

ACADEMIC WORKLOAD AND MENTAL WELLBEING: PERSPECTIVES OF FIRST-YEAR QUANTITY SURVEYING STUDENTS AT HIGHER EDUCATION INSTITUTIONS IN SRI LANKA

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ABSTRACT

Mental well-being plays an important role in the academic success of first-year students during their transition from secondary education to higher education institutes. They often encounter challenges with new social responsibilities, increased academic workload, and an unfamiliar learning environment. These challenges can negatively influence their mental well-being. This study aims to identify the influence of academic workload on the mental well-being of first-year quantity surveying (QS) students in Sri Lanka. A quantitative approach was adopted in the study, beginning with a literature review to identify the challenges that first-year students encounter once they enrol in university. An online questionnaire was administered to collect responses from 80 first-year quantity surveying students studying in Sri Lanka. Data analysis was conducted using Fisher's Exact test and the Mann-Whitney U test to examine perception of workload and its impact on mental wellbeing on first-years QS students. The results of the study revealed that there was no significant difference between gender and the perceived negative impact on the mental well-being of first-year quantity surveying students. Further, the Relative Important Index (RII) was used to rank the academic-related challenges first-year quantity surveying students experience. The findings indicate that balancing extracurricular activities with academic workload is more challenging than studying unfamiliar module content in a new language. The study identifies the key academic challenges influencing the mental well-being of first-year quantity surveying students in Sri Lanka. Addressing these challenges is important for a successful transition from secondary education to university life for first-year quantity surveying students to promote academic success and good mental well-being.

Keywords: *Academic Workload; First-year students; Mental Wellbeing; Quantity Surveying.*

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1. INTRODUCTION

Education is identified as a fundamental right of all people in a society, which plays a crucial role in shaping the lives of people by ensuring their independence and allowing them to improve the quality of their lives (Sandanayake, 2019; UNESCO, 2025). Within this broad framework of education, Higher Education (HE) is a particularly significant aspect as it facilitates the acquisition of technical knowledge, competencies, and advanced skills in a specified area. The HE institutes provide guidance and education for undergraduates in relation to specific fields to improve their academic and professional growth (Tight, 2024). Additionally, these institutes shape the behaviour of undergraduates, as a centred place that influences a country's development (Bui et al., 2024; Goczek et al., 2021). The HE represents a key transition point in a young person's life (Campbell et al., 2022).

First-year students who are newly enrolled in HE institutes need to successfully adjust themselves to the complex and dynamic university environment, as they might encounter challenges with new academic expectations and independent learning with the transition from secondary education to university (Leonard et al., 2024; Mahees, 2020). HE institutions offer Quantity Surveying (QS) degree programs to prepare quantity surveyors, who are one of the key professionals in the construction industry, to equip them with a wide range of skills and expertise (Ekundayo et al., 2021; Ekundayo, 2020). As QS graduates are highly specialized professionals, ensuring undergraduates maintain both mental and physical well-being is important for their individual success and for meeting the competitive, rapidly evolving industry competencies (Kamarazaly et al., 2021; Samaratunga et al., 2025). However, the intensive workload influences the mental well-being of undergraduates.

Mental well-being has been identified as a clear state of mind that influences the lives of individuals to function effectively, which previous studies have identified as an important factor that influences the better academic performance of undergraduates (Al-Najdi et al., 2025; WHO, 2022). The existing studies have examined the relationship between academic workload and the mental well-being of undergraduates (Praveeni & Herath, 2020), and have indicated that female undergraduates tend to have a higher level of negative mental well-being due to the academic demands compared to male undergraduates (Cen et al., 2024; Zhu et al., 2025).

In Sri Lanka, first-year students encounter challenges with balancing their academic activities and extracurricular activities with their mental well-being (Wickramasinghe et al., 2023). With a challenging degree program such as QS, the pressure on first-year students can be further intensified, which negatively influences their mental well-being. Therefore, it is important to examine the influence of academic workload on the mental well-being of first-year QS students and to understand the role of gender in shaping their perception of workload and mental well-being. Addressing these factors is crucial in promoting a supportive academic environment that encourages both academic and professional success. Therefore, to address these factors, the following objectives were formulated.

