Resilience attributes among Lovely Professional University students: A correlation study of depression, anxiety and stress.

Anahita Verma[1], Devasmita Karmakar[2], Dev Lama[3], Ngawang Lhakey[4], Vaishnavi Sinha[5], Dr. Muzafar Ahmed Bhat[6]

ABSTRACT

The term 'Resilience 'in general defines the ability of and individual to recover or bounce back from difficult and unpleasant situations. From a Students standpoint, each individual comes to face uncertainty and difficult situations in their professional, academic and personal lives that prove hard and stressful to cope with. Difficult situations bring with them a lethal exposure to conditions like stress, anxiety and depression. These conditions occur in succession and can strike a lethal amount of damage to the mental health in the long run, with great interest to growing and adapting minds like those of a university student. These conditions can alter the brains plasticity to a great extent leaving a permanent mark on their conscious. Variables such as anxiety, depression and stress tend to have a negative impact on the lives of individuals in general. This paper discusses the correlation of these conditions with resilience and how it should exist and be built as a mechanism in students to prepare them for their lives afterwards.

Keywords

Stress, Anxiety, Depression, Resilience, university students, mental health.

Introduction

Resilience in psychological terms, can be defined as a process of, capacity for, or outcome of successful adaptation, despite challenging or threatful circumstances.' Masten, Best and Gramezy, (1990). Life in a university can be full of distress and mental challenges in relation to general population. (Stallman, 2010; Macaskill, 2013) .Coming to the university brings many challenges in the lives of young adults and that alone can be cause of mental distress to many. Adjusting to new social roles and social situations can definitely prove as a challenge. It puts many such individuals at a risk of developing burnout, anxiety or depression. (Keye & Pidgeon, 2013, Slavin et al., 2011).

It would be wrong to assume that resilient individuals do not experience emotional pain, distress, anxiety and suffering, it is that despite their presence, they are found to be better at overcoming adversity and hardship while rebuilding their lives after them. They do so by utilizing their skills and strengths and leaning into their support systems all while viewing the world through realistic optimism. Besides resilience's importance in processing and overcoming hardship, it also empowers and fosters within individuals, growth and improvements to reach their full potential. Resilient individuals' perception of themselves and their role in the world motivates and allows them to cope more efficiently unlike the non-resilient individuals who fall easily into despair, get overwhelmed and unmotivated with many turning to unhealthy coping mechanisms.

Stress, anxiety and depression are interrelated in every aspect and one or the other is bound to occur if the onset of stress is seen. With the absence of resilience, many other factors like academic performance, self- efficacy and confidence come to stake. How the absence of resilience as a primary factor causes a mental havoc and inability to handle certain situations, and how it affects an individual as a whole is discussed in this research paper.

Literature Review

Among educators, a huge concern has been expressed on the topic of resilience, academic performance and its influence on the student's mental health. Many students continued to have low grades in result to their situations. The study indicated that academic performance, resilience, depression, anxiety and stress were found to be positively correlated amongst the sample of female college students. Regression analysis implied that academic performance predicted depression, anxiety and stress in these students, while depression alone is significantly predicted by resilience. In accordance to many empirical studies, resilience negatively correlates with indicators of mental health such as depression, anxiety and pertains positive correlation with things like life satisfaction, subjective well being and positive emotions (Hu et. Al. , 2015). Studies have shown that resilience is negatively correlated with depression and anxiety. (Miller and Chandler, 2002; Nrugham et. Al., 2010; Poole et. Al., 2017; Shapero et. Al., 2019). Researchers found that resilience characteristics are associated

with lower anxiety and depression symptom levels (Skrove et. Al., 2012). Resilience partially mediates the relationship between stress and symptoms of anxiety and depression (Anyan and Hjemdal, 2016). Studies verified that resilience is significantly influenced by the individuals mental health. While greater part of past investigations and studies utilized mental health status only as an outcome measure, only a couple of studies have taken it into account as a predictive factor. Research on academic performance, stress and resilience clearly identified a negative correlation between resilience and stress, a positive correlation between academic performance and resilience and also emphasized on the role of age factor in development of resilience in young adults. Academic achievement and daily functioning was seen to be effected by the levels of given variables. . A cross sectional study showed in consistency with previous researches that resilience was significantly negatively correlated with level of perceived stress and the tested psychopathological symptoms (p< 0.01). Due to significant correlation, it was assumed that resilience had a moderating and mediating effect on relation between stress and depression as well as anxiety. There is a moderating effect on the relationship between the variables.. Anxiety and depression as variables have a significant effect on academic performance, which are deteriorating factors in resilience (Bisson H. Katherine, 2017).

