

Psychological Communication

Prediction of Resilience Based on Personality Traits of Female Adolescent Students

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ABSTRACT

In high school students' anxiety is very common problem for all. Nevertheless, the students predict to be stressful increasing with several sources of stress especially with Academic stress. How to respond to stress and challenges affect the entire life of them. The current study tries to investigate the relationship between resilience and personality traits. Moreover, the other important objective is to examine whether big five personality traits predict resilience of high school female students or not. Till now, very limited studies have been conducted in India in context to high school female students. Enrolled in academic session 2020-21, 85 students studying Humanities in 12th standard, in GGSSS, Delhi, India were selected to participate in the study. The standardized questionnaires of the Ego Resilience Scale and Big Five Personality Test were used as the tool of the study. The data was collected using both the questionnaires and interpreted using Pearson correlation and multiple linear regression at a significance level $p < 0.05$. As a result of analysis, Pearson Correlation shows that all the personality traits E, A, C, O have a significant positive correlation with Resilience ($r = .539$, $r = .734$, $r = .792$ and $r = .751$ respectively) but N has a significant negative correlation with resilience ($r = -.684$). Furthermore, the results reveal a statistically significant relationship between the variables of Conscientiousness, Neuroticism, and Agreeableness, and the participants' resilience scores ($R = .859$, $R^2 = .738$, $p < .05$). These three personality traits together account for 73% of the total variance in resilience ($F = 75.94$, $p < .05$). It is concluded that Understanding of the levels and relationship among Personalities and Resilience of adolescents can assist in predicting the performance level of the students and in future intervention programs can be developed accordingly for the students for a successful and satisfactory life.

KEY WORDS: ADOLESCENTS, BIG FIVE PERSONALITY TRAITS, PERSONALITY, RESILIENCE, STUDENTS.

INTRODUCTION

After a stressful and traumatic life event, some people adjust themselves by showing a stable, well-functioning path, while other people may face stress after that event. Resilience is a powerful process that combines good adaptation within the context of great difficulty (Oshio et al. 2018). On a daily basis, a remarkable amount of physical and mental growth is experienced by students. Among school, work, social life, and co-curricular activities, adolescents face lots of new challenges and experiences (Anderssen 2021). The competition in itself is quite stressful, and the uncertainty over the exam dates adds to the students' miseries (Kar et al. 2021). The inability to handle performance pressure, meet parental demands and accomplish aspirations may lead to

psychological distress and may lead to suicidal behavior. (Edlina et al. 2020; Karet et al. 2021).

Resilience gives them the capability to handle these head-on, recover from any obstacle and support them to approach new circumstances, people or experiences with a positive mindset and confidence which helps them succeed (Anderssen 2021). Accordingly, difficulties faced by students adjusting to their new situations and studies adversely influence their life experience and academic achievements. If they are unable to overcome the difficulties, they may not be able to reach their preset goals. Some may adjust easily while the rest find it extremely difficult as they face many changes in many aspects of their lives, such as geographical location, climate, food, language and educational systems (Singh 2021). Previous researches indicated that the concept of resilience was fundamental to people dealing successfully with change (Wang 2009; Raghavan and Sandanapitchai 2019; Fuente et al. 2021).

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Women often have the added responsibility of demonstrating their abilities during daily challenges. They need to strengthen the ability that enables them to face challenges in different situations (Webb 2018). In rural areas, the condition of the female is challenging with early marriage, illiteracy, poverty, unemployment, etc. As very few studies are conducted on female students, therefore, this study has purposively selected this population to fill the gap in literature about personality traits and resilience levels of female adolescent students. Personality comprises of attitudes, moods, and opinions displayed in dealing with other people. The current study also reports the personality trait variable, which is supposed to be associated with resilience, consistent with the big five perspectives (Hulya 2017; Holzman 2020). Academic achievement is also influenced by personality traits. eg., conscientiousness has reliably appeared as a constant predictor of exam performance (Chamorro 2003; Fuente et al. 2021).

Groupings of Big Five traits have also been found to expect various educational results. Specifically, openness to experience and conscientiousness predict course outcome, and openness to experience, conscientiousness, and agreeableness predict overall academic performance. In contrast, academic achievement is negatively related to neuroticism (Chamorro et al. 2003, Samsilah et al. 2021). Several factors may help in developing resilience, but an individual's personality traits are important. There is ample evidence that Big Five Personality traits can influence Resilience among adolescents as found in previous studies. For instance, it is reported that resilience was negatively associated with neuroticism, and was positively related to conscientiousness and extraversion (Campbell et al. 2006; Fuente et al. 2021).

Previous findings suggest that resilient children have higher thinking and problem-solving skills. Further, researchers confirm that personality traits such as flair, motivation, and understanding contribute to resilience, and resilience enhances personality traits (Annalakshmi 2008; Edlina et al. 2020). Recently, many studies have been conducted to observe the relationship between the big five personality traits and resilience like 'resilience as a buffering variable between the big five component, Building Emotional Resilience with Big Five Personality Model, still there is a severe shortage of the studies that works with ego resiliency and big five personality traits of Indian high school female students (Sahni et al. 2021; Fuente et al. 2021). Moreover, it is required to enhance the literature of resilience and personality traits in Indian high female context as well as to investigate the personality traits that predict resilience in high school female students so that they would train accordingly to successfully deal with the upcoming adversities in life (Sonam 2021). This study aims to find if there is there a relationship between resilience and Big five personality traits and if the big five personality traits can predict resilience.

