

OCD Tendencies, Personality Traits, and Its Impact on Academic Performance Among University Student

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Abstract

The association between OCD tendencies, personality traits, and their effect on university students' academic performance was examined using a correlational study. The hypothesis was that academic achievement, personality traits, and OCD tendencies must be related. The Big Five Inventory (John & Srivastava, 1999), the Academic Performance Scale, and the Obsessive Compulsive Inventory-Revised (Foa et al., 2002) were created to evaluate the relationship between OCD tendencies, personality traits, and academic performance. For this purpose, data was collected from 300 university students. Academic performance was positively correlated with Agreeableness, conscientiousness, and openness, while it was negatively correlated with sex, indicating that males had higher academic performance scores than females. Moreover, gender was also a significant predictor of academic performance, with males outperforming females. Also, Conscientiousness and Agreeableness significantly predicted academic performance, suggesting that higher levels of organization and responsibility, along with cooperative and empathetic individuals, tend to perform better academically. However, OCD tendencies, extraversion, neuroticism and openness were not significant predictors of academic performance.

Keywords: OCD Tendencies, Personality Traits, Academic Performance.

Introduction

Obsessive-Compulsive Disorder (OCD) tendencies are one of the most serious neurological and mental conditions that can be marked by persistent, intrusive thoughts and/or repetitive behaviors, including stereotypical actions. This psychotic disorder can significantly interfere with a person's daily life, including work, relationships, and overall quality of life (Lewin et al., 2014) and disrupt it. If OCD is ranked in a worldwide manner, then it is seen As the fourth most prevalent disorder (Asghar et al., 2020). OCD tendencies define the distinct thinking patterns, behaviors, and actions that are characteristic of Obsessive-Compulsive Disorder (OCD). These tendencies usually involve the presence of intrusive, unwanted thinking (obsessions) that trigger stress. In response to these obsessions, a person feels compelled to perform repetitive behaviors or mental rituals (compulsions) to alleviate that anxiety or prevent something bad from happening (Pinto et al., 2006).

Many people believe that personality has a central organizing role in human behavior. One of

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the most popular and scientifically validated models for analyzing personality is the Five-Factor Model, also known as the "Big Five." Conscientiousness, Agreeableness, openness, neuroticism, and extraversion are the five fundamental traits included in this model (Chmielewski & Morgan, 2013).

A student's academic performance, or how well they achieve their learning goals, is frequently evaluated using grades, test results, assignments, and general classroom participation. It is an important measure of a student's understanding of the subject matter, work ethic, and ability to apply knowledge in various contexts. However, academic performance is not just only about grades. However, it reflects a student's overall approach to teaching, including their engagement with the activities, time management, critical thinking skills, and how effectively they can apply what they have learned in real-world situations (Rodríguez-Hernández et al., 2020). Academic procrastination is often linked to perfectionism, obsessive-compulsive tendencies, and certain personality traits, such as those outlined in the Five-Factor Model of personality. Suppose these personality traits like procrastination can be addressed. In that case, it can help students improve their time management skills and enhance their learning experiences, ultimately reducing the negative impact on their academic performance (Mucahit et al., 2010). Increased conscientiousness, which manifests as extreme attention to detail, a persistent demand for order, and a drive for precision and organization, is frequently found in people with OCD (Geiger et al., 2023). Students with obsessive-compulsive disorder (OCD) may often lie behind in their academic performance. Those seemed to be daydreamers, distracted from their motives, disengaged, or even lazy, leading others to believe they were unfocused or uninterested in their work. In reality, these students suffer from persistent, intrusive thoughts or overwhelming urges, which make them feel compelled to manage their anxiety. While this behavior can be frustrating for educators, it is important to recognize that for students, OCD can be an intense and painful experience. (Geiger et al., 2023).

A framework for comprehending the way personality traits impact OCD tendencies and academic achievement is provided by the Big Five, often referred to as the Five-Factor Model of Personality. Neuroticism, conscientiousness, agreeableness, extraversion, and openness are some of these characteristics (Goldberg, 1993). Students with greater neuroticism are more vulnerable to worry and feel stressed, which can exacerbate OCD symptoms and hinder focus and productivity. On the other hand, motivated learners may engage in more planned and goal-oriented activities, which may reduce some of the negative effects of OCD on academic performance. These traits reflect stable patterns in how people think, feel, and behave. Neuroticism is mainly the mixture of feelings like insecurity, anxiety, and emotional instability. Open-minded people may exhibit qualities like inventiveness, intellectual stimulation, and a readiness to accept new concepts and experiences. People may also possess personality trait like agreeableness which is linked to qualities like kindness, flexibility, and cooperation. Lastly, conscientiousness is marked by traits of reliability and a strong sense of responsibility (Chmielewski & Morgan, 2013). The main purpose of conducting this research is that the understanding of interplay between these factors and how they impact academic behavior allows for better support and interventions, helping individuals manage the challenges associated with OCD tendencies and capitalize on their strengths in academic settings. Also there is a research gap related to Pakistani culture on university students as majority of the common mental wellbeing issues like OCD are commonly followed and treatments are being made to center and move forward the lives of the individual's encountering OCD. Irrespective of the developing investigate, there's still a need of investigate centering specifically on OCD tendencies, personality traits, and academic performance within the Pakistani setting.

