

The Impact of Students Well-Being on Teaching and Learning Quality

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Abstract

Students' well-being plays a crucial role in shaping their perception of teaching and learning quality in higher education. This study examines the differences in students' physical, psychological, and social well-being based on demographic factors and explores the relationship between well-being and teaching and learning quality. Grounded in Self-Determination Theory, this research highlights the significance of autonomy (Psychological well-being), competence (Physical well-being), and relatedness (Social well-being) in influencing students' overall well-being and academic experiences in term of teaching and learning quality. Data was collected from 127 university students through a structured questionnaire, and statistical analyses, including one-way ANOVA and Pearson correlation, were conducted. The findings reveal significant gender-based differences in physical and psychological well-being but no notable variations based on the program of study. Furthermore, a positive correlation exists between students' well-being and their perception of teaching and learning quality, with psychological well-being showing the strongest association. These results underscore the importance of fostering a supportive academic environment that prioritizes students' physical, mental, and social well-being to enhance educational outcomes. Universities should integrate well-being initiatives into academic frameworks to improve student engagement, resilience, and overall learning experiences.

Keywords: Psychological Well-Being, Physical Well-Being, Social Well-Being, Teaching and Learning Quality, Students Well-Being

Introduction

The perception of teaching and learning quality is crucial as it directly influences students' learning experiences and teaching effectiveness (Suarman et al., 2013). Students' perceptions of teaching and learning quality reflect their understanding of course content, acceptance of teaching methods, and adaptability to the classroom setting and atmosphere (Ansow et al., 2022).

In today's fast-paced and highly competitive society, many university students experience increasing pressure related to academics, daily life, emotions, and future employment. This has led to a growing concern about students' well-being, which directly impacts their academic performance. University students face significant challenges related to mental health. Compared to the general population, they are more likely to experience mental health issues and are at higher risk of stress, anxiety, and depression (Wong et al., 2023). These issues often stem from uncertainty about life's purpose, personal goals, and post-graduation plans, leading to feelings of insecurity, self-doubt, and emotional distress.

In addition to mental health concerns, physical well-being also plays a crucial role in students' overall well-being. Studies have shown that irregular sleep and eating patterns can negatively affect university students' physical health (Hagedorn et al., 2021). Moreover, university life introduces students to a new social environment, requiring them to build and maintain new relationships. However, some students struggle with social adaptation, which can lead to social withdrawal and social anxiety disorder. Students with social anxiety often experience heightened self-consciousness, fear of negative evaluation, and frequent psychological distress (Luan et al., 2022).

An overemphasis on academic performance often results in the neglect of students' well-being, which directly affects their perceptions of teaching and learning quality. Universities must ensure that students' physical, mental, and social well-being are well supported to better prepare them for life beyond academia. Higher education institutions should not only focus on imparting knowledge and skills but also on fostering emotional intelligence, interpersonal skills, and resilience. These factors are essential in preparing students for their professional careers after graduation.

Therefore, this study aims to examine differences in students' well-being based on demographic factors and assess the relationship between students' well-being and their perceptions of teaching and learning quality. In line with this, the following research objectives (ROs) are established:

RO1: To examine the differences in students' physical, psychological, and social well-being based on demographic factors.

RO2: To investigate the impact of physical, psychological, and social well-being on students' perceptions of teaching and learning quality.

Understanding the impact of students' well-being on teaching and learning quality is essential in shaping effective educational practices and policies. As higher education becomes increasingly demanding, students face heightened academic pressures, mental health challenges, and social adjustments that directly influence their learning experiences. Investigating this area is crucial because students' physical, psychological, and social well-being significantly affect their engagement, motivation, and ability to absorb knowledge. Poor well-being can lead to decreased academic performance, lack of classroom participation, and overall dissatisfaction with the educational process. By examining this relationship, this study provides valuable insights for educators, policymakers, and university administrators in developing well-being-centred interventions that enhance teaching effectiveness, student retention, and academic success. Ensuring a holistic approach to student well-being not only

improves learning outcomes but also fosters resilience, emotional intelligence, and career preparedness, benefiting both individuals and society as a whole.

