12, 501-511.
Musson DM, Sandal G, Helmreich RL. Personality characteristics and trait clusters in final stage astronaut selection.Aviation, space, and environmental medicine. 2004: 75(4); 342-9.
Nie NH, Bent DH, Hull CH. SPSS: Statistical package for the social sciences. New York: Mc Graw-Hill; 1975.

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.
O'Connor, M. C., & Paunonen, S. V. (2007). Big Five personality predictors of post-secondary academic performance. *Personality and Individual differences*, 43(5), 971–990. https://doi.org/10.1016/j.paid.2007.03.017
O'Connor, M., and Paunonen, S. Big Five personality predictors of post-secondary academic performance. Personality and Individual Differences, (2007) 43, 971–990.
Oakes, L., & Howard, M. (2019). Learning French as a foreign language in a globalized world: an empirical critique of the L2 Motivational Self-System. International Journal of Bilingual Education and Bilingualism, 25(1), 166–182. https://doi.org/10.1080/13670050.2019.1642847
Oblinger, D., Barone, C. A., & Hawkins, B. L. (2001). *Distributed education and its challenges: An overview*(Vol. 1). Washington, DC: American Council on Education.
Offir, B., Bezalel, R., & Barth, I. (2007). Introverts, extroverts, and achievement in a distance learning environment. *The American Journal of Distance Education*, 21(1), 3–19.
Oga-Baldwin, W. Q. (2019). Acting, thinking, feeling, making, collaborating: The engagement process in foreign language learning. System, 86, 102128. https://doi.org/10.1016/j.system.2019.102128 Öz, H. (2014). Big five personality traits and willingness to communicate among foreign language learners in Turkey. Social Behavior and Personality, 42(9), 1473–1482. https://doi.org/10.2224/sbp.2014.42.9.1473
Oswald, J., Boxberger, S., Jørgensen, B., Feldmann, S., Ehninger, G., Bornhäuser, M., & Werner, C. (2004). Mesenchymal stem cells can be differentiated into endothelial cells in vitro. *Stem cells*, 22(3), 377–384.
Pagán, J. E. (2018). Behavioral, affective, and cognitive engagement of high school music students: relation to academic achievement and ensemble performance ratings. [Doctoral Dissertation] University of South Florida. https://digitalcommons.usf.edu/etd/7347
Pallant, J. (2016). SPSS Survival Manual: A Step by Step Guide to Data Analysis Using IBM SPSS (6th ed.). Open University Press: McGraw-Hill Education. Perez, D. (2022, January 3). Chapter 6: Progressivism. Pressbooks. https://kstatelibraries.pressbooks.pub/dellaperezproject/chapter/chapter-5- progressivism/
Pashler, H., McDaniel, M., Rohrer, D., & Bjork, R. (2008). Learning styles: Concepts and evidence. *Psychological Science in the Public Interest*, 9(3), 105–119. https://doi.org/10.1111%2Fj.1539-6053.2009.01038.x
Paunonen, S. V., & Ashton, M. C.(2001). Big five predictors of academic achievement. Journal of Research in Personality, 35, 78-90.
Personality changes for the better with age, American Psychological Association. First St. NE, Washington. July/August 2003, Vol 34, No. 7 Print version: page 14. 2019
Porter, T. (2022). Personality Traits and Forgiveness after Infidelity. Scholars Crossing. https://digitalcommons.liberty.edu/doctoral/3776/
Qazi, W., Qureshi, J.A., Raza, S.A., Khan, K.A. and Qureshi, M.A. (2021), "Impact of personality traits and university green entrepreneurial support on students' green entrepreneurial intentions: the moderating role of environmental values", Journal of Applied Research in Higher Education, Vol. 13 No. 4, pp. 1154-1180. https://doi.org/10.1108/JARHE-05-2020-0130
Qureshi, M. A., Khaskheli, A., Qureshi, J. A., Raza, S. A., & Yousufi, S. Q. (2021). Factors affecting students' learning performance through collaborative learning and engagement. Interactive Learning Environments, 1-21.