1. To examine the relationship between gender and perceived negative mental well-being due to the academic workload of first-year QS students.

2. To investigate the perception of balancing academic workload and extracurricular activities based on gender.
3. To rank academically related challenges which affecting first-year QS students' mental well-being based on perceived importance.

2. LITERATURE REVIEW

Academic workload is a common concern of undergraduates who are pursuing their education in HE institutions, with the challenge they face with learning demands and difficulties with adjusting to university life (Akhtar & Akhtar, 2024). According to Samratunga et al (2025), first-year students who pursue their higher education in relation to the construction industry encounter a higher academic workload compared to other undergraduates.

2.1 ACADEMIC CONTENT FOR QUANTITY SURVEYING UNDERGRADUATES

The construction industry is recognized as one of the leading sectors that contribute to a country's economic development (Musarat et al., 2023; Thiruchelvam & Uduwage, 2025). In this sector, Quantity surveyors serve as key professionals involved across the entire construction project from planning to construction, maintenance, and demolition (Olanrewajua et al., 2015; RICS, 2025). Considering the level of involvement across all the stages in a construction project, a QS functions as an independent expert who is responsible for handling and providing financial and contractual advice in a construction project (Spellacy et al., 2020). The accuracy of the advice provided by the QS has a significant influence on overall project success (Azizi et al., 2021).

Due to the critical nature of responsibilities, they perform, Qs need to acquire the required knowledge and expertise through formal education (Keung et al., 2022). Therefore, QS degree programs offered by HE institutes are academically demanding, as they aim to develop graduates who are capable of successfully addressing multifaceted challenges encountered in the construction industry (Hui Yap et al., 2022). Considering the complex nature of the construction industry, comprehensive and structured education is essential in delivering Qs with the skills and competencies they require (Padmasiri et al., 2020).

To achieve this, QS's education requires undergraduates to learn a diverse range of professional knowledge and competencies, which are significantly different from what they learned during secondary education. Areas such as construction law, management, finance, risk, and dispute resolution need to be learned by the first-year QS students, which are not generally taught within the school curriculum (Zhang et al., 2024). Therefore, Quantity surveying undergraduates have to study specialized subjects beyond traditional academic modules to cover different knowledge areas, to meet the evolving demands of the construction industry (Wijekoon & Kawmudi, 2024). As a result of this intensive academic demand, fresh QS undergraduates often encounter a heavy academic workload. Continuous assessments, competitive learning environment, examinations, and strict deadlines cause an increased academic workload (Abdullah et al., 2024). These challenges can result in limiting first-year students' ability to manage their academic activities and personal commitments (Samaratunga et al., 2025).

2.2 CHALLENGES ENCOUNTERED BY FRESH UNDERGRADUATES

Transition from high school to a higher education institute is widely recognized as a critical and challenging period for first-year QS students. This transition involves a significant environmental and social change where first-year students need to adapt to a new academic environment without their familiar support system, such as family and friends (Chimenya, 2025). Living independently in this unfamiliar environment may be further challenging for first-year students. With this transition, first-year students learn about their own individual development and independence (Mulaudzi, 2023). In adapting to this new environment, first-year QS students often experience difficulties in establishing new friendships and social networks. These difficulties can result to lesser social relationships and academic activities (Gulliver et al., 2023). Therefore, a decline in social adjustment is commonly identified during the early stage of university life for first-year students (Nthabiseng et al., 2024).

In addition to social challenges, first-year QS students often experience academic challenges as well during this transitional period. First-year students often struggle to manage increasing academic workload while simultaneously engaging in extracurricular activities and adapting to new learning expectations (Guo et al., 2022; Mulaudzi, 2023). The structure supervised non-academic activities to which students participate outside their regular classroom hours are known as extracurricular activities. Activities such as sports, student societies, music clubs, and cultural activities that are not part of the standard curriculum are considered extracurricular activities (Zeidan et al., 2025). In addition, studying academic modules delivered in a language that is not their primary language may create additional pressure related to understanding course content and maintaining academic performance (Yu et al., 2025). These challenges can negatively influence the mental wellbeing of first-year students, as they may feel overwhelmed by these challenges (Paul et al., 2019).

