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A Comparison of Mental Well-being among Female Undergraduates in Sri Lanka based on Relationship Status

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Abstract

The prevalence of depression, stress, and anxiety symptoms among Sri Lankan undergraduates has increased over the years, especially among females. However, there is limited research on the impact of romantic relationships on these symptoms as well as their quality of life. This study aims to compare the difference in levels of depression, anxiety, stress, and quality of life of female Sri Lankan undergraduates based on their relationship status. A random sample of 295 female undergraduates (18-29 years) purposively selected from Sri Lankan universities, which consist of 152 having no relationship ('single') and 143 having romantic relationship ('relationship') was taken for this study. An online survey that included a demographic questionnaire, the Sinhala translated version of the Depression Anxiety Stress Scale (DASS-21), and the World Health Organization Quality of Life – BREF (WHOQOL-BREF) was utilized to obtain the necessary information. Results showed that there is a strong positive multicollinearity among depression, anxiety, and stress in female undergraduates. There are no significant differences in the mean score of anxiety and stress between the two groups even at the 10% level, but the mean score of depression of the single group (13.16) is significantly higher than that of the relationship group (10.74) at 10% level. Positive significant correlations were also found among six pairs within the four variables: physical, psychological, social relationships and environment in QoL among female undergraduates irrespective of the type of groups. The mean score for social relationship in 'relationship' group (63.69) is significantly higher ($p < 0.05$) than that of 'single' group (50.05). This study reveals the intricate nature of relationships and mental health and highlights the need for investigations that consider different cultures.

Keywords: Anxiety, Depression, Quality of life, Romantic relationships, Sri Lankan undergraduates.

Introduction

The mental health and quality of life (QoL) numerous systematic reviews and meta-analyses of university students are becoming a highlight highlighting the high prevalence of growing concern globally, as evidenced by depression, anxiety, and stress among this

demographic (Hope & Henderson, 2014; Rotenstein et al., 2016). While studies in the Sri Lankan context have identified elevated levels of depression, anxiety, and stress among specific student cohorts, such as nursing and medical students, there remains a notable gap in understanding the influence of romantic relationships on mental well-being and QoL among undergraduates (Rathnayake & Ekanayaka, 2016; Wickramasinghe et al., 2023). However, research studies on undergraduates in general suggest that most exhibit normal levels of these symptoms (Gamage et al., 2021). Various factors unique to Sri Lanka, such as cultural dynamics, ragging, and academic expectations, play a role in influencing above mentioned mental health outcomes among undergraduates (Gamage, 2017). Cultural dynamics such as the influence of male dominance and coercion within undergraduate relationships in Sri Lanka has been identified as a concerning issue for their mental health and QoL (Gunawardena et al., 2012). This study seeks to address this gap by conducting a comparative analysis of the romantic relationship status of female Sri Lankan undergraduates' levels of depression, anxiety, and stress symptoms, as well as their QoL. Through a comprehensive examination of these factors, the research aims to contribute valuable insights into the intricate interplay between romantic relationships and mental well-being, particularly within the unique cultural context of Sri Lankan universities.

Literature Review

Examining mental health on a global scale reveals a consistently high to moderate prevalence of depression, anxiety, and stress among college students, as highlighted by

Ramón-Arbués et al. (2020). Moreover, Cheng et al. (2023) emphasized that the ongoing impact of the COVID-19 pandemic has influenced the mental well-being of college students.

In Sri Lanka, depression rates among the general population are significant, with specific emphasis on elevated levels among undergraduate nursing students (Alwis et al., 2023; Rathnayake & Ekanayaka, 2016). However, nuanced findings suggest that the majority of Sri Lankan undergraduates exhibit healthy mental health indicators (Gamage et al., 2021).

Romantic relationships and mental health

Romantic relationships play a crucial role in mental well-being during late adolescence and early adulthood, with secure attachments and social support serving as protective factors against psychological distress while anxious or avoidant attachment styles serve as risk factors (Feeney & Collins, 2015; Finkel et al., 2017; Weidmann et al., 2023). However, challenges such as coercion, relationship inauthenticity, and adjustment difficulties can exacerbate depressive symptoms and stress (Gunawardena et al., 2012; Soller, 2014).

Whitton et al. (2013) underline that committed relationships contribute to improved mental well-being, with women in committed relationships reporting fewer depressive symptoms than their single counterparts. The significance of relationship status on mood is evident, with being single or married influencing low mood (Horgan et al., 2018). For young women, the mental health impact of being in a romantic relationship is particularly

noteworthy, with cohabitation associated with lower depression symptoms (Grundström et al., 2021; Hearne, 2022).

Unique dynamics emerge in the context of newer relationships, showcasing a “honeymoon effect” positively influencing mental health (Musick & Bumpass, 2012). The impact of relationship satisfaction during the COVID-19 pandemic further underscores the connection between relationship quality and mental well-being (Till & Niederkrotenthaler, 2022). Romantic relationship authenticity proves crucial, with inauthenticity linked to poor mental health, especially for girls (Soller, 2014). Coercion into a relationship, unstable relationships, and discrepant relationships are associated with depressive symptoms and stress (Ramón-Arbués et al., 2020). Relationship adjustment, crucial for both genders, correlates with positive mental and physical quality of life (Kershaw et al., 2013).

The mental health considerations when forming relationships are complex, with partners’ mental health playing a pivotal role in relationship decisions. Notably, men tend to attribute relationship problems more to mental health issues (Ritter et al., 2022). The reciprocal association between relationships and mental health is recognized, with more pronounced impacts noted when mental health serves as a result, and relationships act as the predictor (Braithwaite & Holt-Lunstad, 2017).