Rafiq, A., Triyono, B., & Djatmiko, W. The integration of inquiry and problem-based learning and its impact on increasing vocational student involvement.International Journal of Instruction, 16 (1) (2023) 659–684.
Raza, S. A., & Hanif, N. (2013). Factors affecting internet banking adoption among internal and external customers: a case of Pakistan. International Journal of Electronic Finance, 7(1), 82-96.
Raza, S. A., Khan, K. A., & Salam, J. (2021). Impact of environmental triggers on students' behavior to use ride-sharing services: the moderating role of perceived risk. Current Psychology, 1-15.
Raza, S. A., Qazi, W., Khan, K. A., & Salam, J. (2021). Social isolation and acceptance of the learning management system (LMS) in the time of COVID-19 pandemic: an expansion of the UTAUT model. Journal of Educational Computing Research, 59(2), 183-208.
Raza, S. A., Qazi, W., Shah, N., Qureshi, M. A., Qaiser, S., & Ali, R. (2020). Drivers of intensive Facebook usage among university students: an implications of U&G and TPB theories. Technology in Society, 62, 101331.
Raza, S.A. and Khan, K.A. (2021), "Corona fear and e-commerce adoption in an emerging economy: paradigm shift of consumer intention", Foresight, Vol. ahead-of-print No. ahead-ofprint. https://doi.org/10.1108/FS-02-2021-0034
Raza, S.A. and Khan, K.A. (2021), "Knowledge and innovative factors: how cloud computing improves students' academic performance", Interactive Technology and Smart Education, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/ITSE-04-2020-0047
Raza, S.A., Qazi, W., Khan, K.A. and Shah, S.M.M. (2021), "Student as customer concept: an approach to determine Pakistani students' preferences as customers while studying at private universities", International Journal of Educational Management, Vol. 35 No. 2, pp. 513- 531. https://doi.org/10.1108/IJEM-04-2019-0138
Raza, S.A., Qazi, W., Umer, B. and Khan, K.A. (2020), "Influence of social networking sites on life satisfaction among university students: a mediating role of social benefit and social overload", Health Education, Vol. 120 No. 2, pp. 141-164. https://doi.org/10.1108/HE-07-2019-0034.
Rhema, A., & Miliszewska, I. (2014). Analysis of student attitudes towards e-learning: The case of engineering students in Libya. Issues in informing science and information Technology, 11, 169-190.
Ridgell, S. D., & Lounsbury, J. W. (2004). Predicting academic success : general intelligence, "big five" personality traits, and work drive. College Student Journal, 38, 4, 607-618.
Roberts, B. W., Jackson, J. J., Fayard, J. V., Edmonds, G., & Meints, J. (2009). Conscientiousness. In M. R. Leary, & R. H. Hoyle (Eds.), Handbook of Individual Differences in Social Behavior (pp. 369-381).
Rothstein, M. G., Paunonen, S. V., Rush, J. C., & King, G. A. (1994). Personality and cognitive ability predictors of performance in graduate business school. *Journal of Educational Psychology*, 86(4), 516.
Saucier, G. (1994). Mini-Markers: A brief version of Goldberg's unipolar Big-Five markers. *Journal of personality assessment*, 63(3), 506–516.
Schmeck, R. R., Ribich, F., & Ramanaiah, N. (1977). Development of a self-report inventory for assessing individual differences in learning processes. *Applied psychological measurement*, 1(3), 413–431.
Schniederjan, Marc J; Kim, Eyong B; Relationship of student undergraduate achievement and personality characteristics in a total web-based environment: An empirical study, J of Innovative Education (2005), vol 3, number 2; PP 205-221.

Schretlen DJ, van der Hulst EJ, Pearlson GD, Gordon B.A neuropsychological study of personality: Trait openness in relation to intelligence, fluency, and executive functioning. Journal of clinical and experimental neuropsychology. 2010: 32(10); 1068-73.