2.3 IMPORTANCE OF MENTAL WELLBEING

Mental well-being is defined as a state of complete physical, mental, and social wellbeing which is important for the health of individuals (WHO, 2022). It is also recognized as a human right, emphasising its significance at both social and individual levels (United Nations, 2015). Within the HE context, mental wellbeing recognized as a crucial factor that determines undergraduates' development and functioning (Karma et al., 2021). Undergraduates who have positive mental well-being perform well in their academics (Khatri et al., 2024). It can identify that undergraduates who have good mental well-being tend to perform well in their academics (Elkin et al., 2025; Li et al., 2025).

However, first-year QS students may become vulnerable to mental well-being challenges due to the demanding nature of the academic programme. Difficulties associated with unfamiliar subject content may negatively affect their mental well-being (Barbayannis et al., 2022; Samaratunga & Kamardeen, 2025). Furthermore, the transition to a new social and academic environment can negatively influence the mental well-being of both male and female first-year QS students (Haruna et al., 2025).

Importantly, researchers debate whether gender influence the perceived academic stress of undergraduates. Gender has been identified as an important factor that influences how undergraduates perceive academic workload and its impact on mental well-being. According to the studies, female undergraduates experience a higher level of negative

mental well-being compared to male undergraduates (Zhu et al., 2025). Therefore, female first-year students may tend to be more emotionally vulnerable in response to academic workload, with the demand in education (Barbayannis, et al., 2022).

Previous studies have identified that academic demand influences the negative mental well-being and feelings of being overwhelmed among the general undergraduate population. However, limited studies have specifically examined this issue in relation to first-year QS student, specifically in relation to Sri Lankan university education. Therefore, there is a need to investigate the influence of academic workload on the mental well-being of first-year QS students in Sri Lanka.

3. METHODOLOGY

This study aimed to investigate the influence of academic workload on the mental well-being of first-year QS students in Sri Lanka by examining gender-based differences in perceptions and identifying the most significant academic-related challenges.