MATERIAL AND METHODS

This is a descriptive study with quantitative approach. A random selection of 85 female students, mean age ± 17.43

studying Humanities in class XII, session 2020-2021 for the sample the study was made. From GGSSS No. 1 JJC Bawana, Delhi, India from Sec- A, B, and C every odd roll no. students were selected. By meeting them in their classrooms the data was collected by the researcher. Aim of the study as well as the method to filling up the tools was clearly explaining to them. Then both of the tools were circulated and students were requested to fill up the tools to the best of their knowledge. All the difficult statements were explained by the researcher. Once the questionnaires were filled up researcher collected both questionnaires and ensured the confidentiality and anonymity of responses.

For Tool I, The Ego Resilience Scale, Ego resilience scale consists 14 items to determine the ego-resilience of the individual. To recognize the emotion, behavior, and motivation, the answers were evaluated on a four-point Likert scale where (1) representing "Does not apply at all" to (4) demonstrating "Applies very strongly". Each statement was positively stated and scored. Total scores for ER-89 can vary from 14- 56 where; 14 reflected Low resiliency Traits to 56 signified as Very High Resilience Traits. Internal consistency of this scale was 0.82 (Edlina et al. 2020).

For Tool II, Big Five Personality Test, Big five personality scale included 50 statements to assess the intensity of the different personality traits. Scores achieved in this scale were evaluated on a Five Point likert Scale where (1) signifying "disagree" to (5) representing "agree". The overall point of each personality trait was measured by summarizing all the points obtained in that aspect. Internal consistency of Conscientiousness is 0.81, Extroversion was 0.86, Agreeableness was 0.77, Neuroticism was 0.83 and Openness to experience 0.82 (Sonam 2021).

SPSS software had been used to analyze the data. To identify the relationship between ego resilience and big five personality traits descriptive analysis and Pearson correlation analysis were implemented. In addition, to measure whether personality traits can predict the level of resilience, a multiple linear regression analysis was conducted (Hulya 2017). Consent from the school has been attached below, and after permission from the school authority, data was collected only from those students who had agreed to take part in the study voluntarily.

Consent Form: Consent from the school for the present study was duly taken in writing, and after permission from the school authority, data were collected only from those students who had agreed to take part in the study voluntarily.

RESULTS AND DISCUSSION

Data from given Tables have reflected that the neuroticism personality trait had a statistically negative correlation of moderate level ($r = -.684$) with resilience which showed higher the resilience lower the neuroticism trait, whereas Conscientiousness had a statistically positive and strong correlation with the greatest score ($r = .792$) reflected 'higher the resilience higher the conscientiousness' trait. Likewise, Openness to experience also had a statistically

positive and strong correlation ($r=.751$) with the second greatest score and very close to conscientiousness which also presented 'higher the resilience higher the openness to experience' trait. Moreover, agreeableness and Extroversion were in third and fourth position to statistically positively and intermediately correlate ($r= .734$ & $r= .539$) with resilience. As per the findings, if the scores of resilience increased then the scores of conscientiousness, openness to experience, extroversions and agreeableness also increased proportionally whereas neuroticism score had been decreased at 0.05 level of significance. Additionally, the next question of the present study was to investigate whether the level of resilience had been predicted by the personality traits of the participants. For that, being predictor variables the big five personality traits had been entered to perform a multiple linear regression analysis. The results of the analysis presented in Table 3:

Table 1. Description of scores of Ego Resilience scale and Big Five Personality traits

	Mean	Standard Deviation	Min	Max
ERS	32.19	11.18	11	49
E	30.14	9.31	10	50
A	30.36	10.05	12	49
C	29.81	9.85	10	48
N	27.41	10.16	7	49
O	29.04	8.84	9	49
Age	17.43	.6	16	18

Note*: E, Extroversion; A, Agreeableness; C, Conscientiousness; N, Neuroticism; O, Openness to Experience; ERS; Ego Resilience Scale

Table 1 evidently showed the results of descriptive analysis of all the variables illustrating that the Mean (SD) of Ego Resilience scale, Extroversion, Agreeableness, conscientiousness, Neuroticism, and Openness to experience was 32.19 ± 11.18 , 30.14 ± 9.31 , 30.36 ± 10.05 , 29.81 ± 9.85 , 27.41 ± 10.16 , and 29.04 ± 8.84 respectively. It also appears that in personality traits, Extroversion had a maximum score i.e. 50 and minimum score was in Neuroticism i.e 7. The Ego Resilience scale had a maximum score of 49 and a minimum of 11. First question of the present study investigated the relationship among the level of resilience and personality traits of participants.

Table 2, demonstrated the correlation among the scores of ego resilience scale and big five personality traits obtained by the participants which exposed statistically significant relationships.