Sheldon, K.M., Ryan, R.M., Rawsthorne, L.J., and Ilardi, B. (1997). Trait self and true self: Cross-role variation in the Big-Five personality traits and its relations with psychological authenticity and subjective well-being. Journal of Personality and Social Psychology, 73(6), 1380-1393. http://dx.doi.org/ 10.1037/0022-3514.73.6.1380

Siddiquei, N. L., & Khalid, R. (2017). Emerging Trends of E- Learning in Pakistan: Past, Present and Future. *International Journal of Law, Humanities & Social Science*, 2(1), 20–35.

Simha, A., & Parboteeah, K. P. (2019). The Big 5 Personality Traits and Willingness to Justify Unethical Behavior—A Cross-National Examination. Journal of Business Ethics, 167(3), 451–471. https://doi.org/10.1007/s10551-019-04142-7

Simpson, D. J., & Jackson, M. J. (2003). John Dewey's View of the Curriculum in The Child and the Curriculum. Education and Culture, 19(2), 23-27. Retrieved 4 12, 2021, from https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1464&context=eandc

Soto, C. J., & John, O. P. (2009). Ten facet scales for the Big Five Inventory: Convergence with NEO PI-R facets, self-peer agreement, and discriminant validity. *Journal of Research in Personality*, 43(1), 84–90.

Svalberg, A. M. (2009). Engagement with language: interrogating a construct. Language Awareness, 18(3–4), 242–258. https://doi.org/10.1080/09658410903197264

Teravainen-Goff, A. (2023). Intensity and perceived quality of L2 engagement: Developing a questionnaire and exploring engagement of secondary school language learners in England. System, 112, 102955. https://doi.org/10.1016/j.system.2022.102955

The Guilford Press. Saleem, J. (2014). The Attitudes and Motivation of Swedish Upper Secondary School Students towards Learning English as a Second-Language A Comparative Study of Vocational and Theoretical Programs (dissertation). Malmö University. https://www.divaportal.org/smash/get/diva2:1483130/FULLTEXT01.pdf Seven,

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. *Journal of Psychology*, 215(2), 132–151.

Ullah, O., Khan, W., & Khan, A. (2017). Students' attitude towards online learning at tertiary level. PUTAJ–Humanities and Social Sciences, 25(1-2), 63-82.

Verma, B. P., & Sheikh, C. Q. (1996). Cognitive style, personality and psychogenic needs. *Jouranl of the psychological researches*, 40, 62–68.

Vermunt, J. D. (1998). The regulation of constructive learning processes. *British journal of educational psychology*, 68(2), 149–171.

Veroff. J (1983) Contextual Determinants of Personality, Personality and Social Psychology Bulletin University of Michigan, SAGE Journals, Volume: 9 issue (3): 331-343 https://doi.org10.1177/0146167283093002/

Wagerman, S. A., & Funder, D. C. (2007). Acquaintance reports of personality and academic achievement: A case for conscientiousness. Journal of Research in Personality, 41, 221-229.

Wang, M.., & Fredricks, J. A. (2013). The reciprocal links between school engagement, youth problem behaviors, and school dropout during adolescence. Child Development, 85(2), 722–737. https://doi.org/10.1111/cdev.12138

Weisberg YJ, DeYoung CG, Hirsh JB. Gender differences in personality across the ten aspects of the Big Five. Frontiers in psychology.2011: 2; 178.

Weisberg, M. (2011). Student attitudes and behaviors towards digital textbooks. *Publishing Research Quarterly*, 27(2), 188–196. https://doi.org/10.1007/s12109-011-9217-4

