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Article

Effect of Personality Traits on Emotional Regulation Among University Students

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ABSTRACT

This study examined how personality traits influence emotional regulation strategies among university students. It focused on the Big Five traits—Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness—and their relationship with two main emotional regulation strategies: Cognitive Reappraisal and Expressive Suppression.Using a quantitative correlational design, data were collected through a structured questionnaire from 183 BS program students. Participants were selected through convenience sampling, and the sample size was calculated using G*Power software to ensure statistical accuracy. Out of 201 distributed questionnaires, 18 were excluded due to incomplete responses.

The results revealed significant links between personality traits and emotional regulation. Extraversion was negatively associated with both Cognitive Reappraisal and Expressive Suppression, suggesting extroverted students use these strategies less. Openness was positively linked to Expressive Suppression, meaning open individuals tend to suppress emotional expressions more. Neuroticism was a strong predictor for both regulation strategies, indicating emotionally unstable individuals rely more on these methods. These findings emphasize the importance of considering personality traits when addressing emotional regulation in students. Understanding these connections can guide the development of personalized emotional support and intervention strategies to enhance students' mental well-being and academic success.

KEYWORDS: *Personality Traits, Emotional Regulation, Cognitive Reappraisal, Expressive Suppression, University Students*

Introduction

Personality is an important aspect in understanding human beings. Feist and Feist (2006) defined personality as a pattern that is relatively stable, consisting of unique traits, dispositions or characteristics within an individual that show some consistent measures about his/her behavior. Allport (in Feist & Feist,2006) stated that personality

is a dynamic organization within an individual, which constitutes a psychophysical system. It determines the individual's selfadjustment with Personality includes patterns of thoughts, actions, and emotions. It's also influenced by individual temperament and experiences (Gepp et al., 2022). Emotional regulation, a fundamental component of human psychological functioning, encompasses the intricate processes through which individuals manage and modulate their emotional experiences, expressions, and responses. It plays a pivotal role in shaping psychological well- being, interpersonal relationships, and overall adaptive functioning. Rooted in historical theories of emotion, contemporary research on emotional regulation has flourished across multiple disciplines, including psychology, neuroscience, and sociology. As described by James J. Gross, a pioneer in the field, emotional regulation involves the dynamic interplay between cognitive, behavioral, and physiological processes, contributing to diverse emotional responses observed across different contexts and individuals (Gross, 1998). Emotional regulation can be automatic or controlled, conscious or unconscious, and may have effects at one or more points in the emotion producing process (Gross, 1998). The objective of this study is to find out the relationship between personality traits and emotional regulation.

Personality traits in psychology are enduring patterns of thoughts, feelings, and behaviors that

characterize an individual's way of interacting with and perceiving the world. Psychologists have explored various models to understand and categorize these traits. One of the most widely accepted models is the Five-Factor Model (FFM), also known as the Big Five personality traits. These traits include: Openness to Experience reflects the tendency to be open-minded, imaginative, curious, and creative. Individuals high in openness are open to new ideas, experiences, and unconventional beliefs. They often enjoy exploring new things and are intellectually curious (Mccrae & Costa, 1997).

Conscientious individuals are organized, responsible, dependable, and goal oriented. They exhibit self- discipline, are reliable in their actions, and strive for achievement. This trait involves a sense of duty and a focus on achieving tasks efficiently (Mccrae & Costa, 1997). Extraversion reflects that extraverts are outgoing, sociable, and energetic. They tend to seek stimulation from the external world, enjoy social interactions, and are generally assertive and talkative. They often derive energy from being around others. Agreeableness reflects how cooperative, empathetic, and kind an individual is. Agreeable individuals tend to be compassionate, considerate, and are often concerned with maintaining harmonious relationships with others (Eysenck, 1991). Neuroticism reflects individuals high in neuroticism are prone to experiencing negative emotions such as anxiety, sadness, and moodiness. They may be more sensitive to stress and tend to worry more. On the contrary, those low in neuroticism are more emotionally stable and resilient. (Eysenck, 1991; Mccrae & Costa, 1997).