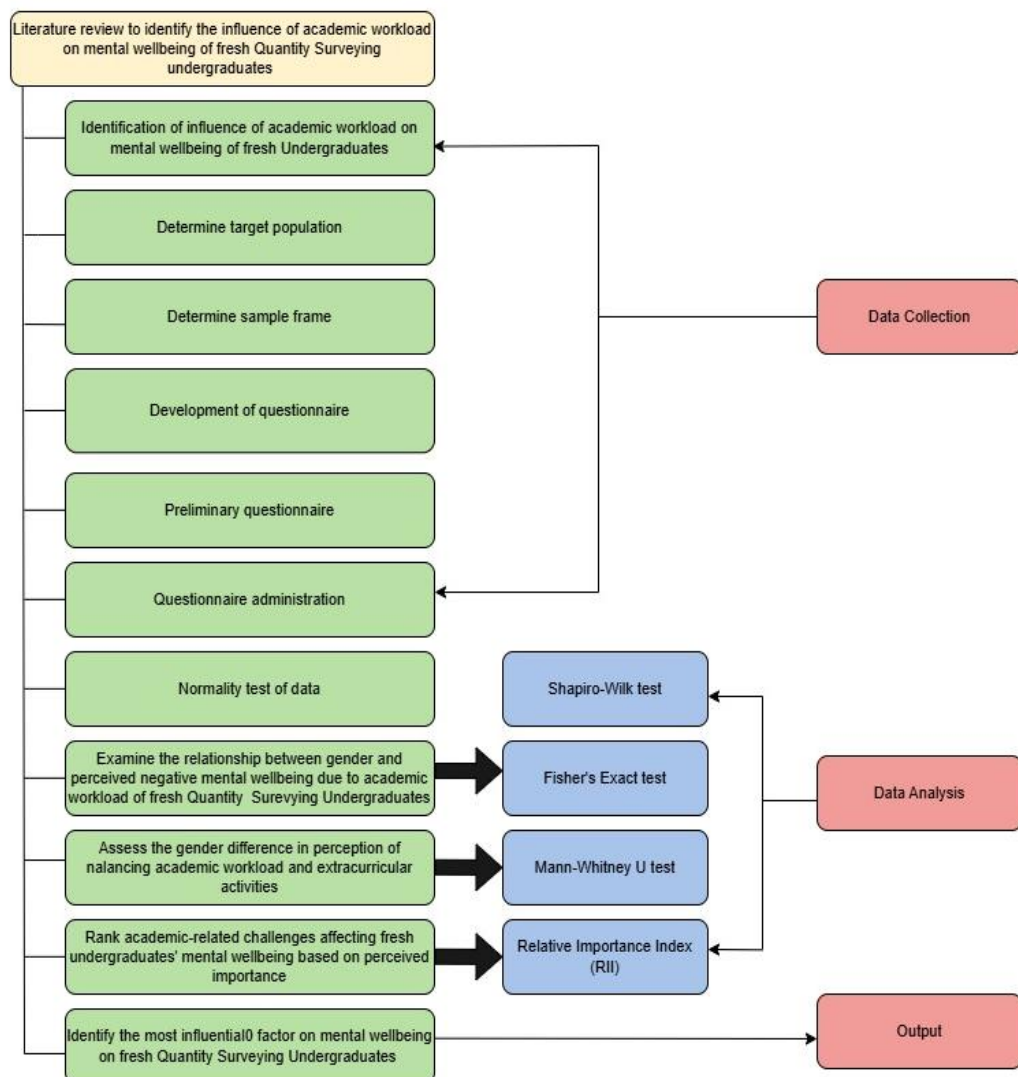


Figure 1: Research design

Initially, a literature review was conducted to identify the factors influencing academic workload on first-year students' mental well-being. Then a preliminary survey was conducted to validate the factors identified through the literature review. The target population of the study consist of first-year QS students who are studying in Sri Lanka. The sampling frame of the study consists of first-year QS students enrolled in HE institutes offering Quantity Surveying programmes in Sri Lanka, namely the University of Moratuwa (UOM), Sir John Kothalawala Defence University (KDU), the School of Institute of Quantity Surveyors in Sri Lanka (IQSSL), and the Higher National Diploma (HND). In all these HE institutions, participating in extracurricular activities is entirely voluntary and is not a mandatory requirement. The survey focused on a subjective workload perspective regarding balancing extracurricular activities.

Purposive sampling method was adopted in the study, which is widely used in studies as a method that enables researcher to reach the respondents with required characteristics for the study (Etikan, 2016). Data was collected through an online questionnaire survey via Google Form, which was shared through WhatsApp to the participants. The questionnaire consisted of two sections: demographic information and academic stress factors. The impact on mental wellbeing was evaluated using a binary scale of yes/no, and the specific stress challenges were evaluated using a 5-point Likert scale of 1 = Strongly disagree, 5 = Strongly agree. Before the questionnaire survey, a pilot test was conducted with 20 fresh undergraduates to ensure the clarity of the questionnaire. A total of 80 valid responses were collected from the questionnaire survey.

3.1 DATA ANALYSIS

Descriptive statistics techniques were used to analyse the demographic characteristics of the received responses. The normality of the variables was assessed using the Shapiro-Wilk test. The Shapiro-Wilk test is recommended for use with a moderate data sample ($n < 100$) (Mishra et al., 2019). The hypothesis for the Shapiro-Wilk test is as follows.

- Null Hypothesis (H_0) : The data set is normally distributed.
- Alternative Hypothesis (H_1) : The data set is not normally distributed.

If $p < 0.05$, reject the null hypothesis. Otherwise, the null hypothesis is accepted.

To achieve objective 1, which aims to determine whether gender is associated with perceptions that academic workload negatively impacts the mental well-being of first-year QS students, Fisher's Exact test was used. This statistical test was used due to the relatively small sample size ($n=80$), as Fisher's Exact test is more appropriate for analysing the relationship between a categorical variable (Nowacki, 2017). Hypothesis for Fisher's Exact test developed as follows.