Objectives-

Taking into consideration claims made by earlier empirical studies that resilience enhances positive mental health, the objectives of the present study are as follows:

- To assess the resilience level among university students.
- To correlate the resilience amongst students with variables like depression, anxiety and stress.
- To assess the impact of these variables on daily functioning of the individuals.

Hypothesis- It is predicted that resilience will have a significant negative correlation with DASS scores. In other words, university students reporting higher resilience will report lower levels of self-reported symptoms of depression, anxiety and stress and vice-versa.

Sample- The study was conducted on a sample of (N=73) students within Lovely Professional University (current students) from age group 18-24. Random sampling technique was used to identify the sample. Each student was asked to provide their honest opinion on the topic and the questions concerned the various aspects of probed variables, and the correlation between them in the individual's life.

Methodology- The study used experimental verification due to its nature. Various journals, website articles and publications were consulted in order to deduce data for the literature review. Deductive analysis was used and the data was processed. Resilience was considered as the primary factor and stress, depression and anxiety were considered secondary. Variables like academic performance and daily situations were also included with the perspective of student life. Co -relational method was used to establish results and Pearson's correlation was also taken into account. Graphical representation was used to display data in a comprehensive manner.

Tools Used

Depression Anxiety Stress Scale (DASS-21)

The scale was designed by Lovibond (1995) and is used primarily for the assesment of symptoms of amxiety, stress and depression as daily stressors variables. DASS-21 comprises of three sub scales which has 7 items each and uses a 4-point Likert scale ranging from 0 (Did not apply to me at all) to 3 (Applied to me very much). The reliability for depression is 0.77, for anxiety is 0.77 and for stress is 0.70. the validity of the scale is also very high when compared with other scales.

Nicholson McBride Resilience Questionnaire (NMRQ)

Nicholson McBride Resilience Questionnaire is a 12 item scale designed by McBride (2010). It uses 5-point Likert scale ranging from 'Strongly disagree' to 'Strongly agree'. Scores of 0-37 indicate a developing level of resilience, scores 38-43 indicate an established level, 44-48 indicate

a strong level and 49-60 indicate an exceptional level. This measure had high reliability with Cronbach's Alpha= 0.76.

Procedure of Data Collection-

All the respondents were contacted through electronic correspondence in order to receive their feedbacks. The form was constructed on the electronic platform. The scores were recorded electronically. The scores that were collected were used to measure the correlation between resilience and anxiety, stress and depression amongst the sample.

Research Problems-

- The following problems were encountered -
- Lack of communication and responses from the respondents.
- Conveying the message behind conduction of the study to convince the respondents to fill the survey.

Analysis of Data

Descriptive statistics (mean, standard deviation, range) were used to the compare the scores between the different variables. Graphical representation of the scores was also done and displayed. The higher the resilience score, the lower the scores will be for the negative variables in a given individual.

Result and Discussion

Students participating as a member of the sample size were from different domains. The selected age group varies from 18 to 24. The study was performed in order to denote the resilient attributes of the sample with respect to variables like depression, anxiety and stress and also to determine the co-relation between them. The sample that was taken into consideration consisted of 73 students from lovely professional university and all

Resilience, depression, anxiety and stress are measured by using the central tendency measures (mean, median and mode) and by dispersion measure like standard deviation and ranges. Pearson r or Pearson correlation coefficient is used to determine the co-relation between resilience with other factors such as depression, anxiety and stress respectively.

	Resilience score	Depression	Anxiety	Stress
Mean	43.452	18.123	17.603	17.356
Std. Error of Mean	0.759	0.861	0.875	0.866
Median	43.000	18.000	18.000	16.000
Mode	40.000	20.000	7.000	11.000
Std. Deviation	6.487	7.354	7.479	7.396
Minimum	29.000	7.000	7.000	7.000
Maximum	65.000	38.000	34.000	38.000