The Emotional Regulation Questionnaire (ERQ) is another widely used self-report

measure designed to assess individual differences in the habitual use of two specific emotion regulation strategies: cognitive reappraisal and expressive suppression. These strategies are seen as distinct ways individuals manage their emotions in response to situations. The ERQ typically consists of items that capture these specific strategies (Gross, 1998). Cognitive Reappraisal involves in reframing or reinterpreting a situation to change its emotional impact. Items in this domain assess how often an individual engages in cognitive reappraisal to regulate their emotions. Example item: "When I want to feel more positive emotions, I change what I'm thinking about" (Gross, 1998). Expressive Suppression involves in inhibiting or suppressing the outward expression of emotions. Items in this domain assess how often individuals try to hide or suppress their emotions in social contexts. Example item: "I control my emotions by not expressing them". The ERQ typically measures the frequency with which individuals use these specific emotion regulation strategies in their daily lives. Participants rate their agreement or frequency of engaging in these strategies on a scale, ranging from strongly disagree to strongly agree or from never to always (Gross, & John, 2003).

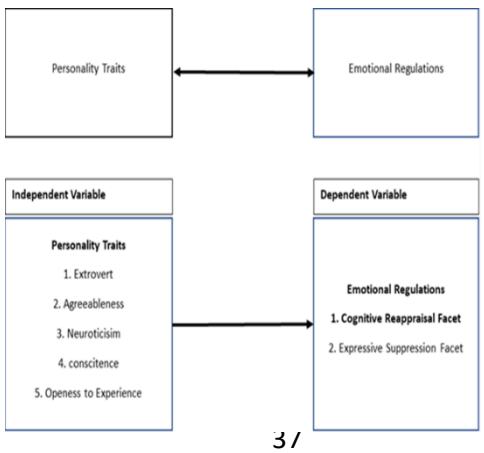
Rational of the Study

The rationale behind studying the current research is to investigate relation of personality traits, cognitive and expressive of emotional regulation, moreover find out the impact of personality traits on emotional regulation stems from the understanding that individual differences in personality play a significant role in shaping how individuals regulate their emotions.

Hypotheses

- There would be a significant relation between personality traits and emotional regulation among university students.
- There would be a significant impact of personality traits and emotional regulation among university students.

Theoretical Framework



Method

Research Design

Quantitative correlational research design was used through survey method by using questionnaire to obtain data through convenient sampling technique.

Participants

The sample of present study consisted of 201 university students (N=201). The sample size was calculated using G* Power 3.1.9 (Power = 80%, α = 5%). Cohen's formula estimated the sample of a total of 165 participants, with a 95% confidence interval and 90% test power. This study included 201 participants. Initially, 35 participants were taken additionally to overcome attrition rate and biasness (Faul et al., 2007 & 2013). Students' demographics, i.e. gender, age, birth order, qualifications were noted. Data collected from males and females; their age range was 19 to 29 years.

Inclusion Criteria

Only those students who are studying regular BS Program.

Exclusion Criteria

M.Phil. Program and Languages Program students are not included.

Instruments

Two tools were used in this research.

- Big Five Personality Traits
- Emotional Regulation

Big Five Personality Traits

Big Five Inventory-10 (BFI-10) Adapted from Rammstedt & John (2007). Measuring personality in one minute or less: A 10 item short version of the Big Five Inventory in English and German. Journal of Research in Personality, 41, 203-212. It was derived from the longer BFI and is widely used in research. There are 10 items in this scale and 5 options are given from which you can select 1 option according to yourself. Scoring of Extraversion: 1R, 5, Agreeableness: 2, 7R, Conscientiousness: 3R, 8, Neuroticism: 4R, 9, Openness to Experience: 5R, 10

Emotional Regulation

Gross and John (2003) introduce the Emotion Regulation Questionnaire and provides

details on its development, psychometric properties, and the conceptual framework. Gross & John (2003) The ERQ is designed to assess two distinct emotion regulation strategies: cognitive reappraisal and expressive suppression. The questions involve two distinct aspects of your emotional life. One is your emotional experience, or what you feel like inside. The other is your emotional expression, or how you show your emotions in the way you talk, gesture, or behave. Although some of the questions may seem similar to one another, they differ in important ways. There are 10 items in this scale and 7 answers are given to select. Items 1, 3, 5, 7, 8, 10 make up the Cognitive Reappraisal facet, Items 2, 4, 6, 9 make up the Expressive Suppression facet.