- Null hypothesis (H_0) : Gender is not associated with the perception of the negative impact of mental well-being due to academic workload
- Alternative hypothesis (H_1) : Gender is associated with the perception of a negative impact on mental well-being due to academic workload

If $p < 0.05$, reject the null hypothesis. Otherwise, the null hypothesis is accepted.

To achieve objective 2, which aimed to assess whether the perceptions of balancing academic workload and extracurricular activities differ based on gender, the Mann-Whitney U test was performed. This non-parametric test was employed to examine

whether there was a statistically significant difference between male and female first-year QS students in their perceptions of balancing academic and extracurricular commitments.

- Null hypothesis (Ho) : There is no difference between the gender of students and their perception of balancing extracurricular activities and academics.
- Alternative hypothesis (H1) : There is a difference between the gender of students and their perception of balancing extracurricular activities and academics.

If $p < 0.05$, reject the null hypothesis. Otherwise, the null hypothesis is accepted.

To achieve objective 3, which is to rank academically related challenges affecting the mental well-being of first-year students based on perceived importance, the Relative Importance Index (RII) was used. The Relative Importance Index is a quantitative analysis technique that is used to convert Likert-scale responses into numerical values, which enable easier comparison and ranking of variables (Sourav et al., 2024). Accordingly, the questions which measured using a Likert scale were analysed using RII.

$$RII = \frac{\sum W}{A \times N} \quad (01)$$

W = Weight assigned by respondents

A = Highest weight on the scale

N = Total number of respondents.

The above formula was used to calculate RII. The factor with the highest relative index was ranked first, while the factor with the lowest relative index was ranked last.

4. RESULTS AND DISCUSSION

4.1 RESPONDENTS' DEMOGRAPHIC INFORMATION

The data was collected among first-year QS students who are studying in 4 higher education institutes known as the University of Moratuwa (UOM), Sir John Kothalawala Defence University (KDU), the School of Institute of Quantity Surveyors in Sri Lanka (IQSSL), and the Higher National Diploma (HND). Initially, a preliminary survey was conducted to identify the clarity and relevance of the questionnaire. In response to the preliminary survey, 20 valid responses were received. Based on the responses, the questionnaire was adjusted. The modified questionnaire was distributed among first-year QS students who are studying the Quantity Surveying degree programme in the above-mentioned higher education institutes. The questionnaire was distributed among 120 fresh quantity surveying undergraduates, and 80 valid responses were collected, resulting 66.67% response rate.

The majority of the responses (87%) were collected from UOM fresh undergraduates, and only 1% were collected from IQSSL fresh undergraduates. The remaining responses were received from KDU (8%) and HND (4%) programmes. This variation in the collection of responses can be identified as the difference in undergraduate intake size across each institute. The annual intake of QS undergraduates in UOM is generally 140 undergraduates, which is higher compared to KDU (34 undergraduates), IQSSL (40 undergraduates), and HND (25 undergraduates). Therefore, the higher representation from UOM reflects its comparatively larger first-year student population. This distribution represents the broader educational context in Sri Lanka, where state

universities have a comparatively larger student intake than private HE institutes offering QS degree programmes.