Perception of Teaching and Learning Quality

According to Siagian and Artha (2023), perception is the process by which individuals interpret sensory information to understand and make sense of their environment. Teaching and learning quality refer to the effectiveness of teaching methods and learning outcomes in the educational process. Universities play a crucial role in producing high-quality graduates equipped with professional knowledge, critical thinking skills, innovation, and practical expertise. Therefore, higher education institutions must continuously enhance teaching and learning quality to ensure that students have access to better educational resources and learning experiences, ultimately improving their overall competence and social adaptability.

In this study, the researcher adopts the four factors of education quality proposed by Chaudhry & Niazi (2017)—learning environment, curriculum, assessment and evaluation, and teacher quality—to evaluate students' perceptions of teaching and learning quality.

Wellbeing

Physical Wellbeing

Leist (2021) defines physical health as a state in which all organs and tissues of the human body are structurally intact, function properly, and are free from disease or physical weakness. University students should prioritize their physical fitness and adopt healthy lifestyles, as poor habits, such as insufficient water intake, unhealthy dietary patterns, lack of regular exercise, and inadequate sleep can lead to various health issues, including headaches, back pain, neck pain, insomnia, hair loss, and eye strain.

Psychological Wellbeing

According to the World Health Organization (2022), psychological well-being is a state of overall well-being in which individuals recognize their own capabilities, cope effectively with life's challenges, work productively, and contribute to their communities. Ryff & Keyes (1995) identify six key components of psychological well-being: self-acceptance, purpose in life, personal growth, autonomy, positive relationships, and environmental mastery. These elements collectively contribute to an individual's mental resilience and overall psychological health.

Social Wellbeing

Bou, Hotelit and Harajlis (2021) define social well-being as an individual's overall health in terms of relationships and social interactions. It involves building and maintaining positive, supportive, and meaningful relationships with family, friends, colleagues, and the broader social network. Fleurbaey and Leppanen (2021) categorizes social well-being into five dimensions: social integration, social contribution, social coherence, social actualization, and social acceptance. These factors influence an individual's sense of belonging, social engagement, and overall life satisfaction.

Underpinning Theory: Self Determination Theory

Self-Determination Theory (SDT) is a theory of human motivation and personality development that emphasizes individuals' inherent growth tendencies and intrinsic

psychological needs (Deci & Ryan, 2004). According to this theory, humans have three fundamental psychological needs: autonomy, competence, and relatedness. These needs play a crucial role in fostering motivation, well-being, and overall personal development.

Autonomy and Psychological Well-being

According to Voukelatou et. al. (2021), autonomy refers to an individual's need to experience self-direction and personal identity in their actions. Autonomy allows individuals to act in alignment with their own interests and values, enhancing intrinsic motivation and increasing their willingness to engage in activities voluntarily. In this study, psychological well-being is linked to the need for autonomy in Self-Determination Theory. When students have a high level of psychological well-being, they feel more autonomous and motivated, enabling them to engage more deeply in the learning process and perceive teaching and learning as more effective.

Competence and Physical Well-being

Ruggeri et. al. (2020) defines competence as an individual's ability to respond effectively to challenges in their environment and achieve their goals. When individuals feel competent in a particular domain, they develop greater confidence, experience a sense of accomplishment, and become more willing to take on new challenges. In this study, physical well-being is associated with competence in Self-Determination Theory. When students maintain high levels of physical well-being, they feel more capable and energized, which enhances their engagement in learning activities and positively influences their perception of teaching and learning quality.

Relatedness and Social Well-being

Wong et al. (2024) defines relatedness as an individual's need to form meaningful and positive connections with others. When individuals feel accepted, understood, and supported by those around them, they develop a greater sense of security and belonging. In this study, social well-being is connected to the concept of relatedness in Self-Determination Theory. When students experience high levels of social well-being, they feel a strong sense of support and belonging within the learning environment. This fosters collaborative learning, strengthens their sense of community, and ultimately enhances their perception of teaching and learning quality.

Research Framework and Hypothesis Development

Research Framework

Based on Self-Determination Theory and findings from empirical research, this study conceptualizes physical well-being, psychological well-being, and social well-being as independent variables, while students' perception of teaching and learning quality is the dependent variable. The research framework and hypotheses corresponding to RO1 (H1 and H2) and RO2 (H3, H4, and H5) are illustrated in Figure 1.

