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The impact of self-efficacy on service quality in private universities: The mediating role of organizational citizenship behavior

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ABSTRACT

This study investigates the relationship between self-efficacy and service quality in private universities, focusing on the mediating role of Organizational Citizenship Behavior (OCB). Using a quantitative research approach, data were collected from 85 higher education institutions through surveys and analyzed with Structural Equation Modeling-Partial Least Squares (SEM-PLS). The results demonstrate that self-efficacy positively influences both OCB and service quality, particularly through reliability as a key indicator of service quality. However, OCB does not mediate the relationship between self-efficacy and service quality, suggesting the influence of other factors such as technical skills and institutional policies. The findings highlight the importance of self-efficacy and OCB in enhancing service quality and emphasize the need for regular evaluations, increased support, and targeted training programs to strengthen lecturers' self-efficacy. Universities are encouraged to promote OCB activities, including peer collaboration, student support, and curriculum development, offering valuable insights for managerial and policy improvements in private higher education institutions.

1. Introduction

Universities have an essential role in producing quality human resources and contributing to the development of society and the country. In the context of higher education, the quality of services provided by lecturers and academic staff plays a crucial and significant role, which is one of the key factors influencing student satisfaction, increasing academic achievement, and the overall reputation of higher education (Gunarto and Cahyawati, 2022; Gunarto, 2021). High service quality is a determining factor in creating a productive and satisfying academic environment that attracts the interest of students and other related parties. One of the relevant factors to consider that influences service quality is the self-efficacy of lecturers and academic staff in carrying out their duties (Bayır and Aylaz, 2021; Narotama and Sintaasih, 2022).

Self-efficacy is an individual's belief about one's ability to achieve goals and overcome challenges. It has a significant influence on achieving academic and non-academic goals. Lecturers who have a high level of self-efficacy are believed to be able to provide better and more effective services in helping students so that they can make a positive contribution to the academic environment (Almutairi, 2020; Bayır and Aylaz, 2021; Burhan, 2019; Zaini et al., 2022).

Apart from self-efficacy, the critical role of Organizational Citizenship Behavior (OCB) is an important aspect of the work environment in higher education. OCB includes proactive behavior and positive contributions that exceed the primary job duties but play an essential role in creating a conducive and harmonious organizational atmosphere. People who actively participate in OCB tend to provide support, help colleagues, and collaborate positively in creating a conducive work environment that positively impacts the quality of services and academic atmosphere in higher education (Setyabudi et al., 2021).

Lecturers and academic staff with a high level of self-efficacy tend to be more confident in managing situations and challenges in teaching and supervising students. In addition, in the context of

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higher education, OCB is also an essential factor that can affect service quality. OCB includes voluntary and extra-role actions performed by individuals to contribute to the smooth running and effectiveness of the organization. Lecturers and academic staff who show OCB tend to be more active in helping students, collaborating with colleagues, and providing more support. States that self-efficacy and organizational citizenship behavior on service quality show that self-efficacy and organizational citizenship behavior variables significantly influence service quality (Bogler and Somech, 2023; Ocampo et al., 2018; Rita et al., 2018).

2. Literature review

Self-efficacy is a way of determining how someone thinks, feels, motivates themselves, and acts. These beliefs can produce various effects through four main processes: affective, cognitive, motivational, and selection. A high sense of self-efficacy can increase human achievement. Many paths lead to personal well-being, including setting challenging goals and maintaining a strong commitment to oneself. Self-efficacy is a view or self-perception of how one can function according to the situation at hand. Self-efficacy, in general, is not related to the skills possessed by individuals but rather to psychological or individual beliefs. Self-efficacy is a person's belief about his competence in a particular field. So, having confidence in one's abilities is expected to increase one's interest.

Referring to the research of Almutairi (2020), Narotama and Sintaasih (2022), Pearson (2019), and Zaini et al. (2022), there are three dimensions of self-efficacy, namely: (1) Level of task difficulty (magnitude or level); (2) The broad field of behavior (generality); and (3) Strength of belief (strength). There are seven indicators of self-efficacy according to Almutairi (2020), namely: 1. Confidence in completing the task given; 2. Confidence in finding a solution for every problem; 3. Confidence in completing tasks that are considered difficult; 4. Being positive in all situations; 5. Being able to learn from every experience; 6. Having high self-confidence; 7. Having a responsible attitude.