Mental health and quality of life (QOL)

The intricate relationship between mental health and quality of life (QOL) is underscored by a wealth of research findings. Tang &

Thomas (2020) emphasize that depressive symptoms serve as robust predictors of lower overall QoL. Schofield et al. (2016) further elaborate on this, linking higher depressive symptoms to elevated stress, anxiety, loneliness, low body appreciation, studying law/management, regular binge drinking, and reduced physical activity factors collectively contributing to diminished QOL

Anxiety, another significant mental health facet, correlates with depressive symptoms and poor QOL in the social domain, encompassing personal relationships, social support, and social interactions (Ratnani et al., 2017). Conversely, students without social phobia report significantly higher QOL in all areas compared to those with social phobia (Hajure & Abdu, 2020). Similarly, nursing students in Brazil with heightened depressive symptoms exhibit lower scores in physical functioning, vitality, and social functioning domains (Souza et al., 2012). Social Anxiety Disorder and its severity are also notably associated with deterioration across all domains of QoL (Hakami et al., 2017).

The impact of environmental factors and physical health on student mental health cannot be overstated (Dafaalla et al., 2016). Systematic reviews, such as the one by Ribeiro et al. (2018) consistently reveal a negative association between QOL and stress. Lucchetti et al. (2018) highlight cross-cultural differences, pointing out that Brazilian medical students, in contrast to their US counterparts, experience more depression, higher stress levels, fewer wellness behaviors, increased exhaustion, and lower environmental quality of life. However, those with higher mental health scores reported higher physical QOL.

Given the observed relationships between mental health and QOL, it is reasonable to assume that romantic relationships, as a significant aspect of personal life, may impact QOL.

Romantic relationships and QOL

In the realm of relationships and QOL, better relationship adjustment emerges as a key determinant of positive mental and physical QOL for both young women and men (Kershaw et al., 2013). Interpersonal relations, encompassing social support and intimacy, consistently emerge as robust predictors of QOL in various studies (Tol et al., 2013). QoL is notably linked to feelings of loneliness, the presence of social support, the degree of social connectedness, and the level of intimacy with a romantic partner (Kuczynski et al., 2020). Notably, a meta-analysis by Holt-Lunstad et al. (2015) underscores the critical role of relationship quality, associating poor-quality relationships with an increased risk of mortality. Romantic involvement introduces nuanced dynamics, as seen in the study by Whitton et al. (2018), associating romantic involvement with less drinking but more smoking. Committed relationship involvement is also linked to less problematic alcohol use for both genders, showcasing potential positive implications for QOL (Whitton et al., 2013).

Romantic relationships in the Sri Lankan context

Turning attention to the Sri Lankan cultural context, existing studies provide intriguing glimpses into the dynamics of romantic relationships. In a study conducted among

university students in Sri Lanka, it was found that more than half of the participants were involved in romantic relationships (Gunawardena et al., 2012). Interestingly, most of the Sri Lankan youth believe that establishing a romantic relationship with someone from a similar background increases the likelihood of building a strong relationship, positively impacting mental health (Kumarasinghe et al., 2021).

However, the picture is not entirely positive. A study among university undergraduates in Sri Lanka uncovered concerning aspects of sexual relationships within romantic contexts. It found that a significant proportion of students reported engaging in sexual relationships, with a notable portion of females expressing that they unwillingly agreed, due to the fear of losing the relationship or being physically harassed by males (Gunawardena et al., 2012). The cultural dynamics in Sri Lanka are further emphasized by the tendency to direct blame in romantic relationships towards the female partner (Kumarasinghe et al., 2021). Disputes between partners and crises of an intimate nature are one of the reasons for suicide among female youth in rural areas in Sri Lanka (Marecek, 2006). This underscores the absence of adequate professional support to address challenges related to romantic or sexual relationships. The disrespectful attitude towards females and the desire to exert power over them are identified as contributing factors (Jordal et al., 2015). There have been significant instances of physical violence and verbal abuse in the initiation and maintenance of romantic relationships among undergraduates due to this (Gunawardena et al., 2012). These can negatively impact the mental well-being of female undergraduates.

Moreover, the cultural phenomenon of “ragging” in Sri Lanka is highlighted as a potential source of lower mental well-being. Constant harassment, trauma, and frustrations due to the inability to form functional social or romantic relations contribute to the challenges faced by individuals in the university context (Gamage, 2017). Students who were ragged as freshers proceeded to continue severely ragging new students since they felt like they had the right to ‘torture’ someone because they had to go through it, hence continuing a vicious cycle.

Summary of the literature review

Previous literature has highlighted how romantic relationships can be significant contributors to mental well-being, with committed relationships associated with improved mood and lower depressive symptoms, which leads to a better overall quality of life. However, challenges such as coercion, relationship authenticity, and adjustment difficulties can negatively affect one’s mental well-being. It becomes evident that while certain cultural beliefs and practices may positively influence romantic relationships, there are significant challenges and gender-based dynamics that require thorough investigation. However, there is a noticeable research gap regarding the impact of romantic relationships on mental health among Sri Lankan undergraduates, particularly concerning depressive, anxiety, and stress under mental health and physical, psychological, social relationship and environment in QoL.