The results of the analysis presented that there is a statistically significant relationship found among the scores of participants of ego resilience and the variables of conscientiousness, neuroticism, and Agreeableness i.e ($R=.859$, $R^2= .738$, $p<.05$). Above mentioned variables of personality explained 73% of the entire variance in resilience ($F=75.94$, $p<.05$). As per the standardized

coefficient of regression (β), on resilience the order of predictor variables of relative importance is as follows: conscientiousness ($\beta= .413$, $p<.01$), neuroticism ($\beta= -.304$, $p<.01$), and agreeableness ($\beta=.276$, $p<.05$).

Table 2. Correlation among the scores of ego resilience and big five personality traits

	ERS	E	A	C	N	O
ERS	1.000	.539	.734	.792	-.684	.751
E	.539	1.000	.812	.663	-.337	.681
A	.734	.812	1.000	.734	-.511	.712
C	.792	.663	.734	1.000	-.578	.831
N	-.684	-.337	-.511	-.578	1.000	-.700

The present study investigated the relationship between ego resilience and the big five personality traits and whether the levels of resilience are predicted by the traits of personality or not. As a result of analysis, a significant but negative relationship was recognized between resilience and neuroticism. Resilience helps students in being constant and keep moving on whatever the conditions but neuroticism trait of personality consists of self-doubt, nervousness, negative feelings and weak coping skills (Campbell et al. 2006; Fuente et al. 2020). For abovementioned reasons it is expected that neuroticism trait and resilience correlate negatively with each other that find reliable with the previous studies (Campbell et al. 2006; Fuente et al. 2020; Sonam et al. 2021). In addition, extrovert students possess the qualities to assess more flexibly and possessively in wide range of opportunities that helps them handle the challenges and hardship with the availability of additional personal resources. Moreover, they also possess the qualities to find social support at the time of adversities. Therefore, it is not unexpected that extroversion and resilience correlate positively with each other which is consistent with earlier studies (Costa and McCrae 1992; Fuente et al. 2020; Sonam et al. 2021).

Students with open to experience personality trait possess qualities like enthusiasm, courage, they know how to stand against the strict rules with critical and innovative thinking and possess a tendency to be exceptional, intellectual, and independent for their rights. For these reasons, open to experience students are able to deal with life's hardships and difficulties which elucidate the statistically significant and positive relationship between resilience and openness to experience trait of personality. It is also found similar to previous studies (Fayombo 2010; Sonam et al. 2021; Kocjan 2021).

Students who possess Agreeableness trait of personality have qualities like well behavior, helpfulness, co-operation and compassion. Because of these qualities they receive additional mental and emotional support at the time of challenges and less struggles in relations. Hence, students with more mental and emotional support ultimately become more resilient which provide the reason of statistically positive and significant relationship between resilience and

agreeableness. Results of the study were similar to earlier studies (Hulya 2017; Fuente et al. 2020; Kocjan 2021; Sonam et al. 2021). Further, students with conscientiousness personality were explained with qualities like being persistent, plan-oriented, organized and patient. Such qualities allow them to focus on certain points and take

action. Hence, it helps them achieve goals and contributes to their level of resilience. Therefore, results of present study showed statistically positive correlation between resilience and Conscientiousness. Findings of the present study were similar to earlier studies (Hulya 2017; Fuente et al. 2020; Kocjan 2021; Sonam et al. 2021).

Table 3. Multiple Regression Analysis on Prediction of level of Resilience through Big five Personality Traits of participants

Model	B	SE	Beta	T	P	Zero-order r	Partial R
Constant	18.051	4.226		4.271	.000		
Conscientiousness	.469	.101	.413	4.623	.000	.792	.457
Neuroticism	-.335	.078	-.304	-4.305	.000	-.684	-.431
Agreeableness	.307	.094	.276	3.258	.002	.734	.340
R= .859		R= .738					
F= 75.94		p<0.05					

So, it is clearly elucidating from the results of the study that if a student has a stronger personality, then he/ she would have stronger resilience too which helps them face competitive examinations, support students in adjustment and learning and provide enough strength to the female to handle all the life-changing and simultaneously enhance their performance level. Lastly, a multiple linear regression analysis was run to examine whether the big five personality traits predicted level of resilience. Results found that the dimensions of conscientiousness, neuroticism, and agreeableness accounted for 73% of the total variance of resilience. This finding appears to be reliable with the findings of previous studies (Campbell et al. 2006; Cetin et al. 2015; Hulya 2017; Kocjan 2021).

CONCLUSION

The findings of the present study conclude that big five traits of personality can be used to address resilience. And Resilience has a significant positive relation with Conscientiousness, agreeableness, extroversion, and openness to experience personality traits and a negative relationship to neuroticism. Moreover, by recognizing risk and protective factors of students, intervention programs to enhance resilience can be designed in schools. In addition, if a student has weak resilience, then training should be given to him/her so that he/she could meet the life challenges after passing school, meet the challenges of excessive competition, monetary needs, and survival in society.

Conflict of Interests: Authors declare no conflict of interests to disclose.

Data Availability Statement: The database generated and /or analysed during the current study are not publicly available due to privacy, but are available from the corresponding author on reasonable request.

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