Organizational citizenship behavior is when a person acts not because of the demands of his job but because of his own will. OCB is an individual's contribution that goes beyond job responsibilities. This OCB involves several behaviors, including helping others, volunteering for extra tasks, and complying with workplace rules and procedures. OCB is defined as behavior that positively impacts the company because it aims to achieve organizational effectiveness. Based on the definition above, it can be interpreted that OCB is behavior or attitudes that do not expect formal rewards. The behavior of a person who carries out outside formal work for the benefit of the organization and the behavior of a person who does not carry out formally regulated tasks (Bogler and Somech, 2023; Ocampo et al., 2018).

OCB is defined as "individual behavior that is independent, not directly recognized by a formal reward system, and in the aggregate promotes the effective functioning of an organization (Bogler and Somech, 2023). OCB is one of the important attitudes of an employee whose behavior is outside of work. A person's behavior goes beyond the official job description provided voluntarily by the company and is not directly appreciated by the company (Rita et al., 2018; Yusoff et al., 2017). Referring to the research of Bogler and Somech (2023), Rita et al. (2018), and Yusoff et al. (2017), the dimensions and indicators of OCB in this research are: 1. Altruism; 2. Conscientiousness; 3. Sportsmanship; 4. Courtesy; 5. Civic Virtue,

Service Quality can be interpreted as a focus on fulfilling needs and requirements and timeliness to meet customer expectations. The success of an organization at all levels depends on the quality of service. Service quality is an obligation for organizations, both manufacturing organizations and (especially) service organizations. Service is the key to success, so service quality must be the focus of organizational management when running a business. A service organization can win the competition by continuing to provide services with better quality than its competitors and higher than what customers expect (Demir et al., 2021; Hennig-Thurau et al., 2001; Jiewanto et al., 2012; Moslehpour et al., 2020).

Service quality is a level of service related to meeting the expectations and needs of customers or users. Service quality is a measure to assess whether the service has the desired use value. In other words, an item can be said to have quality if its use value or function is as desired (Behera, 2018; Hoang et al., 2022; Johnson and Sirikit, 2002; Omara et al., 2016). Referring to the research of Behera (2018), Demir et al. (2021), Hoang et al. (2022), Johnson and Sirikit (2002), Zameer et al. (2015), Omara et al. (2016), and Pahi et al. (2020); there are five indicators of service quality, namely: 1. Tangibles; 2. Reliability; 3. Responsiveness; 4. Assurance; 5. Empathy. The framework for thinking in this study is shown in Fig. 1.

2.1. Hypothesis development

Lecturer self-efficacy has a direct and positive influence on service quality at private tertiary institutions. Lecturers who have a higher level of self-efficacy tend to provide better services to students and other related parties. This hypothesis assumes that individual beliefs about one's abilities will affect motivation and effort in providing quality services.

H1: There is a positive influence between self-efficacy on service quality and service quality at private tertiary institutions.

OCB has a positive influence on the quality of service at private tertiary institutions. People who

feel confident in their abilities tend to be more likely to participate in OCB behaviors, such as helping colleagues, providing support to students, and participating actively in organizational activities. In addition, OCB also has a positive and significant influence on service quality. Lecturers who behave contributively and proactively in the work environment tend to provide better services to students.

H2: There is a positive influence between OCB and service quality at private tertiary institutions.

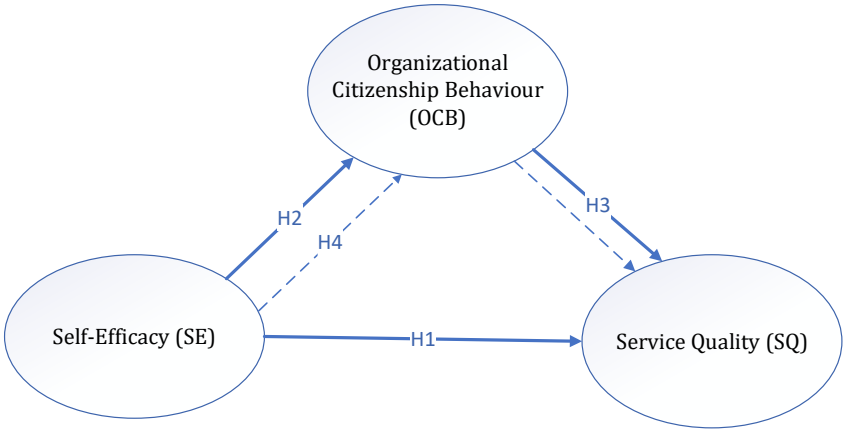

Fig. 1: Research framework

Lecturer self-efficacy has a positive influence on service quality at private universities, and this relationship is mediated by OCB. This means that lecturer self-efficacy not only has a direct impact on service quality but also influences service quality through the role of OCB as a mediator. Doses that have high levels of self-efficacy tend to participate in positive OCB behavior, which in turn improves the quality of services provided.