Objective of the study

Considering the above, this study endeavors to address this gap and enhance understanding in this specific context. The objectives of this study are (i) to compare the levels of depression, anxiety, and stress symptoms among female Sri Lankan undergraduates in romantic relationships and those not in romantic relationships and (ii) to compare the overall quality of life among female Sri Lankan undergraduates who are in romantic relationships and those who are not.

Hypotheses

The following two null hypotheses are tested in this study.

H_{01} : There is no significant difference in depression, anxiety, and stress symptoms under mental health between two groups namely, ‘relationship’ and ‘single’.

H_{02} : There is no significant difference in the physical, psychological, social relationships, and environmental domains under QoL between two groups namely, ‘relationship’ and ‘single’.

Significance of the study

This research seeks to provide vital insights into the nuanced relationship between romantic involvements and mental health outcomes. It aims to determine whether being in a romantic relationship acts as a protective factor against depression, anxiety, and stress symptoms or, conversely, if it exacerbates these issues. Understanding these dynamics is crucial for fostering healthy relationship practices and implementing interventions to manage stress

and conflicts effectively. The study also recognizes the potential role of universities in supporting students experiencing mental health symptoms, emphasizing the need for policies and programs that promote healthier romantic relationships.

Methods and Materials

Study design

This study utilized a cross-sectional descriptive research design to investigate the relationship between romantic relationship involvement and levels of depression, anxiety, and stress symptoms. The independent variable is the status of romantic relationships, namely female undergraduates: (i) not in a romantic relationship ('single') and (ii) In a romantic relationship ('relationship'). The dependent variables are the scores of depression, anxiety, and stress symptoms as well as the four domains of the QoL scale: physical, psychological, social relationships, and environment. Following sections will describe sample selection and data collection.

Sample size and sampling unit

The sample size was computed using equation (1) shown by Cochran (1963), where e is the margin of error, p is the true proportion and z is the critical value of normal distribution at 95% confidence level.

$$n = \frac{z^2 * P * (1-P)}{e^2} \quad (1)$$

As p is not known, the value of p , which maximize $p(1-p)$ was taken, that is $p = 0.5$. Under the assumption of 2.5% margin of error, $p = 0.5$ and 95% confidence interval so that $z = 1.96$, it was found that minimum

sample size is 385. The sampling unit is a female undergraduate of age between 18 and 29 years in a university of Sri Lanka. The study was purposively restricted to female undergraduates from various state and non-state universities. A total of 385 participants responded to the survey but only 295 were included in the analysis based on the inclusion criteria. The selected undergraduates are from different years and are studying different degrees such as Information Technology, Psychology, Law, and Engineering.

Data Collection Instruments

Demographic information

A demographic questionnaire was utilized to collect the socio-demographic data such as gender, age, university, degree programme, and partner's gender. The response variable was binary, namely females having no relationship ('single') and females having romantic relationship ('relationship').

Depression anxiety and stress scale

The dependent variables depressive, anxiety, and stress symptoms were measured using the Sinhala version of the depression anxiety stress scale (DASS-21) which has been adapted and validated in the Sri Lankan context (Aththidiye & Ismail, 2012). The self-report questionnaire consists of 21 items, with 7 items per subscale, and assesses the three negative emotional states over the past week. Each question is rated on a 4-point Likert scale (0 = did not apply to me at all, 1 = applied to me to some degree, or some of the time, 2 = applied to me to a considerable degree or a good part of time and 3 = applied to me very much, or most of the time). The

sum of the scores of each subscale is obtained and multiplied by 2 to ensure consistency with the longer DASS- 42 version. Higher scores on each subscale indicate higher levels of

depression, anxiety, or stress experienced by the individual over the past week. The severity scorings of DASS-21 are shown in Table 1.

Table 1.
Severity Scoring of DASS-21.

Severity levels	Depression	Anxiety	Stress
Normal	0-9	0-7	0-14
Mild	10-13	8-9	15-18
Moderate	14-20	10-14	19-25
Severe	21-27	15-19	26-33
Extremely severe	28+	20+	34+

Source: Lovibond, S. H., & Lovibond, P. F. (1995). *Depression Anxiety Stress Scales (DASS-21, DASS-42)* <https://doi.org/10.1037/t01004-000>.

World Health Organization quality of life – BREF (WHOQOL-BREF)

The dependent variable, quality of life, was measured using the Sinhala-translated version of the World Health Organization Quality of Life- BREF (WHOQOL-BREF) questionnaire. WHOQOL-BREF is a short version of WHOQOL-100, and it assesses the quality of life within six different contexts. This self-administered questionnaire contains 26 questions, capturing perceptions of health and well-being over the previous two weeks. It covers four domains: physical health (7 items), psychological health (6 items), social relationships (3 items), and the environment (8 items) and each containing multiple facets. The remaining two questions out of 26 measure overall QOL and general health. Each question is rated on a Likert scale ranging from 1 to 5 (1=“very poor”, “very dissatisfied”, “not at all” or “never”, 2 = “poor”, “dissatisfied”, “a little” or “seldom”, 3 = “neither poor nor good”, “neither satisfied nor dissatisfied”, “a

moderate amount”, “moderately” or “quite often”, 4 = “good”, “satisfied”, “very much”, “mostly” or “very often” and 5 = “very good”, “very satisfied”, “an extreme amount”, “extremely”, “completely” or “always”). The mean score is calculated for each domain to produce a score falling between 4 to 20. To standardize the domain scores and make them comparable to those in the original WHOQOL-100, each mean domain score is multiplied by 4. Consequently, a higher scaled score reflects a better quality of life.

