



Relationship Between Resilience and Optimism Among Young Adult Undergraduates: A Cross-Sectional Study in Sri Lanka Institute of Information Technology

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ABSTRACT

Young adulthood is an important developmental stage in which individuals must go through a positive trajectory for a healthy and successful life. Young adult undergraduates in Sri Lanka face many stressors and adversities which affect their lives negatively. Therefore, it is important to determine the factors contributing to their resilience. Optimism is a factor that significantly enhances resilience. Moreover, there is a paucity of positive psychological and gender-sensitive research in the Sri Lankan context. In this sense, the present study aims to determine the relationship between psychological resilience and dispositional optimism among young adult undergraduates in Sri Lanka, the gender differences in resilience, and the gender differences in optimism. The instruments used were the Brief Resilience Scale (BRS) to measure resilience and the Life Orientation Test-Revised (LOT-R) to measure dispositional optimism. A total of 124 participants were involved in the study. The findings suggest that (a) there is a statistically significant moderately positive relationship between resilience and optimism (b) there are no gender differences in resilience between males and females (c) there are no gender differences in optimism among males and females. Importantly,

the research provides practical implications for mental health practitioners, researchers, and positive psychologists to develop gender-sensitive interventions to cope with stressors and adversities.

1. INTRODUCTION

1.1 Stressors and Adversities Faced by Sri Lankan YAs and Its Negative Psychological Effects

Young adulthood is an important as well as a challenging developmental stage (Arnett, 2004). The term, Young Adult (YA) is defined differently by health organizations (Higley, 2019). After analysing the absence of a standard definition, the Society for Adolescent Health and Medicine (2017) recommends the inclusion of the age range for YAs as ages 18-25 years.

In the Sri Lankan context, YA undergraduates encounter unique stressors and adversities along with academically-related challenges. With regards to academic life, heavy workload, competition for higher GPAs, and techno stressors have been found as major stressors (Mahees, 2020). Reduced motivation, lower academic performance rates, negative effects on mental and physical well-being have been found as the consequences of academic stress among undergraduates (Pascoe et al., 2019).

When considering non-academic stressors, Sri Lanka is affected by the coronavirus pandemic (COVID-19) and a severe economic crisis, that has led the country to a multidimensional crisis (Ariyaratne, 2022). Moreover, the current state of Sri Lanka has resulted in uncertainty and despair about their future among undergraduates (Ariyaratne, 2022).

1.2 Overview

Considering the stressors and adversities which cause impairments in Sri Lankan YA undergraduates' lives, it is important to understand

the protective factors that contribute against these circumstances (Mahees, 2020). In this sense, literature on resilience supports that it enhances successful adaptation to stressors and adversities (Southwick & Charney, 2012). Resilience is "the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioural flexibility and adjustment to external and internal demands." (American Psychological Association, 2022). Therefore, determining the factors that enhance resilience is important for healthy young adulthood as well as a successful academic life for Sri Lankan YA undergraduates. One psychological construct that gained acceptance in enhancing factors on resilience is optimism (Southwick & Charney, 2012). Dispositional optimism refers to "the generalized, relatively stable tendency to expect good outcomes across important life domains." (Scheier & Carver, 2018). Whilst there are considerable numbers of research examining the negative consequences of young adulthood, comparatively fewer studies focus on the positive psychological aspects of it (Hoyt et al., 2012). Therefore, studying the relationship between optimism and resilience is important to understand the positive psychological aspects of resilience. Furthermore, scarce research has been done in the Sri Lankan context evaluating levels of resilience and optimism. Importantly, there was no research found to examine the relationship between resilience and optimism and gender differences in Sri Lanka. Therefore, determining the relationship between the two variables and its gender difference could represent an important area of investigation. Also, since both resilience and optimism can be enhanced, taught, and learned (Southwick & Charney, 2012), studying its gender differences will be useful in gender-sensitive practical applications of resilience and optimism for YA undergraduates in Sri Lanka. The specific objectives of the research are as follows,

1. To determine the relationship between resilience and optimism among YA undergraduates in Sri Lanka.

2. To determine the gender differences in the levels of resilience among YA undergraduates in Sri Lanka.

3. To determine the gender differences in the levels of optimism among YA undergraduates in Sri Lanka.

1.3 Academic Rationale

While no research is available examining the relationship between resilience and optimism in the Sri Lankan context, existing research in South Asian contexts implies a positive relationship between the two variables among YA undergraduates (Agarwal & Malhotra, 2019; Maheshwari & Jutta, 2020).