H3: There is a positive influence between self-efficacy and OCB

OCB, which is a mediating variable for the influence of self-efficacy (SE) on service quality (SQ), does not have a significant influence, meaning that OCB does not have a role in improving service quality.

H4: The influence of self-efficacy mediated by organizational citizenship behavior on service quality

3. Research method

3.1. Research design

This research uses a quantitative research design and structural equation models (SEM) analysis method to evaluate the relationship between variables. Primary and secondary data were used in this research. Primary data was obtained through questionnaires, while secondary data came from literature such as journals. The object of this research is private universities.

3.2. Population and sample

The research population consists of 110 private higher education institutions (PHEIs) operating in Palembang City, located in South Sumatra province. The unit of analysis for this research is lecturers at private universities because lecturers have a crucial role in maintaining the quality of education at private universities. They are responsible for the delivery of course material and play an important role in curriculum development, student advising, and many other important aspects of the educational experience. Therefore, understanding the factors influencing lecturer performance and service quality can provide valuable insights for improving the overall quality of education in private universities. The sampling technique used is simple random sampling, where each member of the population has the same probability of being selected as the sample. Although the questionnaire was distributed to 100 PHEIs, only 85 responded and were eligible for analysis. Although the sample size analyzed was slightly lower than planned, this does not reduce the validity or reliability of the research findings. Appropriate statistical analysis can help overcome the potential bias that may arise from a smaller-than-planned sample size.

The sample size of 85 private universities can generalize the research results for several reasons. First, the simple random sampling method ensures that each private university in the population has an equal chance of being selected, so this sample is considered representative and can reduce sampling bias. Second, although this sample size may seem small in some contexts, for a population of only 110 private universities, it is quite large and almost close to the entire population, making it valid for generalization in the region. Third, this study uses the SEM approach which allows for the assessment of data validity and reliability, even with a smaller sample size. SEM-PLS used in the analysis ensures that the data is accurate and reliable. In addition, the uniformity in the characteristics of the private university population in Palembang, such as

relatively similar education policies and resources, further strengthens the possibility that the research results can be generalized to other private universities in the region with similar characteristics. Finally, in statistics, the sample size is not only about the absolute number but also the homogeneity of the population and the analysis techniques used. With SEM-PLS, the potential for bias due to smaller sample sizes can be minimized so that the results of this study remain relevant for generalization.

Data analysis techniques were carried out using a SEM approach. Due to the limitations of the relatively small sample, the SEM approach is SEM-PLS with the help of SmartPLS software. SEM analysis is carried out in two steps, namely measurement analysis through the outer model to determine the validity and reliability of indicators; then, the structural model analysis is carried out through the inner model to answer the research hypothesis (Hair et al., 2019).

4. Results and discussion

4.1. Respondent characteristics

The respondents in this study included 85 individuals, categorized by gender, education level, position, and lecturer status. Most respondents were male (47 people, 55.3%), with the majority holding a master's degree (71 people, 83.5%). Most respondents held lecturer positions (42 people, 49.4%), and the majority were permanent lecturers (76 people, 89.5%).

4.2. Evaluation of the measurement model

The measurement model analysis process in the PLS context needs to be carried out as an initial stage of structural equation model (SEM) analysis. This approach was chosen because it can describe the special relationship between latent variables and the related manifest variables. Preliminary results from the external modeling stage involve assessing the validity and reliability of the constructs used.

In this study, the operationalized construct is reflective. The validity test includes convergent validity and discriminant validity. As for reliability, the evaluation is carried out through internal reliability measures using Cronbach's alpha and composite reliability for each construct. Instructions regarding the validity value of the reflective indicators used in research are for the measures listed in Table 1.

The measurement model analysis in this research uses the first-order construct (FOC) or low-order construct (LOC) method, which is a modeling method where the construct is reflected or formed by indicators. Initial Measurement Model in Fig. 2.