Data collection

Data was collected through online platforms such as WhatsApp and LinkedIn, using Google Forms to reach potential participants and ensure convenient accessibility for a diverse group of female undergraduates. All participants took part in an online survey

with a duration of approximately 10 – 15 minutes. To avoid duplicate responses, the system allowed only one survey submission per Google account. Upon accessing the survey, participants were presented with comprehensive information about the study. Subsequently, they encountered an implied consent statement, and progression to the remainder of the survey was contingent upon their agreement to participate. Participants were required to respond to each preceding survey item before advancing to the next question. Following the completion of the survey, a debrief form was made available to participants. Participants were free to withdraw from the study at any point and were informed that their participation was voluntary, with no benefits offered for their contribution to the study. Furthermore, the participants were encouraged to seek clarification or ask questions by contacting the researcher or supervisor through the provided contact details. Data was assured to be kept confidential and securely stored with password protection. After 2 years, all data will be securely destroyed to safeguard participants' privacy and confidentiality.

Ethical approval

The study obtained ethical approval from the Psychology ethics review panel of the Humanities and Sciences faculty.

Data analysis

The collected data were analyzed using the Statistical Package for the Social Sciences (SPSS) 26. Descriptive statistics, such as mean, frequencies, and percentages, were generated to summarize the data. One-way

analysis of variance (ANOVA) was conducted to compare the means of all variables between two groups, under the assumption of normality.

Results and Discussion

Reliability of data

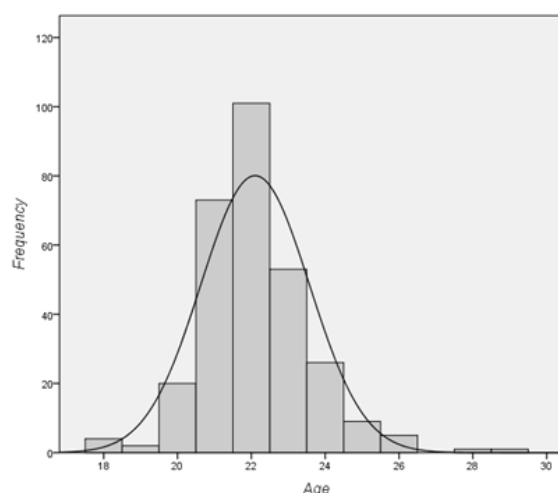
Cronbach's alpha statistic for the internal consistency for depression, anxiety, stress, physical health, psychological health, and environment domains were determined to be 0.91, 0.84, 0.89, 0.72, 0.83, and 0.79, respectively. The statistics for all variables are greater than 0.7 confirming the instrument reliability of data. Social relationships showed an internal consistency of 0.57, due to fewer number of items.

Distribution of age of female undergraduate

The age varies from 18 years (minimum) to 29 years (maximum) with a mean of 22.10 years and SE of 0.086. Both the median and mode are also 22 years confirming age distributed normally (Fig. 1).

Figure 1

Distribution of age of the participants.



Analysis of variables in mental health

Mean values of three variables in mental health

Table 2 shows mean and standard deviation (SD) of the three variables among female undergraduates in different groups.

Table 2.

Descriptive statistics (mean $\pm$ SD) of depression, anxiety and stress.

Variable	Group type		Pooled group
	Relationship	Single	
Depression	10.74 $\pm$ 10.19	13.16 $\pm$ 11.83	11.99 $\pm$ 11.12
Anxiety	8.50 $\pm$ 8.32	9.62 $\pm$ 9.43	9.08 $\pm$ 8.91
Stress	15.02 $\pm$ 9.84	16.08 $\pm$ 11.06	15.57 $\pm$ 10.49

Results in Table 2 indicate the mean score for stress, depression, and anxiety for all three groups. Further it can be seen that the SDs are almost close to the mean indicating there is very high variability in each variable. All values are in the mild range in the DASS-21 scoring scale, aligning with previous research (Gamage et al., 2021). Out of the three dependent variables, stress scores were the highest irrespective of the groups. These findings are similar to the results of Illankoon

and Warnakulasooriya (2014) who found that there was a high prevalence of stress levels among Sri Lankan undergraduates, specifically nursing students. Breakups in romantic relationships (Thi Khanh Minh et al., 2023), academic stresses (Ponnamperuma et al., 2023; Ritter et al., 2022), and coercion (Gunawardena et al., 2012) were found to be associated with increased stress levels in undergraduates in Sri Lanka.

The association among the variables

This correlation coefficients between depression, anxiety, and stress are shown in Table 3.

Table 3.

Correlation coefficient and its significance level among three variables irrespective of two groups.

	Anxiety Score	Stress Score
Depression Score	0.75 (0.000)	0.79 (0.000)
Anxiety Score		0.82 (0.000)

(parenthesis indicates the probability of the correlation coefficient)

Results in Table 3 clearly indicate that there is a significantly positive ($p < .05$) correlation among three variables irrespective of the group being in a relationship or not having a relationship. The highest correlation ($r = 0.82$) was found between anxiety and stress. A similar trend was observed for the single group as well as for the relationship group.

These results conclude that if stress increases in a female undergraduate, then there is a high chance both depression and anxiety increase irrespective of the two groups. From previous literature it is evident that cultural nuances such as getting blamed for any issue in the relationship (Kumarasinghe et al., 2021), male dominance resulting in coercion (Gunawardena et al., 2012), societal expectations, and individual coping strategies (Panis et al., 2019) of female Sri Lankan undergraduates may play pivotal roles for high stress, high depression and high anxiety.