Hypotheses

1. There is likely to be significant association between OCD tendencies, personality traits and academic performance among university students.
2. OCD tendencies and personality traits will likely to predict academic performances among university students.

Methodology

Research Design

Using a correlational research approach, this study investigated the association between personality traits linked to obsessive compulsive behaviors and their impact on academic performance among university students.

Sample and Sampling Strategy

Three hundred college students between the ages of 18 and 35 made up the study's sample. Data was collected from many educational institutions. A non-probability purposive sampling method that relied on a few particular participant attributes was used to choose the sample.

Measuring Tools

Obsessive Compulsive Inventory Revised Scale (OCI-R; Fao et., 1998)

The 18-item Obsessive-Compulsive Inventory-Revised (OCI-R) that is graded on a 5-point scale is used to evaluate OCD symptoms. It has shown remarkable convergent validity, test-retest reliability, and internal consistency. The OCI-R can differentiate OCD from anxiety-related conditions and is sensitive to the effects of therapy. Factor analysis supports its six-component structure, and it has strong concurrent validity. The OCI-R is a legitimate tool for use in clinical and research settings, with eight items and a high Cronbach's alpha of .89 for the Cognitive-Oriented Thinking subscale.

Big Five Inventory (John et al., 1991)

Big Five Inventory may be a self-report inventory outlined to degree the Enormous Five estimations of personality developed 18 and over. It consists of 44 brief expressions relating to person's claim personality and responses have a five point scale, where 1 suggests oppose this idea emphatically and 5 concurs emphatically.

Academic performance scale (Carson et al., 1991)

The Academic Achievement Scale (APS), a 5-point Likert scale used to assess students' academic performance, was developed by Carson et al. (1991) of Saginaw Valley State University. It has satisfactory internal consistency, two-week test-retest reliability, and adequate concurrent validity. The scale provides useful information for analysts interested in student academic achievements.

Procedure

The study involved 300 students, and the researcher gathered data both online and in person. A Google Form was used to digitize demographic information, academic performance scales, the Big Five Inventory (BFI), and OCI-R. The form, which included an introduction detailing the project, confidentiality, and informed permission, was disseminated by email and university portals for easy access. Participants provided written consent and verbal explanations after surveys were handed out in a quiet campus room for in-person administration. This mixed-method approach enhanced participant autonomy and ensured data reliability.

Results

Table 1: Correlations Among Age, Sex, Personality Traits, OCD Tendencies, and Academic Performance (N=300)

Variable	1	2	3	4	5	6	7	8	9
1. Age	--								
2. Sex	.10	--							
3. OCD Tendencies	.15*	-.01	--						
4. Extraversion	-.18**	-.01	-.03	--					
5. Agreeableness	.09	.02	-.17**	.09	--				
6. Conscientiousness	-.05	.02	-.05	.40**	.33**	--			
7. Neuroticism	.04	.10	.24**	-.31**	-.03	-.19**	--		
8. Openness	-.10	.01	.08	.39**	.36**	.47**	.11	--	
9. Academic Performance	.03	-.21**	.02	.11	.26**	.35**	.02	.27**	--

Note: N = 300. Sex was coded as 1 = male, 2 = female. * $p < .05$. ** $p < .01$.

Table 1 presents the Pearson correlation coefficients examining the relationships between age, sex, OCD tendencies, the five major personality traits (extraversion, agreeableness, conscientiousness, neuroticism, and openness), and academic performance within a sample of 256 participants. Sex was coded as 1 for male and 2 for female.

OCD tendencies were significantly correlated with age ($r = .15, p < .05$) and neuroticism ($r = .24, p < .01$). Extraversion was negatively associated with age ($r = -.18, p < .01$) and neuroticism ($r = -.31, p < .01$) but positively correlated with openness ($r = .39, p < .01$). Agreeableness was negatively correlated with OCD tendencies ($r = -.17, p < .01$). Conscientiousness showed positive associations with extraversion ($r = .40, p < .01$), agreeableness ($r = .33, p < .01$), and openness ($r = .47, p < .01$). Neuroticism was negatively related to extraversion ($r = -.31, p < .01$) and conscientiousness ($r = -.19, p < .01$).

Academic performance was positively associated with agreeableness ($r = .26, p < .01$), conscientiousness ($r = .35, p < .01$), and openness ($r = .27, p < .01$), while it was negatively correlated with sex ($r = -.21, p < .01$), indicating that males had higher academic performance scores.