The literature on gender differences with about resilience has not been previously researched in the Sri Lankan context. In the South Asian context, research suggests that male undergraduates are more resilient than female undergraduates and contrariwise (Anagha & Navyashree, 2020; Sundar & Archana, 2020) while some research supports that there is no gender difference (Dolev et al., 2021).

The literature on gender differences relating to optimism has not been previously researched in the Sri Lankan context. In the South Asian context, research supports that males are more optimistic than females (Abbas et al., 2020; Zafar & Murtaza, 2018).

Thus, the following hypotheses were identified:

Hypothesis 1: There would be a positive relationship between resilience and optimism among Sri Lankan YA undergraduates.

Hypothesis 2: There would be a gender difference in levels of resilience among Sri Lankan YA undergraduates.

Hypothesis 3: There would be a gender difference in levels of optimism among Sri Lankan YA undergraduates.

2. METHODS

2.1 Design

The research employed cross-sectional and descriptive design. The Correlational method and group differential testing were utilized in the analysis of data. Moreover, descriptive statistics of frequencies, percentages, means, and standard deviations were utilized.

2.2 Participants

Participants were recruited through a convenient sampling method. They were contacted either via the researcher's personal WhatsApp messages or Email. The exclusion criteria were students of other faculties and universities and students who were not aged 18-25 in FHS at SLIIT.

The total response count was 129 and five responses were identified as outliers in initial responses.

The final participation count was 124 individuals which are 52.8% response rate. 58.9% were females ($N= 73$) and 41.1% were males ($N= 51$).

2.3 Measures

2.3.1 Demographic Information

The participants were requested to provide demographic information. In particular age, gender, faculty, and level of education

2.3.2 Life Orientation Test-Revised (LOT-R)

LOT-R is a standard instrument that evaluates an individual's level of dispositional optimism. LOT-R has displayed an acceptable internal consistency on Cronbach's alpha of 0.78 (Scheier et al., 1994). Moreover, it has been used in research to measure optimism in India and Pakistan which have

relatively similar cultures to Sri Lanka (Maheshwari & Jutta, 2020; Zaheer & Khan, 2022).

2.3.3 Brief Resilience Scale (BRS)

BRS is utilized to evaluate one’s level of perceived resilience. BRS has displayed an acceptable internal consistency on Cronbach’s alpha between 0.8-0.91. (Smith et al., 2008). Moreover, it has been used in research to measure resilience in India and Pakistan which have relatively similar cultures to Sri Lanka (Aman, 2020; Zaheer & Khan, 2022).

2.4 Procedure

Participants were provided with a link via either WhatsApp or email which directed them to the Google form which included online questionnaires. After getting access to the survey, the participant information sheet and implied consent were provided at the beginning of the Google form. Participants who agree to the consent could proceed in the Google form. In case of disagreement, there was an option to withdraw before the final submission. However, there was no option to withdraw data after the submission since all data was anonymous. Participants who proceeded were required to complete the demographic information, LOT-R and BRS respectively. They received the debriefing sheet after the completion. In case the participant needs immediate psychological aid, the information on the mental health helpline of the National Institute of Mental Health was provided in the debriefing sheet.

2.5 Data analysis

The collected data was input into IBM SPSS Statistics 22.0. Simple linear regression analysis was used to find the relationship between resilience and optimism. Independent group t-test was used to study the gender differences in resilience and optimism.

3. RESULTS

3.1 Determining the relationship between resilience and optimism

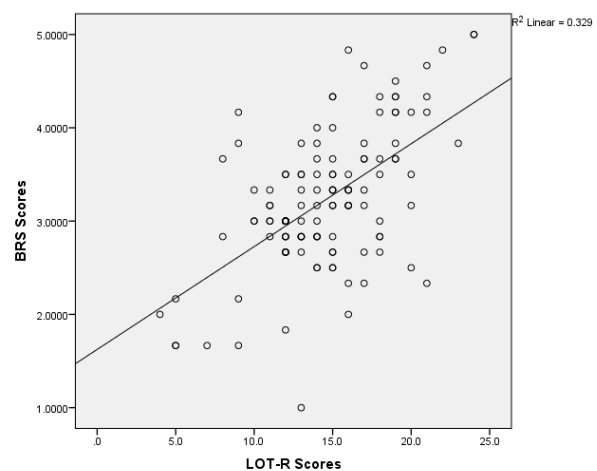
The Pearson product-moment correlation coefficient was employed to determine the relationship between resilience and optimism. An alpha level of .05 was utilized. The results of the correlational analysis presented in Table 1 show that there was a statistically significant moderately positive correlation $r(122) = .57, p < .001$ between resilience and optimism in YA undergraduates. Additionally, the mean of 3.2 BRS score and the mean of 14.5 LOT-R score were found among the YA undergraduates. The scatter plot of the relationship between the variables is presented in Figure 1.