Comparison between two groups

The one-way analysis of variance (ANOVA) was carried out to find whether there is a significant difference among the mean score of depression, anxiety and stress between two groups. The summary of the results is shown in Table 4.

Table 4.
Summary of F value of the ANOVA tables.

Variable	F value (p value)
<i>Depression</i>	3.51 ($p = 0.06$)
<i>Anxiety</i>	1.15 ($p = 0.28$)
<i>Stress</i>	0.75 ($p = 0.39$)

As all three F values are not significant it can be concluded that the mean values of depression, anxiety, and stress are not significantly different between participants in romantic relationships and single participants. This could be due to the confounded effect in the sample as participants are from various universities, following various degrees, and different years. However, the mean value of depression in the 'relationship' group (10.74) is significantly lower than the corresponding value in the 'single' group (13.16) at a 10% level.

The findings in this study contrast with previous studies suggesting that committed relationships are linked to improved mental well-being (Horgan et al., 2018; Whitton et al., 2013). The absence of significant differences in mental health outcomes based on relationship status raises intriguing questions about the cultural nuances and relationship dynamics within the Sri Lankan context. It is plausible that the societal norms and expectations related to romantic relationships in Sri Lanka differ significantly from those in Western cultures, where the majority of previous research has been conducted. In Sri Lanka, the nature and expectations of romantic relationships might be distinct, potentially influencing how individuals perceive and experience these relationships about their mental health (Kumarasinghe et al., 2021). Dissanayake et al. (2020), found that individuals in the South Asian cultural setting tend to choose how they express their emotions based on their social environment, which can lead to negative mental health outcomes.

Another interpretation of these findings could be the complex nature of mental health. Mental health outcomes are influenced by

a myriad of factors, including individual coping mechanisms, social support networks, familial relationships, and societal pressures (Kumarasinghe et al., 2021). It is conceivable that while romantic relationships play a role in shaping mental well-being, they do not operate in isolation. Other contextual elements, such as academic stressors, financial pressures, and cultural expectations, could be equally, if not more, impactful in determining the mental health status of these undergraduates (Ponnamperuma et al., 2023). Studies conducted in Sri Lanka have indicated that the prevalence of depression increased with the undergraduates' academic year (Wickramasinghe et al., 2023).

Analysis of variables in QOL

Descriptive statistics

Table 5.

Mean and SD of the variables QOL among female undergraduates.

Variable	Group		
	Relationship	Single	Pooled
Physical	66.08±13.32	68.05±16.04	67.09±14.79
Psychological	63.75±15.50	59.92±19.37	61.77±17.68
Social relationships	63.69±18.72	50.05±23.05	56.67±22.11
Environment	62.50±13.82	63.96±17.73	63.25±15.94

Results in Table 5 indicate that the mean score of all four variables is almost the same in the relationship group. Similarly, physical and environmental scores are almost the same among the two groups.

The association among the four variables within QOL

The correlation analysis was carried out to find the association among four variables under QOL and results are shown in Table 6.

Table 6.

Correlation coefficient and its significance level among four variables irrespective of two groups.

	Psychological Domain	Social Relationships Domain	Environment Domain
Physical Domain	0.58	0.43	0.58
	(0.000)	(0.000)	(0.000)
Psychological Domain		00.50	0.43
		(0.000)	(0.000)
Social Relationships domain			0.41
			(0.000)

(parenthesis indicates the probability of the correlation)

Results in Table 6 indicate that there is significantly positive ($p < .05$) correlation among the four variables in QOL irrespective of the group having relationship or not having relationship. The correlations among the variables within QOL are much lower than the correlations among the variables within mental health (Table 3 and Table 6).

Table 7.
Summary of F value of the ANOVA tables .

Variable	F value (p value)
Physical	1.29 ($p = 0.256$)
Psychological	3.49 ($p = 0.063$)
Social Relationships	30.89 ($p = 0.000$)
Environment	0.62 ($p = 0.433$)

The results of the one-way ANOVA revealed that mean score values are not significantly different in physical and environment. However, there were significant differences in the social relationships ($p=0.000$) and psychological ($p = 0.063$).

These findings are similar to previous research emphasizing the importance of social connections in influencing QoL (Kuczynski et al., 2020). Research has consistently shown that mental health outcomes are associated with romantic relationships and Quality of life (Kershaw et al., 2013; Tol et al., 2013; Whitton et al., 2013). The current results add to the existing literature on QoL, as the study found that participants in romantic relationships had higher scores in their social relationship domain. This supports the literature that suggests that romantic relationships could facilitate social support as well as improve social relationships (Porter & Chambless, 2017).

In the Sri Lankan context, the practice of “ragging” can detrimentally impact mental well-being, given the persistent harassment, trauma, and frustrations experienced by individuals. This can further lead to challenges in forming functional social or romantic relationships (Gamage, 2017; Wickramasinghe et al., 2023). Undergraduates who had to adapt to unfamiliar environments after moving away from home could suffer more psychological distress (Kuruppuarachchi et al., 2002). The COVID-19 pandemic might have also influenced the mental well-being of the undergraduates (Cheng et al., 2023).