Table 1: Practical rules of validity and reliability

Aspect	Description	Criteria
Convergent validity	Manifest variables of a construct should be highly correlated (Campbell and Fiske, 1959)	- Outer loading value on the indicator > 0.708 for confirmatory research; 0.6–0.7 acceptable for exploratory research (Hair et al., 2013) - Average Variance Extracted (AVE) value > 0.50 (Fornell and Larcker, 1981)
Discriminant validity	Different construct manifest variables should not be highly correlated (Campbell and Fiske, 1959)	- Outer loading indicator values in a construct > all cross-loading values with other constructs (Hair et al., 2013) - Quadratic correlation between latent constructs < AVE of each related construct (Fornell and Larcker, 1981)
Reliability	Proves the accuracy, consistency, and precision of the instrument in measuring constructs	- Cronbach's Alpha > 0.70 for confirmatory research, and > 0.60 acceptable for exploratory research (Hair et al., 2013) - Composite Reliability > 0.708 for confirmatory research, 0.60–0.70 acceptable for exploratory research (Hair et al., 2013)

Initial measurement models in the lower order describe the manifest variable that is correlated with the construct (outer loading). The results of the measurement model in higher order explain the path coefficients between the constructs.

Based on Table 2, the outer loading on the self-efficacy variable has an invalid indicator because the outer loading value is <0.7, namely the ED.1 and ED.9 indicators. The measurement model revision was carried out through an iterative process by eliminating invalid indicators, so the final model was obtained, as shown in Fig. 3.

The revised lower-order measurement model explains the relationships between the manifest variables and their constructs (outer loadings). The higher-order measurement model demonstrates the strength of the path coefficients between constructs, as shown in Table 3.

The revised measurement model for each variable produced validity and reliability parameters that met the accepted standards. All outer loading values for the manifest variables and constructs exceeded 0.7, ensuring reliable construct values. The AVE (Average Variance Extracted) and CR (Composite Reliability) values for each construct were above 0.7 and 0.5, respectively, indicating that the convergent validity of all variables and their manifestations was achieved, as shown in Table 4.

Table 3 highlights that the most dominant indicator contributing to self-efficacy is "Having a responsible attitude," at 75.69%. For the Organizational Citizenship Behavior variable, the most significant indicator is "Courtesy," at 71.23%. For the service quality variable, "Reliability" is the most dominant indicator, at 66.1%, while the lowest indicator is "Assurance," at 49.5%.

The next step in measuring validity is to assess discriminant validity. Discriminant validity is confirmed when the square of the correlation between latent constructs is less than the AVE of each construct, or when the square root of the AVE is greater than the correlation between latent

constructs. Based on the results presented in Table 5, all squared correlation values between latent constructs were found to be less than the AVE for their respective constructs. Therefore, it can be concluded that all latent variables meet the criteria for discriminant validity.

