

**THE IMPACT OF QUALITY OF SERVICE
AND EXPERIENCE ON STUDENTS'
LEARNING OUTCOMES IN HIGHER
EDUCATION INSTITUTIONS**

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Abstract

Central to this research is the concept of student perceptions of service in higher education and its impact on higher education learning outcomes. The core concepts of service dealt with in this research are quality of service, quality of student experience, and student satisfaction. These concepts are portrayed in literature predominantly from a services marketing and quality assurance perspective.

The aim of this study is to address how quality of service influences higher education learning outcomes and the role that student satisfaction and quality of student experience play in this relationship. This is in view of the need for higher education institutions (HEIs) to address and explore the balance between the marketing intentions of providing a quality service and the core mission of higher education. The focus is to develop a conceptual model to assess six hypothesised relationships and to explore the differences in perspectives among three major stakeholders, namely, students, staff members of HEIs, and industry. This study is motivated by the marketisation of higher education as a global phenomenon, the common adoption of quality of service as a business growth strategy by HEIs, and the increasing international focus on higher education learning outcomes among HEIs.

In order to achieve the aim of this research, a quantitative methodological approach was adopted. A questionnaire was developed through a thorough review of the literature to operationalise each construct of the conceptual model and was deployed as an online survey for each stakeholder group. A total of 484 responses were received through the use of a convenience sampling approach, of which 348 complete responses were analysed. Values of both Cronbach's alpha and average variance extracted (AVE) for all constructs verified construct reliability and validity. Fit indices for both the measurement and structural model also showed the adequacy of both measurement and structural theory used in this research. An

analysis of the path estimates of the structural model resulted in the non-falsification of significant relationships between quality of student experience and student satisfaction, as well as between quality of student experience and learning outcomes. There were also significant interrelationships between the quality of service dimensions comprising reliability, assurance, tangibles, empathy and responsiveness. However, there was falsification of significant relationships between quality of service and both student satisfaction and quality of student experience, as well as between student satisfaction and learning outcomes. Through the use of a multi-method approach comprising multivariate analysis of variance (MANOVA), discriminant analysis and structural equation modelling (SEM), both differences and similarities in the hypothesised relationships were also identifiable among students, staff members of HEIs, and industry.

The findings of this research contribute to theory and methodology. Theoretically, the study has proven the insignificance of market-oriented quality of service strategies in influencing student satisfaction and quality of student experience, and the insignificance of student satisfaction in influencing student learning outcomes, which implies there are problems surrounding the use of market-oriented strategies in the management of higher education. There is also strong indication that, while the role that student satisfaction and quality of student experience play in influencing learning outcomes is stakeholder dependent, the fundamental mission and purpose of HEIs is in providing quality learning experiences that benefit quality student learning to positively impact student learning outcomes, which reflects the value that stakeholders of higher education demand. Maximum possibilities to identify differences in stakeholder perspectives were provided through the subsequent use of a discriminant analysis and SEM as follow-up tests following the use of MANOVA. The use of this multi-method approach has allowed for the triangulation of analysis concerning the differences.

Finally, in view of similarities and differences in stakeholder perspectives, this research highlights the importance for the administration of HEIs to be attentive to the perspectives of various stakeholders in the management and improvement of quality and student learning. It is also important for HEIs to balance the need for service orientation with the core mission of higher education. That this research was conducted in the context of Singapore is also a contribution to policy and practice since Singapore, with its hybrid higher education system, provides a useful starting point for comparison with other higher education systems, including the study of globalisation effects on higher education learning outcomes.

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List of Abbreviations

AHELO	Assessment of Higher Education Learning Outcomes
ACSI	American Customer Satisfaction Index
ANOVA	analysis of variance
AVE	average variance extracted
CFA	confirmatory factor analysis
CFI	comparative fit index
CMIN/DF	chi-square mean/degree of freedom (or normed chi-square)
CR	critical ratio
CSISG	Customer Satisfaction Index of Singapore
ECSI	European Customer Satisfaction Index
IFI	incremental fit index
HEdPERF	Higher Education Performance
HEI	higher education institution
HREC	Human Research Ethics Committee
MANOVA	multivariate analysis of variance
OECD	Organisation for Economic Co-operation and Development
QoE	quality of experience
QoS	quality of service
RMSEA	root mean square error of approximation
SEM	structural equation modelling
SERFPERF	Service Performance
SERVQUAL	service quality or quality of service (Model)
SPSS	Statistical Package for Social Sciences
SWICS	Swiss Index of Customer Satisfaction

TLI	Tucker-Lewis index
TQM	total quality management
UNESCO	United Nations Educational, Scientific and Cultural Organization

Key Words

Higher education

Higher education institution

Learning outcomes

Quality of service

Services marketing

Student experience

Student satisfaction