Table 1: Means, Standard Deviations, and Correlation Between Resilience and Optimism among YA Undergraduates

| Variable | M | SD | 1. | 2. |
|----------------|------|-----|---------|---------|
| 1.BRS Scores | 3.2 | 0.7 | - | .573*** |
| 2.LOT-R Scores | 14.5 | 3.9 | .573*** | - |

Note. * $p < 0.05$, ** $P < 0.01$, *** $P < 0.001$; N=124

Figure 1: Scatterplot Depicting the Correlation Between Resilience and Optimism



3.2 Determining the gender differences in levels of resilience

An independent sample t-test was conducted to determine the gender differences in levels of resilience and optimism. Descriptive statistics are in Table 2. All groups were normally distributed. Regarding the gender differences in resilience, $F(122) = 0.25, p = .619$. Hence, equal variances were assumed. The test indicated that there was no statistically significant mean difference between resilience among males and females $t(122) = 1.70, p = .091$. The magnitude of the differences in mean (mean difference=0.23, 95% CI: -0.03 to 0.49) was very small. Hence, H2 was not supported (see Table 3). However, males attained higher scores ($M=3.4, SD=0.8$) in resilience than females ($M=3.1, SD=0.7$).

3.3 Determining the gender differences in levels of optimism

Regarding the gender differences in optimism, $F(122) = 5.10, p = .026$. Hence, equal variances were not assumed. The test indicated that there was no statistically significant mean difference between optimism among males and females $t(88.57) = 0.61, p = .546$. The magnitude of the differences in mean (mean difference=0.45, 95% CI: -1.03 to 1.93) was very small. Hence, H3 was not supported (see Table 3). However, Females attained higher scores ($M=14.7, SD=3.4$) in optimism than Males ($M=14.3, SD=4.5$).

Table 2: Means and Standard Deviations of Resilience and Optimism among Male and Female YA Undergraduates

| Gender | N | BRS Scores | | LOT-R Scores | |
|--------|----|------------|-----|--------------|-----|
| | | M | SD | M | SD |
| Male | 51 | 3.4 | 0.8 | 14.3 | 4.5 |
| Female | 73 | 3.1 | 0.7 | 14.7 | 3.4 |

Table 3: Results of the Independent Sample t-test for Significance of the Mean Difference of Gender on Resilience and Optimism

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | |
|--------------|-----------------------------|---|------|------------------------------|-------|-----------------|-----------------|---|------|
| | | F | Sig. | t | df. | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | Lower | Upper | |
| BRS Scores | Equal variances assumed | 0.25 | .619 | 1.70 | 122 | .091 | 0.23 | -0.04 | 0.50 |
| LOT-R Scores | Equal variances not assumed | 5.11 | .026 | -0.61 | 88.57 | .546 | -0.45 | -1.93 | 1.03 |

4. DISCUSSION

The primary objective of the research was to determine the relationship between resilience and optimism among YA undergraduates in Sri Lanka. The specific objectives were to determine the gender differences in resilience and optimism. The emerged findings are as follows.

Firstly, it was found that there was a statistically significant moderately positive correlation between resilience and optimism. The existing literature supports this finding. Studies have found a strong positive correlation as well as a moderate positive correlation between resilience and optimism (Maheshwari & Jutta, 2020). Regarding the finding of high optimistic individuals who tended to be more resilient, could be explained through the coping mechanisms associated with the Broaden-and-Build model of positive emotions (Fredrickson, 2001; Southwick & Charney, 2012). According to the model, "experiences of positive emotions broaden people's momentary thought-action preceptories, which in turn serve to build enduring personal resources, ranging from physical and intellectual resources to social and psychological resources" (Fredrickson, 2001). Therefore, the ability to broaden attention and develop resources is useful in dealing with stressors and adversities. Regarding how optimism increased resilience through these coping mechanisms, when optimistic individuals expand their attention, they tend to positively reappraisal events that seem as stressful. This helps optimists

to reframe stressors as challenges and discover the opportunities embedded in adversities (Southwick & Charney, 2012). The finding of highly resilient individuals tend to be more optimistic, Tugade & Fredrickson (2004) have found that individuals who score high in resilience tend to experience positive emotions even under stress. Moreover, they have found that these positive emotions help individuals who score high in resilience secure from vulnerability to negative emotions.