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	134	73.2	73.2	73.2
	Male	49	26.8	26.8	100.0
	Total	183	100.0	100.0	

Procedure

Participants were informed about the purpose of the study. They assured us that all information will be confidential and will be used only for research purposes. Participants were given the questionnaire consisting of two scales with demographic variables age, gender, education, family system, birth order. They asked to fill all the items of scale according to the given instructions. The data obtained was then used for the quantitative study. This quantitative research was carried out by first creating a consent form for participants to sign before making commitments to the study. After signing the consent forms, all 201 participants were advised to fill in the respective questionnaires provided. The big 5 personality scale contains questions that require answers from strongly disagree to strongly agree on a scale of 1-5 while the ERQ has a scale of 1-7. The sample consisted of 201 undergraduates that consented to the research. The participants selected randomly were 18- to 29-year-old male and female Pakistanis. They were sent the consent form and questionnaires via WhatsApp or email after they were uploaded to a google drive for accurate record keeping and easy access. The questionnaires were filled in by participants in the ease of their homes at their convenience. We collected the data of 201 students, from which we can only take 183 student's data and discard 18 students' data from our record due to the falsification of data. The results were analyzed using SPSS. And find out the correlation and regression of data.

Results Descriptive Statistics

Table 3.1

Frequency distribution and percentage of Gender (N=183).

Description

There are 134 individuals, representing 73.2% of the total sample. There's a slightly smaller proportion of females in this sample (73.2% now compared to 72.4% previously). The remaining 49 respondents identify as male, making up 26.8% of the total sample. Similarly, the proportion of males has decreased slightly (26.8% now compared to 27.6% previously).

Table 3.2

Frequency distribution and percentage of Age (N=183).

Age Wise					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-20	88	48.1	48.1	48.1
	21-23	67	36.6	36.6	84.7
	24-34	28	15.3	15.3	100.0
	Total	183	100.0	100.0	

Description

The table delineates the age distribution of respondents, categorizing them into three groups: 18- 20, 21-23, and 24-34. Among the total of 183 respondents, 48.1% fall within the 1820 age range, 36.6% in the 21-23 age bracket, and 15.3% in the 24-34 age category. The valid percentages represent the proportion of respondents within each age group concerning the total valid responses, while cumulative percentages illustrate the cumulative proportion of respondents up to each category. Notably, the data indicates that the majority of respondents are in the 18-20 age range, with a gradual decline in percentage across the subsequent age groups, providing a clear overview of the age demographics of the surveyed population.

Table 3.3

Correlational analysis of personality and emotional regulation among university students (N=183).

**P<0.01, *P<0.05, P>0.05

Model	Mean	Std. Deviation	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness	Cognitive Reappraisal Facet	Expressive Suppression Facet
Extraversion	5.4754	2.08295	1	-.246**	-.025	-.120	.426**	-.269**	-.185*
Agreeableness	6.9727	1.87063		1	-.145*	.030	-.170*	.043	-.079
Conscientiousness	5.8306	1.81530			1	-.099	-.150*	.048	.091
Neuroticism	6.4317	2.00671				1	.110	-.073	-.056
Openness	6.4918	1.71570					1	.125	.156*
Cognitive Reappraisal Facet	26.8361	7.82398						1	.581**
Expressive Suppression Facet	18.1639	5.43649							1

Table 3.4

Regression analysis of Personality on cognitive reappraisal facet (N=183).

Coefficient[a]				
Model	Unstandardized Coefficient	Standardized Coefficient	T	Sig.