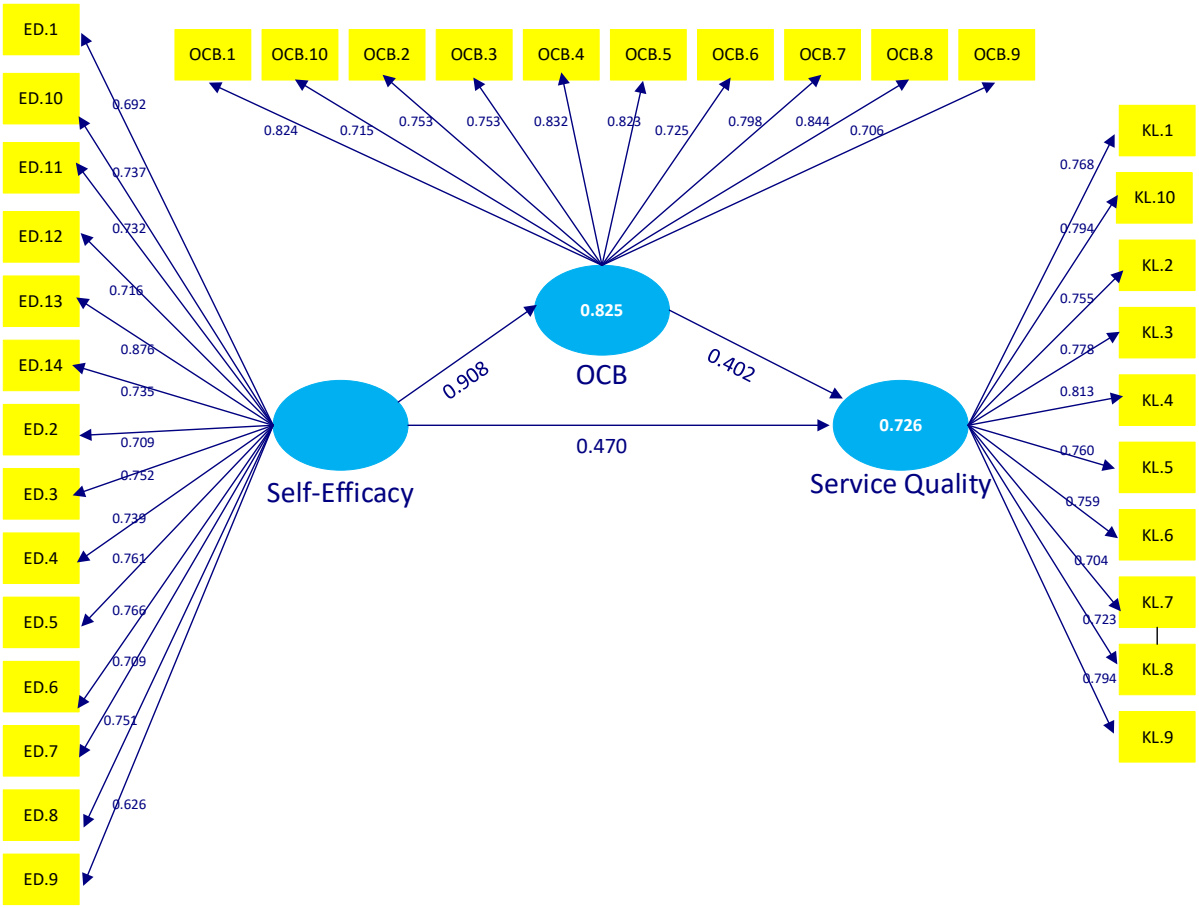

Fig. 2: Initial measurement model

Table 2: Outer loading value of initial measurement model

Indicator	Self-efficacy	OCB	Service quality
ED.1	0.692		
ED.2	0.709		
ED.3	0.752		
ED.4	0.739		
ED.5	0.761		
ED.6	0.766		
ED.7	0.709		
ED.8	0.751		
ED.9	0.626		
ED.10	0.737		
ED.11	0.732		
ED.12	0.716		
ED.13	0.876		
ED.14	0.735		
OCB.1		0.824	
OCB.2		0.753	
OCB.3		0.753	
OCB.4		0.832	
OCB.5		0.823	
OCB.6		0.725	
OCB.7		0.798	
OCB.8		0.844	
OCB.9		0.706	
OCB.10		0.715	
KL.1			0.768
KL.2			0.755
KL.3			0.778
KL.4			0.813
KL.5			0.760
KL.6			0.759
KL.7			0.704
KL.8			0.723
KL.9			0.724
KL.10			0.794

ED: Exploratory dimensions; OCB: Organizational citizenship behavior; KL: Key loading