Resilience

After analyzing the scores it is interpreted that the mean score obtained for resilience was 43.45 with a standard deviation of 6.48 (SD=6.48) with students ranging scores from minimum 29 and maximum 65. This suggests that the responsive values obtained from the sample are inclined towards the greater aspect of resilience. About 17.8% (n=13) students had a score of 33 or less which puts them into the category of developing level of resilience, 31.5% (n=23) students had a score of 43 and less which categorizes them to established level of resilience, 17.8% (n=13) had a score of 44 or above and falls into the category of strong level of resilience and rest 31.5%(n=23) had a score of 49 or above and is categorized to exceptional level of resilience. As the majority of the sample is highly resilient therefore it can be predicted that the students have a greater ability to handle emotional demands, difficulties, challenge and also have the ability to resist negative aspects like anxiety, stress and depression.
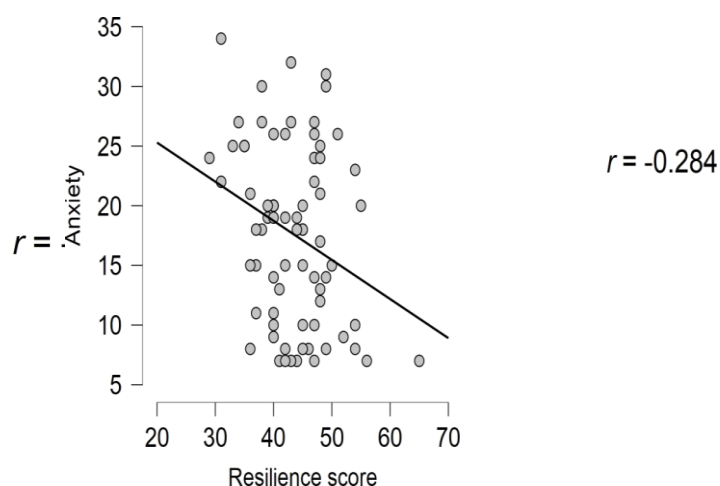
Depression(D)
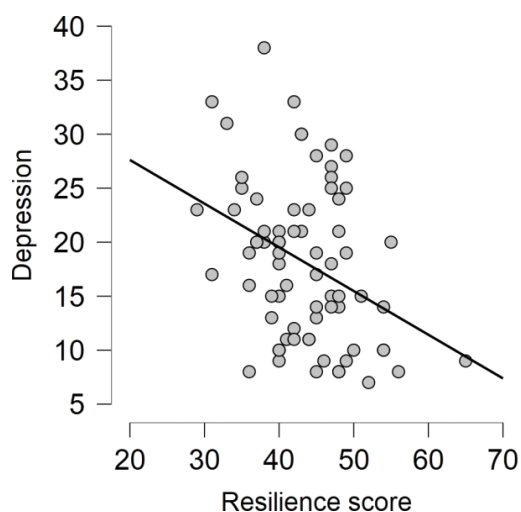
The mean score of depression obtained is 18.12 with a standard deviation of 7.35(SD= 7.35) with students score ranging from 7 to 38. The standard deviation puts the responsive values in the greater spectrum of depression. About 13.6% (n=10) were considered not depressed or normal, 16.4% (n=12) were considered as mildly depressed, 32.8% (n=24) were considered as moderately depressed, 24.6% (n=18) were considered as severely depressed and the rest 12.3% (n=9) were considered as extremely depressed. As most of the students are moderately depressed therefore the will have some difficulty in managing the negative events and may infer with their level of resilience.
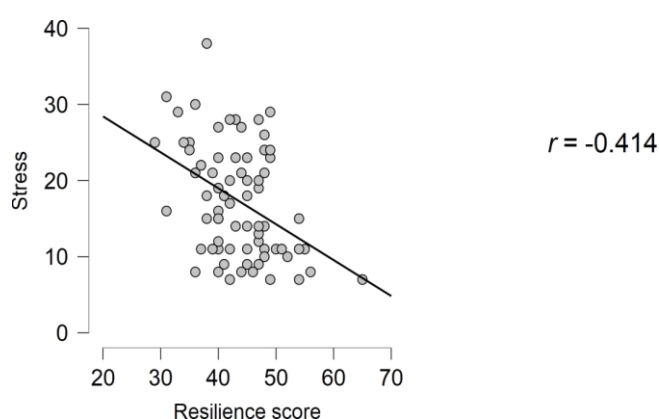
Anxiety(A)

The mean score obtained for anxiety is 17.60 with a standard deviation of 7.47(SD= 7.47) with students score ranging from minimum 7 to maximum 34. About 9.5% (n=7) students were considered to have normal level of anxiety, 10.9% (n=8) students were having mild anxiety, 16.4% (n=12) students were having moderate anxiety, 20.5% (n=15) students were having severe anxiety and the rest 42.4% (n=31) students have extremely severe anxiety. As 42.4% of the sample is inclined towards extremely severe anxiety therefore it can be considered that the students are facing some difficulties in maintaining their normal pace of life and this might infer will their ability to bounce back from those situations.

$r = -0.284$

Stress

The mean obtained for stress is 17.35 having a standard deviation of 7.39(SD=7.39) with students score ranging from minimum 7 and maximum 38. The standard deviation puts the responsive values in the lower spectrum of stress. About 42.4% (n=31) students are considered as normal with no stress, 13.6% (n=10) students have mild stress, 28.7% (n=21) students have moderate stress, 13.6% (n=10) students have severe stress and only 1.3% of the students falls into the category of having extremely severe stress. As 42.4% of the sample has no stress therefore it represents that the students are mostly able to handle the stressful situations of the university and personal life.