Wolfe, R. N., & Johnson, S. D. (1995). Personality as a predictor of college performance. Educational and Psychological Measurement, 55 , 177-185.
Wolk, C., & Nikolai, L. A. (1997). Personality types of accounting students and faculty: Comparisons and implications. *Journal of Accounting Education*, 15(1), 1–17.
Worrell, F. C., & Cross, W. E. (2004). The reliability and validity of Big Five Inventory scores with African American college students. *Journal of Multicultural Counseling and Development*, 32(1), 18–32.
Your primary care is our primary concern. Wayne State University Physician Group 2011
Yusoff MS, Abdul Rahim AF, Baba AA, Ismail SB, Mat Pa MN, Esa AR. The impact of medical education on psychological health of students: A cohort study. Psychology, health and medicine. 2013 Aug 1; 18(4): 420-30.
Yusoff MS, Rahim AF, Aziz RA, Pa MN, Mey SC, Ja'afar R, Esa AR. The validity and reliability of the USM Personality Inventory (USMaP-i): Its use to identify personality of future medical students. International Medical Journal. 2011 Dec 1;18(4): 283-7.
Zepke, N. (2017). Student engagement in neo-liberal times: what is missing? Higher Education Research and Development, 37(2), 433–446. https://doi.org/10.1080/07294360.2017.1370440
Zhang, J., Dong, Z., & Yang, X. (2018). The predictors of academic interest: fluid intelligence, openness, and their interaction. Educational Psychology, 39(2), 271–289. https://doi.org/10.1080/01443410.2018.1514103
Zweig, D., & Webster, J. (2004). What are we measuring? An examination of the relationships between the big-five personality traits, goal orientation, and performance intentions. *Personality and individual differences*, 36(7), 1693–1708

Appendixe: A

Questionnaire For Student

Dear respondents,

I am Isra Shafiq M. Phil scholar in department of education at Government College University Faisalabad. I am going to conduct a research for my M. Phil degree requirement under the supervision of Dr. Muhammad Shabir. The title of my research work is the relationship between personality traits and classroom participation among university students'. By filling up this questionnaire you will be considered as sample of my study. I need your opinion in this regard.

I assure you that the information provided by you will be kept confidential and will be used for research only.

Thank you for participation.

Isra Shafiq M. Phil scholar GCUF

Demographic Information of stusents

Sex: Boys / Girls

Semester 2-4-6-8

Facutly: Arts and Social Sciences/ Basic Sciences

Subject: ----------

University: Public / Private

Note:Select the most appropriate option for the question underneath as under: -

a. Strongly Dis-Agree (SDA)
b. Dis-Agree (DA)
c. Un-Divided (UA)
d. Agree (A)
e. Strongly Agree (SA)

Sr. No.	Items	1-SDA	2- DA	3- UD	4-A	5-SA
	Extroversion					
1	I am the life of the party.					
2	I do not talk a great deal.					
3	I feel comfortable around people.					
4	I prefer to remain in the background.					
5	I converse with many different people at social gatherings.					
6	I prefer not to draw attention to myself.					
7	I am reserved around strangers.					
	Agreeableness:					
8	I feel little concern for others.					
9	I am interested in people.					
10	I sympathize with others' feelings.					
11	I have a compassionate nature.					
12	I am not genuinely interested in others.					
13	I am not particularly interested in other people's problems.					
14	I am attuned to others' emotions.					
	Conscientiousness:					
15	I am always well prepared.					
16	I leave my belongings scattered about.					
17	I often forget to return things to their proper place.					
18	I am meticulous in my work.					
19	I tend to make a mess of things.					
20	I pay close attention to detail.					

	Neuroticism (Emotional Stability):					
21	I become stressed easily.					
22	I am relaxed most of the time.					
23	I tend to worry about things.					
24	I become upset easily.					
25	I experience frequent mood swings.					
26	I frequently feel shy.					
	Openness to Experience (Intellect/Imagination):					
27	I frequently feel shy.					
28	I find it difficult to understand abstract ideas.					
29	I do not have a strong imagination.					
30	I use sophisticated vocabulary.					
31	I spend time reflecting on matters.					
32	I am quick to grasp new concepts.					
	Classroom Participation					
32	Small classes make me more comfortable to participate.					
33	The presence of my seat affects my participation.					
34	I don't participate when I am not confident.					
35	I don't participate because I have problems.					
36	I don't want to participate because of my ethnicity.					
37	I don't participate in class because I am not used to participate.					
38	I am afraid to get laughed at by my classmates if I make a mistake.					
39	I don't participate in order to give chance to others.					
40	I don't participate if my ideas are not encouraging.					
41	Teachers who are aggressive discourage me to participate.					
	N (listwise)					

41	classes make me more comfortable to participate.					
42	presence of my seat affects my participation.					

Appendices B
Personality five traits