Conclusions and Recommendations

Conclusions

Contrary to initial hypotheses and existing literature, the study did not find significant differences in anxiety, and stress symptoms between female undergraduates in romantic relationships and those not in romantic relationships. The depression among female undergraduates in ‘single’ group is significantly higher than that of ‘relationship’ group. There is a strong positive significant correlation ($p < 0.01$) among depression and anxiety ($r = 0.75$), depression and stress ($r = 0.79$). There was a significant difference between the two groups in the social relationship domain of QoL, and psychological domain of QoL indicating potential benefits associated with romantic involvement.

The findings highlight the need for more context-specific research, especially in non-western societies, to better understand the intricate dynamics between romantic relationships and mental well-being. Future studies should adopt mixed methods

approaches and consider broader contextual factors such as cultural beliefs, societal norms, and gender dynamics, to provide a comprehensive understanding of these relationships.

This study adds to the understanding of the complex interplay between romantic relationships, mental health, and QoL within a specific cultural context. By recognizing the multifaceted nature of these relationships and addressing contextual factors, professionals can better support students' mental well-being and enhance their overall quality of life.

Recommendations

Focusing on specific populations such as undergraduates following a certain degree, would further improve the study by eliminating the compound effect of different degree programs on the individuals' mental health. From a practical standpoint, interventions and support systems should take a holistic approach, addressing various stressors and promoting open conversations about mental health. Tailoring interventions to the cultural nuances of Sri Lankan society and considering factors such as societal expectations and coping mechanisms are essential for effectively supporting students' mental well-being.

References

Alwis, I., Baminiwatta, A., & Chandradasa, M. (2023). Prevalence and associated factors of depression in Sri Lanka: A systematic review and meta-analysis. *Social Psychiatry and Psychiatric Epidemiology*. <https://doi.org/10.1007/s00127-023-02495-z>.

Aththidiye, A. V. S. R., & Ismail, Dr. C. (2012). Adaptation and Validation of the Depression Anxiety and Stress Scale 21 (DASS-21) among students in the University of Colombo. *Annual Research Symposium 2012 Faculty of Graduate Studies, University of Colombo*.

Braithwaite, S., & Holt-Lunstad, J. (2017). Romantic relationships and mental health. *Current Opinion in Psychology*, 13, 120–125. <https://doi.org/10.1016/j.copsyc.2016.04.001>.

Cheng, T., Qiyi, L., & Fu, H. (2023). A comparative study of subjective well-being, interpersonal relationship and love forgiveness among Chinese college students before and after the COVID-19 epidemic. *Frontiers in Psychology*, 14. <https://www.frontiersin.org/articles/10.3389/fpsyg.2023.1229451>.

Dafaalla, M., Farah, A., Bashir, S., Khalil, A., Abdulhamid, R., Mokhtar, M., Mahadi, M., Omer, Z., Suliman, A., Elkhailifa, M., Abdelgadir, H., Kheir, A., & Abdalrahman, I. (2016). *Depression, Anxiety, and Stress in Sudanese Medical Students: A Cross Sectional Study on Role of Quality of Life and Social Support*.

Dissanayake, M. P., Halberstadt, A. G., & Kalat, J. W. (2020). Emotional Experiences and Expressions of Individuals in the Sri Lankan Context: The Roles of Gender, Culture and Religion. *OUSL Journal*, 15(1),

43. <https://doi.org/10.4038/ouslj.v15i1.7455>.
- Feeney, B. C., & Collins, N. L. (2015). A New Look at Social Support: A Theoretical Perspective on Thriving Through Relationships. *Personality and Social Psychology Review*, 19(2), 113–147. <https://doi.org/10.1177/1088868314544222>.
- Finkel, E. J., Simpson, J. A., & Eastwick, P. W. (2017). The Psychology of Close Relationships: Fourteen Core Principles. *Annual Review of Psychology*, 68(1), 383–411. <https://doi.org/10.1146/annurev-psych-010416-044038>.
- Gamage, C. K. W., Perera, V. B. J., Sivendran, K., Patabandige, D., Dewage, S., & Fernando, N. (2021). *Depression, Anxiety and Stress Levels Among Allied Health Undergraduates in a Defence University, Sri Lanka*. <https://doi.org/10.21203/rs.3.rs-542811/v1>.
- Gamage, S. (2017). *Psychological, Sociological, and Political Dimensions of Ragging in Sri Lankan Universities*.
- Grundström, J., Konttinen, H., Berg, N., & Kiviruusu, O. (2021). Associations between relationship status and mental well-being in different life phases from young to middle adulthood. *SSM - Population Health*, 14, 100774. <https://doi.org/10.1016/j.ssmph.2021.100774>.
- Gunawardena, N., Weerasinghe, M., Rajapaksa, L., Wijesekara, P., & Chathurangana, P. W. P. (2012). Romance, sex and coercion: insights into undergraduate relationships. *Sri Lanka Journal of Psychiatry*, 2(2), Article 2. <https://doi.org/10.4038/slpsyc.v2i2.4042>.
- Hajure, M., & Abdu, Z. (2020). Social Phobia and Its Impact on Quality of Life Among Regular Undergraduate Students of Mettu University, Mettu, Ethiopia. *Adolescent Health, Medicine and Therapeutics*, 11, 79–87. <https://doi.org/10.2147/AHMT.S254002>.
- Hakami, R. M., Mahfouz, M. S., Adawi, A. M., Mahha, A. J., Athathi, A. J., Daghreeri, H. H., Najmi, H. H., & Areeshi, N. A. (2017). Social anxiety disorder and its impact in undergraduate students at Jazan University, Saudi Arabia. *Mental Illness*, 9(2), 42–47. <https://doi.org/10.1108/mi.2017.7274>.
- Hearne, B. N. (2022). Romantic Relationships and Depressive Symptoms among Young Women. *The Sociological Quarterly*, 0(0), 1–23. <https://doi.org/10.1080/00380253.2022.2076630>.
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and Social Isolation as Risk Factors for Mortality: A Meta-Analytic Review. *Perspectives on Psychological Science*, 10(2), 227–237. <https://doi.org/10.1177/1745691614568352>.
- Hope, V., & Henderson, M. (2014). Medical student depression, anxiety and distress outside North America: A systematic