Coefficient[a]						
Model		Unstandardized Coefficient		Standardized Coefficient	T	Sig.
		B	St. Error	Beta		
1	(Constant)	18.849	3.217		5.859	.000
	Extraversion	-.933	.208	-.357	-4.475	.000***
	Agreeableness	-.272	.213	-.093	-1.277	.203
	Conscientiousness	.314	.215	.105	1.459	.146
	Neuroticism	-.330	.194	-.122	-1.700	.091
	Openness	1.018	.252	.321	4.041	.000***
		B	St. Error	Beta		

1	(Constant)	27.369	4.544		6.024	.000
	Extraversion	-1.602	.294	-.427	-5.443	.000***
	Agreeableness	.044	.300	.010	.145	.884
	Conscientiousness	.318	.304	.074	1.047	.297
	Neuroticism	-.603	.274	-.155	-2.201	.029*
	Openness	1.534	.356	-.336	4.313	.000***

*Note R2: .172, AR2: .149, F(5, 177)= 7.352, ***P<0.001,*P<0.05,P>0.05*

Description

The value .000<.001 which indicates there is a highly significant impact of extraversion on cognitive reappraisal facet. The value .884>.05 which indicates that there is no significant impact of agreeableness on cognitive reappraisal facet. Similarly, the value of .297>.05, hence, conscientiousness has no significant impact on cognitive reappraisal facet. The value of .029<0.05 has significant impact on cognitive reappraisal facet. The value of .000<0.001 has highly significant impact on the cognitive reappraisal facet.

Table 3.5

Regression analysis of Personality on expressive suppression facet (N=183).

Notes R2: .140, AR2: .116, F (5, 177) = 5.767, ***P<0.001, P>0.05

Description

The value .000<.001 which indicates there is a highly significant impact of extraversion on expressive suppression facet. The value 203>.05 which indicates that there is no significant impact of agreeableness on expressive suppression facet. Similarly, the value of .146 >.05, hence, conscientiousness has no significant impact on cognitive reappraisal facet. The value of .091 <0.05 has no significant impact on the expressive suppression facet. The value of .000<0.001 has a highly significant impact on the expressive suppression facet. The constant value (18.849) signifies the expected value of the Expressive Suppression Facet when all predictor variables are zero. For every one- unit decrease in extraversion, the Expressive Suppression Facet score is predicted to decrease by 0.933 units. This relationship is statistically significant ($t = -4.475$, $p < 0.001$), suggesting that lower levels of extraversion are associated with a lower tendency to use expressive suppression in emotional regulation. The coefficient for

agreeableness (-0.272) indicates a negative relationship with the Expressive Suppression Facet score, but it is not statistically significant ($t = -1.277$, $p = 0.203$). This suggests that there might not be a strong linear relationship between agreeableness and expressive suppression. The coefficient (0.314) implies a positive relationship with the Expressive Suppression Facet score, but it's not statistically significant ($t = 1.459$, $p = 0.146$). This indicates that conscientiousness might not significantly predict expressive suppression in emotional regulation in this model. A decrease of one unit in neuroticism is associated with a decrease of 0.330 units in the Expressive Suppression Facet score, but this relationship is marginally insignificant ($t = -1.700$, $p = 0.091$). For every one-unit increase in openness, the Expressive Suppression Facet score is predicted to increase by 1.018 units. This relationship is statistically significant ($t = 4.041$, $p < 0.001$), suggesting that higher levels of openness correspond to a greater tendency to use expressive suppression in emotional regulation.

Discussion

McCrae and Costa's 1987 research played a pivotal role in validating the Big Five personality model, a widely accepted framework in psychology. The model comprises Openness to Experience (curiosity, creativity), Conscientiousness (organization, reliability), Extraversion (sociability, assertiveness), Agreeableness (cooperation, kindness), and Neuroticism (emotional stability).

Additionally, emotional regulation, discussed by Gross in 1998, focuses on individuals' ability to manage and respond to emotions in a healthy way. Emotional regulation questionnaires assess how individuals handle their emotions, including perception, expression, and coping mechanisms in various situations. The goal is to gauge how well individuals manage stress, navigate social interactions, and regulate their emotional experiences. The initial hypothesis posited a meaningful connection between personality traits and how university students regulate their emotions. The results indicated a significant negative correlation specifically between extroversion and emotional regulation. Surprisingly, the remaining personality traits did not display any clear links with emotional regulation. This discovery mirrors previous research, which delved into the intricate relationship between Big Five personality traits and strategies individuals employ to manage their emotions effectively (Gross & John, 2003).