$r = -0.414$

Multivariate Corelation

Using Pearson correlation coefficient or Pearson**'s (r)** to determine the relationship between resilience and negative attributes like depression, anxiety and stress respectively and also to determine if these are significant predictors of resilience. The study showed that the resilience have a significant and negative co-relation between resilience and depression, resilience and anxiety and also between resilience and stress. This proves the hypothesis that variables like depression, anxiety and stress might have a negative co-relation with resilience factor.

The co-relation perceived in case of depression and resilience is (r =-0.357, p=0.002) which suggests that it has a negative association between depression and resilience indicating that students who appears to have higher level of depression are more likely to report lower level of resilience and in same way if the students appears to have lower level of depression they are reported to have higher level of resilience.

The co-relation perceived in case of anxiety and resilience is (r =-0.284, p=0.015) which suggests that they have a significant and negative correlation between them indicating that students with lower level of anxiety will report to have high resilience and students with higher level of anxiety will have low resilience.

The co-relation perceived in case of stress and resilience is (r =-0.414, p=<0.001) which shows that stress and resilience have a negative association between then indicating that students reported with lower level of stress is more resilient and students with higher level of stress are less resilient.

		Pearson's r	p
Resilience score	Depression	−0.357	0.002
Resilience score	Anxiety	−0.284	0.015
Resilience score	Stress	−0.414	< .001

Conclusion

Due to the increased risk to the mental and psychological issues among the students, the university students became target population for research. The study shows that majority of the sample is inclined towards the higher spectrum of resilience therefore the students have better mental health and are able to easily confront the new challenges. The study also suggests that resilience has a negative co-relation with depression, anxiety and stress and they are significant predictors of resilience. So by analyzing it can be interpreted that although these attributes have profound effect on resilience but are not always the denoting factor for resilience as some students with moderate depression also has good resilience. The study also shows that students having low stress level are more resilient and have the ability to bounce back from stressful situations. Therefore, it indicates that if all these three attributes are reported to be on the higher side of students, then the students are likely to have an impact on their mental health and face imbalance in their life which will further deteriorate their level of resilience.

Implication

It adds to the pool of knowledge on the relationship between resilience and mental health problems. And that the results also stand true for the proposal for Universities to have robust support system in regards to mental well-being, provided to the students so that they can tackle the struggles that comes along with adjusting to university life besides its pressure.

References

[1] B. K. (2017). The effect of anxiety and depression on College students' academic performance: Exploring social support as a moderator. Electronic Thesis and Dissertations @ACU.

[2] Chandler, A. M. (2002). Acculturation, Resilience and depression in midlife women from Former soveit union. Nurs. Res. , 26-32.

[3] F. Anyan, O. H. (2016). Adolescent stress and symptoms of anxiety and depression: resilience explains and differentiates the relationships. Journal of Affect Disorders , 213-220.

[4] J.C Poole, K. D. (2017). Childhood Adversity and adult depression: the protective role of psychological resilience. Child Abuse Negligence , 89-100.

[5] M. Skrove, P. R. (2012). Resilience, lifestyle and symptoms of anxiety and depression in adolescence: the ypung HUNT study. journal of social psychiatry emidemiology , 407-416.

[6] M.D Keye, A. P. (2013). Investigation of the relationship between Resilience, Mindfulness and Academic Self Efficacy. open journal of social sciences , 1-4.

[7] M.H Pollack, M. S. (2004). new challenges for anxiety disorders: where treatment, resilience and economic priority converge. CNS Spectrum , 1-4.

[8] Macaskill, A. (2013). the mental health of univesity students in united kingdom. British Journal of Guidance and Counselling , 41 (4), 426-441.

[9] Nrugham, L. (2010). Associations between attempted suicide, violent life event, depressive symptoms and resilience in adolescents and young adults. Journal of Nervous Mental Disorders , 131-136.

[10] Reh, L. (2019). Perceived Stress, Depression and Anxiety in University Students: The role of resilience. Enschede: Journal of Positive Psychology and Technology.

[11] Shapero, B. (2019). understanding the effects of emotional reactivity on depression and suicidal thoughts and behaviours: moderating effects of childhood adversity and resilience. Journal of Affective Disorders , 419-427.

[12] Solomon, O. (2013). Exploring the relationship between resilience, perceived stress and academic achievement. Manchester: Manchester Metroplitan University.

[13] Wu Y, S. Z.-C. (2020). The Relationship Between Reslience and Mental Health in Chinese College Students: A longitudnal Cross-Lagged Analysis. Front Psycho. , 11.

[14] Zarina Ahmed, S. H. (2015). Academic Performance, Resilience, Depression, Anxiety and Stress among Women College Students. Journal of positive psychology , 367-370.