- review. *Medical Education*, 48(10), 963–979. <https://doi.org/10.1111/medu.12512>.
- Horgan, A., Kelly, P., Goodwin, J., & Behan, L. (2018). Depressive Symptoms and Suicidal Ideation among Irish Undergraduate College Students. *Issues in Mental Health Nursing*, 39(7), 575–584. <https://doi.org/10.1080/01612840.2017.1422199>.
- Ilankoon, P., & Warnakulasuriya, S. (2014). *Perceived Stress and Associated Factors among BSc Nursing Undergraduates in University of Sri Jayewardenepura, Sri Lanka*.
- Jordal, M., Wijewardena, K., Öhman, A., Essén, B., & Olsson, P. (2015). ‘Disrespectful men, disrespected women’: Men’s perceptions on heterosexual relationships and premarital sex in a Sri Lankan Free Trade Zone - a qualitative interview study. *BMC International Health and Human Rights*, 15(1), 3. <https://doi.org/10.1186/s12914-015-0040-4>.
- Kershaw, T., Murphy, A., Divney, A., Magriples, U., Niccolai, L., & Gordon, D. (2013). What’s Love Got to Do with It: Relationship Functioning and Mental and Physical Quality of Life Among Pregnant Adolescent Couples. *American Journal of Community Psychology*, 52(3), 288–301. <https://doi.org/10.1007/s10464-013-9594-2>.
- Kuczynski, A. M., Kanter, J. W., & Robinaugh, D. J. (2020). Differential associations between interpersonal variables and quality-of-life in a sample of college students. *Quality of Life Research*, 29(1), 127–139. <https://doi.org/10.1007/s11136-019-02298-3>.
- Kumarasinghe, M., Silva, W. I. D., & Goonatilaka, W. S. M. (2021). Love Affairs, Dating and Sexual Behaviour among Unmarried Youth: A Qualitative Investigation Carried Out Immediately Prior to The Covid-19 Pandemic in Sri Lanka. *South Asian Journal of Social Sciences and Humanities*, 2(6), Article 6. <https://doi.org/10.48165/sajssh.2021.2603>.
- Kuruppuarachchi, K. A. L. A., Kuruppuarachchi, K. A. J. M., Wijerathne, S., & Williams, S. S. (2002). Psychological distress among students from five universities in Sri Lanka. *The Ceylin Medical Journal*, 47(1).
- Lovibond, S. H., & Lovibond, P. F. (1995). *Depression Anxiety Stress Scales (DASS--21, DASS--42)* <https://doi.org/10.1037/t01004-000>.
- Lucchetti, G., Damiano, R. F., DiLalla, L. F., Lucchetti, A. L. G., Moutinho, I. L. D., da Silva Ezequiel, O., & Kevin Dorsey, J. (2018). Cross-cultural Differences in Mental Health, Quality of Life, Empathy, and Burnout between US and Brazilian Medical Students. *Academic Psychiatry*, 42(1), 62–67. <https://doi.org/10.1007/s40596-017-0777-2>.

- Marecek, J. (2006). Young Women's Suicides In Sri Lanka: Cultural, Ecological and Psychological Factors. *Asian Journal of Counselling*, 13, 63–92.
- Musick, K., & Bumpass, L. (2012). Reexamining the Case for Marriage: Union Formation and Changes in Well-being. *Journal of Marriage and Family*, 74(1), 1–18. <https://doi.org/10.1111/j.1741-3737.2011.00873.x>.
- Panis, M. P., Damayanti, Y., & Kerat, M. K. P. A. (2019). Coping Strategies, Personality Type, and Help-seeking behavior for Mental Health Problems. *Journal of Health and Behavioral Science*, 1(2), Article 2. <https://doi.org/10.35508/jhbs.v1i2.2087>.
- Ponnamperuma, L., Hettiarachchi, A., Jayakodi, P., & Abeysinghe, N. (2023). *Construction and Validation of Academic Stress Scale for 18-35-year-old Sri Lankan University Students*, Proceedings of SLIIT International Conference on Advancements in Sciences and Humanities, 1-2 December, Colombo, pages 550-557. <https://doi.org/10.54389/AWFB8089>.
- Porter, E., & Chambless, D. L. (2017). Social Anxiety and Social Support in Romantic Relationships. *Behavior Therapy*, 48(3), 335–348. <https://doi.org/10.1016/j.beth.2016.12.002>.
- Ramón-Arбуés, E., Gea-Caballero, V., Granada-López, J. M., Juárez-Vela, R., Pellicer-García, B., & Antón-Solanas, I. (2020). The Prevalence of Depression, Anxiety and Stress and Their Associated Factors in College Students. *International Journal of Environmental Research and Public Health*, 17(19), 7001. <https://doi.org/10.3390/ijerph17197001>.
- Rathnayake, S., & Ekanayaka, J. (2016). Depression, Anxiety and Stress among Undergraduate Nursing Students in a Public University in Sri Lanka. *International Journal of Caring Sciences*, 9(3), 1020–1032.
- Ratnani, I. J., Vala, A. U., Panchal, B. N., Tiwari, D. S., Karambelkar, S. S., Sojitra, M. G., & Nagori, N. N. (2017). Association of social anxiety disorder with depression and quality of life among medical undergraduate students. *Journal of Family Medicine and Primary Care*, 6(2), 243–248. <https://doi.org/10.4103/2249-4863.219992>.
- Ribeiro, Í. J. S., Pereira, R., Freire, I. V., de Oliveira, B. G., Casotti, C. A., & Boery, E. N. (2018). Stress and Quality of Life Among University Students: A Systematic Literature Review. *Health Professions Education*, 4(2), 70–77. <https://doi.org/10.1016/j.hpe.2017.03.002>.
- Ritter, L., Hilliard, T., & Knox, D. (2022). “Lovesick”: Mental Health and Romantic Relationships among College Students. *International Journal of Environmental Research and Public Health*, 20, 641. <https://doi.org/10.3390/ijerph20010641>.