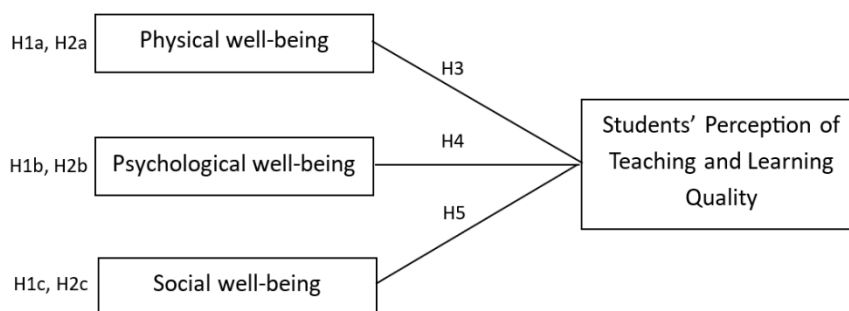


Figure 1: Research framework

Research Hypotheses

H1a: There is a significant difference in physical well-being based on gender.

H1b: There is a significant difference in psychological well-being based on gender.

H1c: There is a significant difference in social well-being based on gender.

H2a: There is a significant difference in physical well-being based on the program of study.

H2b: There is a significant difference in psychological well-being based on the program of study.

H2c: There is a significant difference in social well-being based on the program of study.

H3: Physical well-being is significantly correlated with students' perception of teaching and learning quality.

H4: Psychological well-being is significantly correlated with students' perception of teaching and learning quality.

H5: Social well-being is significantly correlated with students' perception of teaching and learning quality.

Research Methodology

This study adopts a quantitative research approach, focusing on students from a management school at a local university. Data was collected through a structured questionnaire, which was designed to measure students' well-being and their perception of teaching and learning quality. The methodology employed in this study includes a well-defined sampling strategy, a carefully developed research instrument, and rigorous data analysis techniques.

Population and Sampling

A stratified sampling method was used to divide the student population into distinct groups based on their program of study. The population consisted of students from three programs: Technology Management, Marketing, and Accounting. The total number of students in these programs was 643, with 221 students in Technology Management, 188 in Marketing, and 234 in Accounting. To ensure an adequate representation of each group, the sample size was determined using Krejcie and Morgan's (1970) sampling table, which resulted in a sample of 83 respondents from Technology Management, 71 from Marketing, and 88 from Accounting program.

Research Instrument

The research instrument utilized in this study was a structured questionnaire, adapted from prior validated studies, including works by El Ansari et al. (2013), Pontin et al. (2013), Lages et al. (2018), Kember et al. (2009), and the Well-being Questionnaire for PISA (2018). The

questionnaire consisted of 42 questions and was divided into three sections. Section A focused on demographic information, including gender, ethnicity, state of origin, number of family members, monthly expenses, year of study, and program of study. Section B assessed students' physical, psychological, and social well-being, which were the independent variables in this study. Meanwhile, Section C measured students' perception of teaching and learning quality, which served as the dependent variable. To gauge the level of agreement or perception among respondents, a five-point Likert scale was employed, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Analysis Method

Upon data collection, responses were screened to ensure that all data were complete and free from errors. The normality of numerical data was examined through Skewness and Kurtosis values, where values ranging between -3 and +3 were considered acceptable, confirming that the data followed a normal distribution. The reliability of the research instrument was assessed using Cronbach's Alpha (CA), where a value of 0.70 or higher was deemed acceptable, indicating that the data collected was consistent and reliable for further analysis.

To test the research hypotheses, one-way ANOVA was conducted to determine whether there were significant differences in students' well-being based on gender and year of study (Research Objective 1). Additionally, a Pearson correlation test was used to assess the relationship between students' well-being and their perception of teaching and learning quality (Research Objective 2). Both statistical tests were conducted at a 95% confidence level, with a p-value of less than 0.05 considered as the threshold for statistical significance.

