



# A Structural Equation Model of Factors Influencing Student Satisfaction of University Students in Myanmar

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## Abstract

Satisfaction among university students cannot be attributed to a single factor alone. The literature indicates that personal factors, instructional factors, university factors, social factors, and outcome-related factors collectively contribute to the satisfaction of university students within the context of higher education. The purpose of this research was to develop and confirm the validity of the above factors influencing student satisfaction of university students. A total of 1814 university students (644 males and 1094 females) from eleven universities in Myanmar participated in this study in February 2020. Many standardized instruments and self-developed instruments were validated and used to measure student satisfaction and its factors. The structural equation modeling approach was done to confirm the validity of the model on factors influencing student satisfaction of university students. SEM results confirmed that instructional factors, social factors and outcome-related factors had direct effect on student satisfaction but personal factors and university factors had only indirect effect on it through social factors. Totally, 64.5 % of the variance in student satisfaction can be explained by the structural equation model. This study provided a research insight on the relationship of factors influencing student satisfaction and important implications for stakeholders to develop intervention plans and ways to improve university students' satisfaction.

**Keywords:** *Student Satisfaction, Structural Equation Modeling, Personal Factors, Social Factors, University Factors, Instructional Factors, Outcome-related Factors*

## Article History:

*Received: May 30, 2023*

*Accepted: June 20, 2023*

*Revised: June 10, 2023*

*Published online: July 31, 2023*

## Suggested Citation:

Wai Wai Than & Nu Nu Khaing (2023). A Structural Equation Model of Factors Influencing Student Satisfaction of University Students in Myanmar. *Industry and Academic Research Review*, 4 (1), 456-461.

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*\*This paper is presented at the 4<sup>th</sup> International Conference on Multidisciplinary Industry and Academic Research (ICMLAR)-2023*



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## Introduction

Contemporary higher education institutions face various intricate educational challenges. Enhancing student retention and success rates while meeting their educational needs poses a significant hurdle. To address these challenges, institutions must prioritize the quality of their programs and provide adequate support to students. In an increasingly competitive higher education landscape, ensuring university student satisfaction has become a crucial aspect of maintaining quality assurance. University students' satisfaction is important to institutional success in that effective institutions have satisfied students because this satisfaction supports the enrollment of additional students and persistence of existing students. As a result, most universities around the world are constantly looking at how to improve the satisfaction of students at their institutions.

Student Satisfaction is the extent to which a student's perceived educational experience meets or exceeds his or her expectations, measured as gaps between students' expectations and perceived reality (Juillerat, 1995). College student satisfaction refers to the level of enjoyment or realization of a requirement, aspiration, or expectation involving the college experience (Astin, 1993). Clearly, the satisfaction of students with their studies is central to the success of the sector. From an institutional perspective, satisfied students are more inclined to persist with their studies and achieve academic success (Duque, 2014). This trend is expected to improve the financial position and reputation of the institution. Therefore, maintaining and improving student satisfaction to its fullest extent is the ultimate goal of higher education institutions, universities and colleges (Orpen, 1990; Wong, & Chapman, 2023).

In this time of reforming Myanmar higher education, there is a need of researches in the field of university student satisfaction, the prestigious quality of higher education institutions. The administrators and policy makers should consider factors affecting on university student satisfaction in implementing higher education development plans. So, this research will explore how to get this necessary quality of higher education institutions and universities.

No single factor can explain satisfaction among university students; there are a range of personal, financial, social and institution specific factors. Than and Khaing (2020) synthesized the five group of factors influencing student satisfaction by using meta-analysis approach. This meta-analysis study found that self-efficacy (SE), motivation (EM & IM) and college experience (CE) were the most influencing personal factors for student satisfaction. Then, courses (C), learning

environment (LE) and teaching and instruction (TI) were the most influencing factors on student satisfaction among instructional factors. Among the university factors, service quality (RES, REL, ASS, EMP & TAN), cost and reputation (R) had the highest influence on student satisfaction. Among the social factors, student-teacher relation (STR) and social presence (SP) were the most influencing factors. Finally, job prospects (JP) and skills developed (SD) were found as the most influencing outcomes-related factors for student satisfaction.