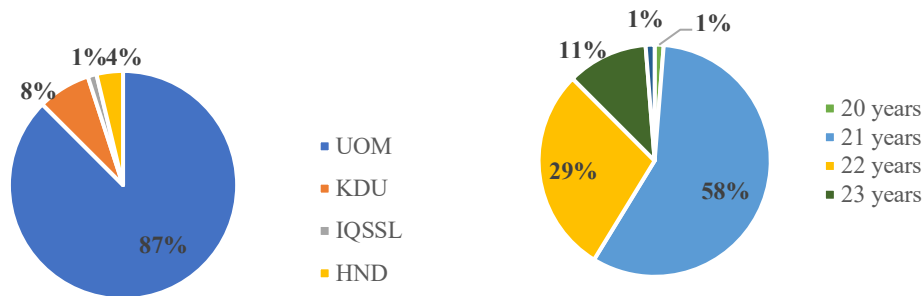


Figure 2: Respondents institutes

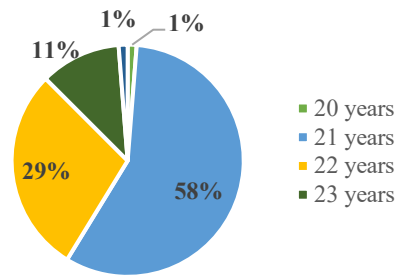


Figure 3: Respondents age

Regarding age distribution, the majority of fresh QS undergraduates were 21 years old (58%), with only 1% representing age 20- and 25-years old undergraduates. The mean age of the age sample was 21.55 years. This distribution represents the typical age range of first-year QS students who are entering QS programmes in Sri Lanka. From the total of 80 respondents who completed the questionnaire survey, 45 were female (56%), and 35 were male (44%).

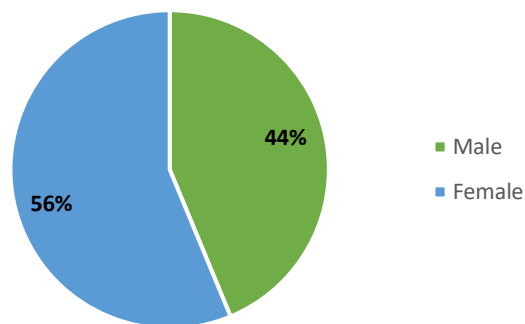


Figure 2: Respondents gender

4.2 EXAMINE THE RELATIONSHIP BETWEEN GENDER AND PERCEIVED NEGATIVE MENTAL WELL-BEING DUE TO THE ACADEMIC WORKLOAD OF FIRST-YEAR QUANTITY SURVEYING STUDENTS

A Shapiro-Wilk test was performed to identify the normality of the collected data in order to determine the suitable statistical techniques for further analysis. The results of the test are 0.745 with a p-value < 0.05. Therefore, the null hypothesis was rejected as the collected data were not normally distributed, and non-parametric tests were further used in the study for the analysis.

A Fisher's Exact test was performed to examine the relationship between gender and the perceived negative impact of academic workload on the mental well-being of first-year QS students. Table 1 outlines the results for Fisher's exact test.

Table 1: Fisher's exact test result

Test	Statistics	P value	N	Result
Freeman- Halton Exact Test	4.514	0.338	80	Not significant

Fisher's Exact Test showed a p-value of 0.338, which is > 0.05 ; therefore, the null hypothesis (H_0) is not rejected. This indicates that there is no statistically significant relationship between gender and the perceived negative impact of academic workload on the mental well-being of first-year QS students. The results of the study differ from the findings of a few global studies, which indicate that female undergraduates are more vulnerable to academic stress (Cen et al., 2024; Zhu et al., 2025). However, the findings of the study indicate that both male and female first-year students experience a similar impact of academic workload on their mental wellbeing within Sri Lankan context. This may be due to both male and female first-year students experiencing similar transitional challenges once they enter the university, such as social, academic, financial, and emotional challenges (Osafo et al., 2025).

4.3 ASSESSING GENDER DIFFERENCES IN PERCEPTIONS OF BALANCING ACADEMIC WORKLOAD AND EXTRACURRICULAR ACTIVITIES

The Mann-Whitney U test was conducted to determine whether perception of balancing academic workload and extracurricular activities differed significantly between male and female first-year QS students. Table 2 presents the results of the Mann-Whitney test.

Table 2: Mann-Whitney test result

Test	U	z value	P value	Result
Mann-Whitney U Test	684.50	-1.05	0.294	Not significant

According to the results of the Mann-Whitney U test, the U value represents the test statistics which use to compare the rank distribution between two independent groups of male and female undergraduates. The Z value represents the standardized score of the test statistic, while the p-value represents the statistical significance of the observed difference. Since the p-value (0.294) is greater than the significance level of 0.05, the null hypothesis cannot be rejected. Therefore, there is no statistically significant difference between male and female first-year QS students in their perception of balancing academic workload and extracurricular activities.