In summary, this study employed a structured and rigorous methodological approach, ensuring that the research findings are both valid and reliable. By using a stratified sampling technique, an established research instrument, and appropriate statistical tests, this study provides a comprehensive analysis of the relationship between students' well-being and their perception of teaching and learning quality.

Data Analysis

A total of 127 respondents participated in the survey, resulting in a response rate of 52.48%. All data collected from the respondents were successfully recorded, with no issues encountered during the data screening process.

Normality and Reliability Test

The normality of the numerical data was assessed using skewness and kurtosis values, as shown in Table 1. The skewness values for all variables ranged from -0.668 to 0.232, while the kurtosis values ranged from -0.652 to 0.693. Since these values fall within the threshold of ± 3 , it can be concluded that all variables are normally distributed.

Table 1

Normality and Reliability Test Result

Variables	Skewness	Kurtosis	Cronbach's Alpha
Physical well-being	0.232	-0.652	0.704
Psychological well-being	-0.177	-0.584	0.831
Social well-being	0.187	0.693	0.741
T&L Quality	-0.668	0.386	0.899

Regarding the reliability test, the threshold for Cronbach's alpha is 0.7. Based on Table 1, the Cronbach's alpha values for all independent and dependent variables range from 0.704 to 0.899, exceeding the minimum acceptable threshold of 0.7. Thus, it can be concluded that all variables and measurements are reliable and consistent, making them suitable for further analysis.

One-Way ANOVA

To examine whether there are differences in students' physical, psychological, and social well-being based on demographics (RO2), ANOVA was conducted for gender (H1a, H1b, H1c) and program of study (H2a, H2b, H2c). The population variance test, based on Levene's test, yielded a p-value greater than 0.05, suggesting that equal variance is assumed across all demographic categories, making the data suitable for ANOVA testing. The results of the ANOVA test are shown in Table 2. Based on Table 2, the significance values for the differences in students' physical and psychological well-being based on gender were less than 0.001 and 0.018, respectively, which are lower than 0.05. This supports hypotheses H1(a) and H1(b), suggesting that there is a significant difference in physical and psychological well-being based on gender. However, the significance value for the difference in students' social well-being based on gender was 0.282, which is higher than 0.05. This result fails to support hypothesis H1(c), indicating no significant difference in social well-being based on gender.

Table 2

ANOVA Analysis Result

Variable	Demographic	Significance level	Decision
Physical well-being	Gender	<0.001	Accepted
Psychological well-being	Gender	0.0018	Accepted
Social well-being	Gender	0.282	Rejected
Physical well-being	Program of study	0.912	Rejected
Psychological well-being	Program of study	0.586	Rejected
Social well-being	Program of study	0.970	Rejected

Moreover, the significance values for the differences in students' physical, psychological, and social well-being based on program of study were 0.912, 0.586, and 0.970, respectively, all of which are higher than 0.05. Thus, hypotheses H2(a), H2(b), and H2(c) were rejected, leading to the conclusion that there is no significant difference in physical, psychological, and social well-being based on the program of study.

Pearson Correlation

To examine the impact of physical, psychological, and social well-being on students' perception of teaching and learning quality (RO3), Pearson correlation analysis was

conducted to test hypotheses H3 to H5. Table 3 presents the results of the Pearson correlation analysis between students' well-being and their perception of teaching and learning quality.

Table 3

Pearson Correlation Analysis Result

Hypothesis		Pearson Correlation Coefficient (r)	Strength	Significance level	Decision
H3	Physical well-being and T&L Quality	0.224	Weak	0.012	Accepted
H4	Psychological well-being and T&L Quality	0.463	Moderate	<0.001	Accepted
H5	Social well-being and T&L Quality	0.25	Weak	0.005	Accepted

According to Table 3, the correlation between physical well-being and the perception of teaching and learning quality was significant at the 0.05 level, while the correlations between psychological well-being and social well-being with the perception of teaching and learning quality were significant at the 0.01 level. Hence, hypotheses H3, H4, and H5 were accepted.

Specifically, the coefficient values for physical well-being and social well-being were 0.224 and 0.250, respectively, which indicate weak correlations ($0.20 \leq r \leq 0.39$). Meanwhile, the coefficient value for psychological well-being was 0.463, representing a moderately strong correlation ($0.40 \leq r \leq 0.59$). These findings indicate that students' physical, psychological, and social well-being all influence their perception of teaching and learning quality.