Secondly, the findings of the current research showed that there was no statistically significant mean difference in resilience between male and female YA undergraduates in Sri Lanka. Similarly, Dolev et al. (2021) have found no significant gender differences in resilience levels among males and females. However, the research finding is contrary to most of the existing literature which shows mixed results of male undergraduates being significantly more resilient than female undergraduates or vice versa. (Anagha & Navyashree, 2020). A possible explanation for the inconsistency of the current result with the existing literature could be the low number of items measured in the social domain in BRS. Since social connectedness and support are found to be protective factors against stressors in females, the resiliency scores obtained through BRS lacks gender sensitivity (Hirani et al., 2016).

Thirdly, the findings of the research showed that there was no statistically significant mean difference in optimism between male and female YA undergraduates in Sri Lanka. However, the finding is contrary to the previous research in the South Asian context which has suggested that males are more optimistic than females (Abbas et al., 2020). A twin study by Mosing et al. (2009) suggests that although the gender differences in optimism are not significant, there are indications of gender differences of it in the genetic architecture of males and females. They have found that genetic influences explain a considerable proportion of variations in females. Moreover, variations

of males are mostly influenced by shared and non-shared environments. Therefore, there is a possibility of gender differences of optimism in the genetic architecture of males and females although the finding of the current research was not statistically significant.

5. CONCLUSION

Taken together, the findings showed that there is a statistically significant moderately positive correlation between resilience and optimism in Sri Lankan YA undergraduates. Moreover, there was no statistically significant difference in the levels of either resilience or optimism among male and female YA undergraduates in Sri Lanka. Given the lack of research in resilience, optimism, and positive psychology in the Sri Lankan context, the present study sets the path for future research specifically in developing gender-sensitive and positive psychological coping interventions for YA undergraduates in Sri Lanka. Importantly, since Sri Lankan YA undergraduates undergo a great deal of stressors and adversities in the present times (Ariyaratne, 2022; Mahees, 2020), the findings of the present study contribute to expanding the understanding of timely relevant psychological constructs of resilience and optimism which ultimately benefits the psychological well-being of YA undergraduates in Sri Lanka.

5.1 Limitations, Modifications and Future Research Directions

There are several limitations associated with current research. The findings cannot be generalized for several reasons. First, the research required a sample of 235 undergraduates. However, the response rate was 52.8% which was 124 responses. Second, the male response rate was relatively low in comparison with the female responses. Third, the sample involved only the undergraduates in FHS at SLIIT. Fourth, the convenience sampling method was utilized in data collection. Another limitation of the study was

the use of self-reported online questionnaires to collect data. There is a possibility of participants having response bias which is known as responding in a typical way despite of question and social desirability bias which is known as answering in a socially acceptable manner in the responses (Demetriou et al., 2015). Moreover, LOT-R and BRS measures were not validated in the Sri Lankan context.

The present study has illustrated on many areas which require further investigation. Since the research has only determined the differences in optimism and resilience between males and females, there is no determination of resilience and optimism of individuals with LGBTQIA+ sexual identities. Moreover, since the research only involved quantitative methods, there is no qualitative understanding on gender-specific views of resilience and optimism in Sri Lanka. Therefore, in the future, mixed-method research could be developed to understand gender-specific views of resilience and optimism in Sri Lankans. Additionally, since the research only determined the relationship between resilience and optimism, future research could be expanded to determine the predictability of optimism in resilience and vice versa. Moreover, a longitudinal study could be designed to determine changes in resilience and optimism levels in individuals with age.

5.2 Implications

The results of the current study provide practical implications for counselors, educational psychologists, positive psychologists, and researchers in psychology. Psychological resilience is a much-needed trait for Sri Lankans in present times (Bandara & Galappatti, 2022). Therefore, the positive relationship which was determined between resilience and optimism will be useful to develop programs to cope with the stressors and adversities that Sri Lankan YAs face in the present. Moreover, since gender sensitivity in individual and social domains is a major factor

in establishing interventions effectively (Celik et al., 2011), the gender differences in resilience and optimism which were determined in the current study will be useful to develop effective interventions. Furthermore, the researchers could use the current findings for future educational and positive psychological research which lacks in Sri Lanka.

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