Table 2: Hierarchical Regression Predicting Academic Performance (N=300)

Predictor	B	SE	β	t	p	95% CI (Lower)	95% CI (Upper)
Model 1							
(Constant)	30.479	0.969	—	31.461	<.001	28.571	32.387
Sex (1 = Male, 2 = Female)	-2.026	0.583	-.213	-3.473	<.001	-3.175	-0.877
Model 2							
(Constant)	10.907	3.343	—	3.263	.001	4.322	17.492
Sex	-2.175	0.540	-.229	-4.026	<.001	-3.239	-1.111
OCD Tendencies	0.013	0.022	0.037	0.626	.533	-0.027	0.052
Extraversion	-0.030	0.067	-	-0.657	.102	-0.162	0.102
			0.062				
Agreeableness	0.187	0.077	0.154	2.425	.016	0.035	0.338
Conscientiousness	0.361	0.086	0.289	4.178	<.001	0.191	0.531
Neuroticism	0.064	0.056	0.047	1.128	.260	-0.047	0.174
Openness	0.071	0.063	0.082	1.129	.260	-0.053	0.194

Note: CI = confidence interval. Model 1 includes sex as a predictor. Model 2 adds personality traits and OCD tendencies. $p < .05$. $p < .01$.

A hierarchical multiple regression analysis was conducted to examine the extent to which sex, OCD tendencies, and personality traits predict academic performance (see Table 2). In Model 1, sex was entered as the sole predictor and accounted for a small but significant proportion of the variance in academic performance, $R^2 = .045$, $F(1, 254) = 12.063$, $p < .001$. The results indicate that sex was a significant predictor of academic performance ($B = -2.026$, $p < .001$), suggesting that males had higher academic performance scores compared to females.

In Model 2, extraversion, agreeableness, conscientiousness, neuroticism, openness, and OCD tendencies were added to the regression. The inclusion of these predictors significantly improved the model, $R^2 = .210$, $F(7, 248) = 9.432$, $p < .001$, accounting for an additional 16.5% of the variance in academic performance. Among the predictors, agreeableness ($B = 0.187$, $p = .016$) and conscientiousness ($B = 0.361$, $p < .001$) were significant positive predictors of academic performance, indicating that individuals scoring higher on these traits tended to perform better academically. In contrast, sex remained a significant negative predictor ($B = -2.175$, $p < .001$), reinforcing the trend observed in Model 1.

OCD tendencies, extraversion, neuroticism and openness were not significant predictors of academic performance. These findings suggest that while personality traits such as conscientiousness and agreeableness contribute positively to academic performance, OCD tendencies and other personality traits do not show a significant association in this sample. Overall, the final model explained 21.0% of the variance in academic performance, with conscientiousness emerging as the strongest predictor.

Discussion

Finding and examining the connection between OCD tendencies, personality features, and academic achievement was the first hypothesis. Park et al. (2016) investigated the connection between juvenile OCD tendencies and personality factors, with a particular emphasis on rigidity and perfectionism. The results showed that obsessive-compulsive traits, especially perfectionism and rigidity, were linked to specific OCD symptom dimensions, including checking, symmetry, and contamination. That study suggested that personality traits influence the expression of OCD symptoms in youth as they are prone towards perfectionism and impacts academic performance. Further, the findings proved this hypothesis to be true as a negative relationship of was seen OCD tendencies with academic performance. One of the previous studies explored the connection between OCD tendencies and academic stress among female teenage students. The study also found a significant negative relationship between OCD tendencies and academic performance, suggesting that the more severe the OCD tendencies, the greater the academic stress the students experienced (Chaudhary & Victor 2021).

Second hypothesis stated that OCD tendencies and personality traits will predict academic performance. The results confirmed the hypothesis to be true as the abovementioned variable i.e., OCD tendencies proved to be significant predictor of outcome variable that is academic performance. Consulting with the previous studies, Pérez-Vigil et al., (2018) depicted that OCD tendencies do predict academic performance. The findings highlighted that OCD tendencies, especially when it begins early in life, can have a lasting and significant impact on a person's ability to succeed academically, from school through to higher education.

Conclusion

According to the study's current findings, academic performance and OCD tendencies are significantly correlated negatively. There was a significant positive correlation between academic performance and Agreeableness, conscientiousness, and openness to experience, while this academic performance revealed a negative correlation with demographic variable of sex, indicating that males had higher academic performance scores compared to females.

Whereas, OCD tendencies didn't appear to be as significantly correlated with academic performance. Additionally, among the significant predictors of academic performance were gender, Conscientiousness and Agreeableness, suggesting that higher levels of organization and responsibility along with cooperative and empathetic individuals tend to perform better academically.

Limitations and Future Recommendations

One of the most highlighted limitation is more work needs to be done on each and every personality trait in research. A limitation of using personality traits as mediators in the relationship between OCD tendencies and academic performance. Since the data collection method was online, some participants may provide information carelessly. As this is a quantitative research, future research may incorporate qualitative data to gain in-depth information about study variables within this sample. The existing research will be helpful for counselors enabling them to provide better mental health advice to students for academic performance. Additionally, this study will also be beneficial for university students by increasing their awareness of OCD tendencies, personality traits and academic performance. Since university students are assets of any country, their mental health must be given priority. Overall, the outcomes of current study will contribute to existing body of previous studies by helping future researchers to understand the effect of OCD tendencies and personality traits on academic performance.

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