Discussions

Addressing Research Objective 1

Based on Table 2, there is a significant difference in physical and psychological well-being based on gender, as the significance values are less than 0.05. This indicates that male and female students experience differences in their physical and psychological well-being. The findings of this study align with previous research conducted by Gijsbers et al. (1999) and Matud et al. (2019). Gijsbers et al. (1999) found typical gender differences in physical symptoms recorded in daily health assessments, further supporting the association between gender and physical well-being. Similarly, Matud et al. (2019) demonstrated that males tend to score higher in self-acceptance and autonomy, while females score higher in personal growth and positive relationships with others. This suggests that psychological well-being may differ significantly between genders in specific aspects.

However, there is no significant difference in social well-being based on gender, as the significance value is greater than 0.05. This indicates that male and female students do not exhibit substantial differences in social well-being. These findings support the study conducted by Fusilier et al. (1986), which found no significant gender differences in the impact of social support on overall health.

Table 2 also shows that there is no significant difference in physical, psychological, or social well-being based on the program of study, as the significance values exceed 0.05. These results suggest that students' well-being remains relatively consistent across different academic programs. This conclusion aligns with research by Marendić et al. (2024) and

Darabinia et al. (2018). According to Marendić et al. (2024), no significant differences were observed in stress levels or physical and psychological well-being between health and non-health science students. Similarly, Darabinia et al. (2018) found no significant differences in social acceptance, social contribution, or social coherence among students from different academic fields..

Addressing Research Objective 2

According to Table 3, all aspects of students' well-being—physical, psychological, and social—are positively correlated with their perception of teaching and learning quality, as the p-values of the correlation coefficients are below the critical threshold of 0.05. These findings are consistent with research conducted by Ferreira et al. (2024), which demonstrated that teachers' physical and psychological well-being are closely linked to teaching effectiveness, thereby enhancing their perception of school connectedness. Similarly, Riva et al. (2020) found that factors such as teacher-student relationships, emotional intelligence, and student-centered teaching methods positively influence social well-being. As students' social well-being improves, their perception of the quality of the learning environment also increases.

The findings of this study suggest that students perceive physical well-being as essential for maintaining energy and focus in the classroom. Psychological well-being significantly impacts emotional and cognitive abilities, and a stable mood helps students better manage learning tasks and comprehend the curriculum. Additionally, social well-being enhances classroom participation and adaptability by fostering interactions with peers and lecturers. These findings indicate that students' learning experiences are shaped by their overall well-being, which, in turn, influences their perception of teaching and learning quality.

Conclusion

This study examined the relationship between students' well-being and their perception of teaching and learning quality, focusing on physical, psychological, and social well-being. The findings from Research Objective 1 indicate significant differences in students' physical and psychological well-being based on gender, whereas no significant differences were observed in social well-being. Additionally, no significant differences in well-being were found based on the program of study, suggesting that academic discipline does not substantially influence students' overall well-being.

For Research Objective 2, the results confirm that students' physical, psychological, and social well-being are positively correlated with their perception of teaching and learning quality. Among the three dimensions, psychological well-being demonstrated the strongest correlation, highlighting the crucial role of mental health in shaping students' learning experiences. This finding underscores the importance of fostering a supportive academic environment that prioritizes students' emotional resilience and cognitive engagement.

Theoretically, this study contributes to the literature by integrating Self-Determination Theory (SDT) to explain how autonomy, competence, and relatedness influence students' well-being and learning perceptions. By linking SDT with students' educational experiences, this research extends the understanding of motivation and well-being in higher education.

Practically, the study highlights the need for universities to implement well-being initiatives that support students holistically. Strategies such as mental health programs, wellness campaigns, and fostering inclusive social environments can enhance students' learning experiences and academic success. Additionally, educators should adopt student-centered teaching approaches that address both academic and emotional needs.

Overall, this study emphasizes the vital role of students' well-being in shaping their perception of teaching and learning quality. Future research should explore additional demographic factors and expand the study across different universities to gain deeper insights into the interplay between well-being and academic experiences.

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