- Rotenstein, L. S., Ramos, M. A., Torre, M., Segal, J. B., Peluso, M. J., Guille, C., Sen, S., & Mata, D. A. (2016). Prevalence of Depression, Depressive Symptoms, and Suicidal Ideation Among Medical Students: A Systematic Review and Meta-Analysis. *JAMA*, 316(21), 2214–2236. <https://doi.org/10.1001/jama.2016.17324>.
- Schofield, M. J., O'halloran, P., Mclean, S. A., Forrester-knauss, C., & Paxton, S. J. (2016). Depressive Symptoms Among Australian University Students: Who Is at Risk? *Australian Psychologist*, 51(2), 135–144. <https://doi.org/10.1111/ap.12129>.
- Soller, B. (2014). Caught in a Bad Romance: Adolescent Romantic Relationships and Mental Health. *Journal of Health and Social Behavior*, 55(1), 56–72. <https://doi.org/10.1177/0022146513520432>.
- Souza, I. M. D. M., Paro, H. B. M. da S., Morales, R. R., Pinto, R. de M. C., & Silva, C. H. M. da. (2012). Health-related quality of life and depressive symptoms in undergraduate nursing students. *Revista Latino-Americana de Enfermagem*, 20, 736–743. <https://doi.org/10.1590/S0104-11692012000400014>.
- Tang, A. L., & Thomas, S. J. (2020). Relationships Between Depressive Symptoms, Other Psychological Symptoms, and Quality of Life. *Psychiatry Research*, 289, 113049. <https://doi.org/10.1016/j.psychres.2020.113049>.
- Thi Khanh Minh, T., Vu Thanh Truc, N., Thien Hoan My, T., & Thi Loan, N. (2023). The Correlation Between Resilience And The Level Of Distress, Rumination, And Sleep Disturbances Of Post-Breakup University Students. *International Journal of Arts, Humanities & Social Science*, 04(05), 35–53. <https://doi.org/10.56734/ijahss.v4n5a5>.
- Till, B., & Niederkrotenthaler, T. (2022). Romantic Relationships and Mental Health During the COVID-19 Pandemic in Austria: A Population-Based Cross-Sectional Survey. *Frontiers in Psychology*, 13. <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.857329>.
- Tol, A., Tavassoli, E., Shariferad, G. R., & Shojaezadeh, D. (2013). Health-promoting lifestyle and quality of life among undergraduate students at school of health, Isfahan university of medical sciences. *Journal of Education and Health Promotion*, 2, 11. <https://doi.org/10.4103/2277-9531.108006>.
- Weidmann, R., Wünsche, J., & Grob, A. (2023). Cross-Sectional and Longitudinal Associations Between Romantic Attachment, Health Satisfaction, and Health Goal Importance in Partnered and Single Individuals. *PsyArXiv*. <https://doi.org/10.31234/osf.io/3uqbd>.
- Weiser, D., Hilliard, T., & Knox, D. (2018). “I Thought You Loved Me too?”: Outcomes of Discrepant Involvement

in Romantic Relationships.
*Interpersona: An International
Journal on Personal Relationships*,
12, 267–282. [https://doi.org/10.5964/
ijpr.v12i2.313](https://doi.org/10.5964/ijpr.v12i2.313).

Whitton, S. W., Dyar, C., Newcomb,
M. E., & Mustanski, B. (2018).
Effects of romantic involvement
on substance use among young
sexual and gender minorities. *Drug
and Alcohol Dependence*, 191,
215–222. [https://doi.org/10.1016/j.
drugalcdep.2018.06.037](https://doi.org/10.1016/j.drugalcdep.2018.06.037).

Whitton, S. W., Weitbrecht, E. M., Kuryluk,
A. D., & Bruner, M. R. (2013).
Committed Dating Relationships
and Mental Health Among College
Students. *Journal of American College
Health*, 61(3), 176–183. [https://doi.or
g/10.1080/07448481.2013.773903](https://doi.org/10.1080/07448481.2013.773903).

Wickramasinghe, A., Essén, B.,
Surenthirakumaran, R., & Axemo,
P. (2023). Prevalence of depression
among students at a Sri Lankan
University: A study using the Patient
Health Questionnaire-9 (PHQ-9)
during the COVID-19 pandemic. *BMC
Public Health*, 23(1), 528. [https://doi.
org/10.1186/s12889-023-15427-y](https://doi.org/10.1186/s12889-023-15427-y).