Based on the above causes, this study proposed a model for predicting factors influencing student satisfaction of Myanmar university students. This study proposed that the above-mentioned personal factors, instructional factors, university factors, social factors and outcome-related factors have direct effect on student satisfaction of university students. Therefore, this study aimed to confirm the above proposed model of factors influencing student satisfaction. Finally, it is anticipated that this study will provide strong theoretical bases of student satisfaction to guide teachers and stakeholders who are involved either directly or indirectly in implementing, planning, or projecting university education.

## **Methodology**

This research study aimed to explore the patterns of relationships among the factors influencing student satisfaction of university students in Myanmar. In order to execute the research objectives quantitatively, this study focuses mainly on quantitative research approach by means of survey design. The target population for this study was university students in Myanmar at (2020-2021) Academic Year. By means of the multistage cluster sampling technique, a total of 1814 university students were selected from eleven universities in Myanmar.

The collected data for this study included student satisfaction, academic self-efficacy, motivation, college experience, student-teacher relation, social presence, job prospects, skills developed, service quality, cost, reputation, courses, learning environment, and teaching and instruction. This study utilized some demographic questions and eight instruments for measuring student satisfaction and its factors. After preparing research instruments, the expert review was conducted for content validity with the help of eighteen experts from the field of Educational Psychology. Pilot study was conducted with a sample of 350 students from Sagaing University of Education. Then, the reliability and validity of the instruments were tested and confirmed by means of the confirmatory factor analysis approach in order to ensure the internal validity of the study.

Structural Equation Modeling (SEM) approach was used to confirm a conceptual model for factors influencing student satisfaction proposed in this study. This approach can help the researchers to test the models and patterns of relationships among numerous observed and latent variables. In R studio (version 3.5.2), SEM was conducted by using the lavaan package (Latent Variable Analysis) and the semPlot package.

## **Findings**

In general, the main purpose of the study was to verify the influence of the personal, social, instructional, outcome-related and university factors towards student satisfaction. Before evaluating hypotheses of the study, goodness of the structural equation model was assessed according to Hooper, Coughlan and Mullen (2008)'s guidelines for Determining Model Fit for Structural Equation Modelling. Assessment of goodness test showed the proposed model does not fit the actual data well since the values of fit indexes are not in the acceptable range. Therefore, the measurement model and structural model were revised according to the modification indexes with the assistance of the supporting literature.

The measurement part of the SEM model without the indicator "cost" in the latent factor "University-related factors" and the indicator "college experience" in the latent factor "Personal Factors" showed a good fit with the data. In the structural part of the SEM model, the direct paths from personal factors and university-related factors to student satisfaction were not significant and therefore, the indirect paths through the social factors had to be added to improve the model with the support of the Self-Determination Theory. Then, the revised model fits well with the actual data, with all fit indexes in the acceptable range.

The result showed that among five latent variables, social factor, outcome-related factor and instructional factor had direct significant effects on student satisfaction when all variables were included. The personal and university factors had significant indirect effect on student satisfaction through the mediator of social factor. Specifically, consistent partial mediation was found between university factor and student satisfaction by social factor. Interestingly, supplementary partial mediation occurs between personal factor and student satisfaction by social factor. Totally, 64.5 % of the variance in student satisfaction can be explained by the structural model.

## **Conclusion**

Every university wants to retain their students and to have them perform well; therefore, it is important to consider the relationship between satisfaction and the predictor variables. The

results of this study identify predictors of student satisfaction that have significant relationship with satisfaction. Social factors, outcome-related factors and instructional factors had direct significant effects on student satisfaction when all variables were included. The personal and university factors had significant indirect effect on student satisfaction through the mediator of social factor.

In conclusion, the findings of the study could assist as a guideline for top management of higher education institutions to appraise their service quality, courses, instruction, social services and skill training assessments on a periodic basis in order to facilitate student satisfaction. Future researches can develop satisfaction interventions and determine which predictors of satisfaction are most easily manipulated, resulting in the largest gains in satisfaction. At a minimum, this study has confirmed that student satisfaction is a terribly important variable to consider in higher education and has important implications for intervention planning to improve retention. Additionally, this study helps provide evidence about which theories of college student satisfaction are plausible and should be investigated further.

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