In both studies, there was a consistent negative correlation found between extroversion and emotional regulation. Expanding on Gross's work, it was revealed that individuals high in Neuroticism tended to lean towards expressive suppression as a means of regulating their emotions. This behavior might stem from the emotional instability associated with Neuroticism, leading individuals to conceal their emotions, possibly to avoid negative social consequences. On the other hand, conscientious individuals were more inclined to utilize cognitive reappraisal as an emotional regulation strategy. The

conscientious trait, linked to organization and self-discipline, appeared to empower individuals to effectively reinterpret situations in a more constructive light. Importantly, both studies did not uncover strong correlations between emotional regulation strategies and other Big Five personality traits such as Openness, Extraversion, and Agreeableness. This suggests that the interplay between extroversion and emotional regulation is a nuanced aspect worthy of further exploration. Thus, the current research not only reaffirms the noteworthy negative correlation between extroversion and emotional regulation but also underscores the intricate dynamics that specific personality traits, like extroversion, may have in shaping how individuals regulate their emotions.

The second hypothesis posited an impact of personality traits on emotional regulation among university students. The findings revealed a highly significant influence of extraversion and openness on the expressive suppression facet, while the other three variables showed no significant relationships.

This aligns with previous research conducted by (Aldao, NolenHoeksema, and Schweizer,2019) who explored the connection between personality traits and emotional regulation strategies.

Their study, centered on the Big Five model, investigated how specific personality traits were linked to various emotional regulation strategies. According to their findings, higher levels of Neuroticism were associated with an increased use of maladaptive strategies like expressive suppression and a decreased use of adaptive strategies such as cognitive reappraisal. Neurotic individuals, experiencing heightened emotional distress, may encounter challenges in effectively managing their emotions. Aldao's research also suggested a positive correlation between Conscientiousness and the use of cognitive reappraisal. Individuals scoring higher in Conscientiousness, characterized by discipline and organization, were inclined to employ more adaptive strategies for emotional regulation. This emphasizes that certain personality traits, such as extraversion, openness, and conscientiousness, play a significant role in shaping the emotional regulation strategies adopted by university students.

Conclusion

The study provided empirical evidence supporting the hypothesis that specific personality traits, particularly Neuroticism and Conscientiousness. Extraversion consistently shows a negative association with both Cognitive Reappraisal and Expressive Suppression. Openness demonstrates a positive relationship with Expressive Suppression. Neuroticism significantly impacts both Cognitive Reappraisal and Expressive Suppression. Age-wise differences are notably significant for Neuroticism scores across different age groups. These results suggest that certain

personality traits, particularly Extraversion, Openness, and Neuroticism, play distinct roles in predicting specific emotional regulation strategies, indicating their potential influence on how individuals manage and express their emotions.

Limitations and Suggestions

- The study may be constrained by a limited sample size or a homogeneous participant group, potentially restricting the generalizability of findings to broader populations or diverse demographics.
- The use of a cross-sectional design limits the ability to establish causality between personality traits and emotional regulation strategies. Longitudinal studies would provide a more thorough understanding of how these relationships unfold over time.
- Emotional regulation is a multifaceted construct, and the study may not have captured all aspects or nuances of these strategies. This limitation could lead to an incomplete understanding of the factors influencing emotional regulation.
- Conduct studies with larger and more diverse samples to enhance the generalizability of findings across different populations and demographic groups.
- Consider adopting a longitudinal study design to explore the dynamic nature of the relationship between personality traits and emotional regulation strategies over an extended period.
- Utilize a combination of self-reported measures and objective assessments to cross-verify findings and minimize the potential impact of response bias.
- Incorporate strategies to control confounding variables, such as considering cultural differences, individual experiences, or external influences, to better isolate the relationships of interest.

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