The findings of the study show that both male and female first-year students experience similar challenges balancing their extracurricular activities with their academics. The quantity surveying degree programme in Sri Lankan HE institutes is highly demanding in nature, which requires continuous coursework and assignments. Because this heavy workload is identical for all the students regardless of gender, the challenges are the same for both male and female first-year students. The study findings align with existing studies that represent both male and female students encounter similar challenges with balancing their academic and extracurricular activities (Pascoe et al., 2020; Ranasinghe et al., 2017).

4.4 RANKING ACADEMICALLY RELATED CHALLENGES AFFECTING FIRST-YEAR STUDENTS' MENTAL WELL-BEING BASED ON PERCEIVED IMPORTANCE

Two academically related challenges affecting first-year students' mental well-being were identified through a comprehensive literature review and ranked using the Relative Importance Index (RII). RII results are presented in Table 3.

Table 3: Relative importance index test result

Academic-related factor	Total weight	RII	Rank
Balancing extracurricular activities with academic workload feels challenging	303	0.7575	1
Studying modules in an unfamiliar language makes worry about grades	287	0.7175	2

The findings represent that balancing extracurricular activities with academic activities had a high perceived impact on first-year students' mental well-being (RII = 0.7575), when compared with the first-year students' concern about academic grades due to studying modules in an unfamiliar language (RII = 0.7175). This suggests that balancing academic and extracurricular activities is perceived as the more significant challenge among the two factors. This can be due to the academic-related difficulties first-year students encounter once they enroll in university. The academic workload, successfully meeting deadlines, and continuous assignments need to be managed along with personal responsibilities. The limited timeline and the new environment that first-year QS students encounter might make it more difficult for them.

Furthermore, the concerns about academic performance due to studying in an unfamiliar language received the lower ranking (RII=0.7175). Even if the language can be challenging, this might be due to the earlier exposure of undergraduates to the English language, as the university academic system is based on the English language. Previous studies also indicate that undergraduates develop their language skills in English over time during their primary and secondary education, that influence good academic performance. Moreover, RII analysis results indicate that difficulties in balancing academic workload with extracurricular activities represent the most significant academically related challenge, which affects the mental well-being of first-year QS students.

The results of the three objectives demonstrate that the study's aim has been achieved. The findings represent that gender does not significantly influence the perceived impact of academic workload on the mental well-being of first-year QS students or perception of balancing academic and extracurricular activities. Anyhow, the results indicate that balancing academic workload with extracurricular activities is the most significant challenge that affects mental wellbeing. Overall, the results indicate that academic workload impacts first-year QS students' mental wellbeing regardless of gender, with workload management difficulties being a main concern.

4.5 RECOMMENDATIONS

Providing guidance for first-year QS students about time management during orientation to help them effectively balance their academics with extracurricular activities.

4.6 LIMITATIONS

The study considered the subjective perspective of first-year students about the engagement in extracurricular activities with balancing academic workload. Therefore, the study did not explicitly record the allocated time to engage in extracurricular activities or did not isolate the students who did not engage in any extracurricular activity. Additionally, the study findings are heavily dominated by respondents from UOM (87%), which reflects the students' intake in HE institutions in Sri Lanka. This limited the generalizability of the results as the findings specifically reflect the state university environment and curriculum.

5. CONCLUSIONS

The study investigates the impact of academic workload on the mental wellbeing of first-year QS students in Sri Lanka, with a relation to the gender-based difference and academic-related challenges. The transition from secondary education to HE results in a sudden increase of academic and social challenges, which influence the mental wellbeing of first-year QS students. A quantitative method was used in the study. The collected data were analysed using Fisher's Exact test, Mann-Whitney U test, and RII. The findings of the study reveal that gender does not have a statistically significant relationship with the perceived negative impact of academic workload on the mental wellbeing of first-year QS students. As well, no significant relationship was identified with gender and the perception of balancing academic workload and extracurricular activities. These results indicate that both male and female fresh QS undergraduates experience the same academic pressure and transitional challenges once they enrol in HE institutes. However, RII analysis identified that balancing academic activities with extracurricular activities is the most significant challenge that affects mental well-being. The study concludes that academic workload influences the mental well-being of first-year QS students irrespective of gender. The findings identified the importance of a smooth transition into university life and positive mental well-being among first-year QS students.

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