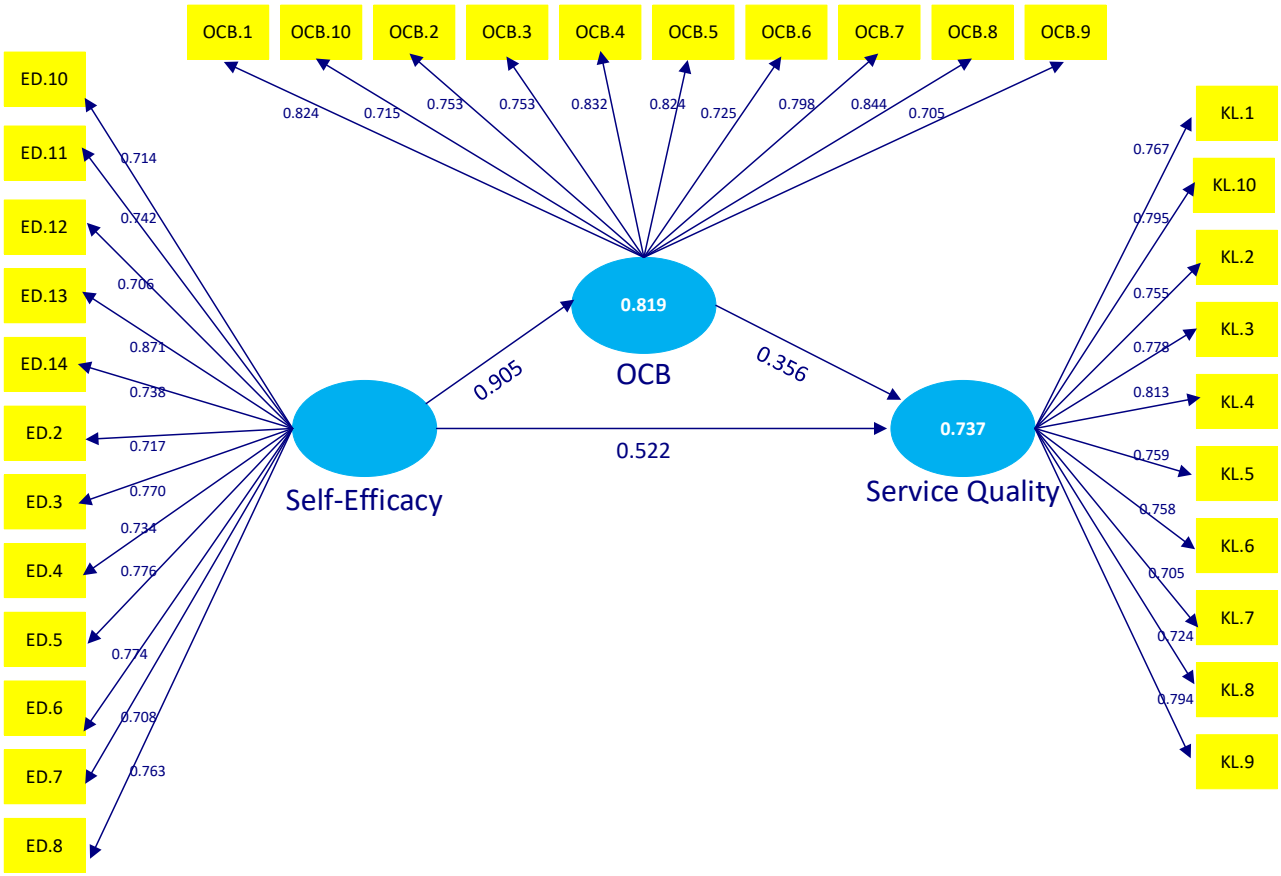

Fig. 3: Revision of the measurement model

Table 3: Revised outer loading values

Indicator	Self-Efficacy	OCB	Quality of service
ED.2	0.709		
ED.3	0.752		
ED.4	0.739		
ED.5	0.761		
ED.6	0.766		
ED.7	0.709		
ED.8	0.751		
ED.10	0.737		
ED.11	0.732		
ED.12	0.716		
ED.13	0.876		
ED.14	0.735		
OCB.1		0.824	
OCB.2		0.753	
OCB.3		0.753	
OCB.4		0.832	
OCB.5		0.823	
OCB.6		0.725	
OCB.7		0.798	
OCB.8		0.844	
OCB.9		0.706	
OCB.10		0.715	
KL.1			0.768
KL.2			0.755
KL.3			0.778
KL.4			0.813
KL.5			0.760
KL.6			0.759
KL.7			0.704
KL.8			0.723
KL.9			0.724
KL.10			0.794

Table 4: Cronbach's alpha, CR, and AVE value

Variable	Cronbach's alpha	rho_A	rho_C	AVE
Self-efficacy	0.930	0.933	0.940	0.566
OCB	0.927	0.929	0.939	0.607
Service quality	0.921	0.925	0.934	0.586

Table 5: Correlation between variable constructs

Variable	Self-efficacy	OCB	Service quality
Self-efficacy	0.752		
OCB	0.905	0.779	
Service quality	0.845	0.829	0.765

Table 5 shows that all squared correlation values between latent constructs are less than the AVE of their respective constructs, confirming that discriminant validity is fulfilled. The second method for assessing discriminant validity involves comparing the outer loading values of indicators within a construct to their cross-loading values with other constructs (Henseler et al., 2009). This method also confirms that the outer loading values for each construct are greater than the cross-loading values with other constructs, thereby fulfilling the criteria for discriminant validity.

4.3. Results of structural model analysis

Fig. 4 illustrates the relationships between the exogenous and endogenous latent variables. The values represent the path coefficients, indicating the strength of the direct influence of each exogenous variable on the corresponding endogenous variable.

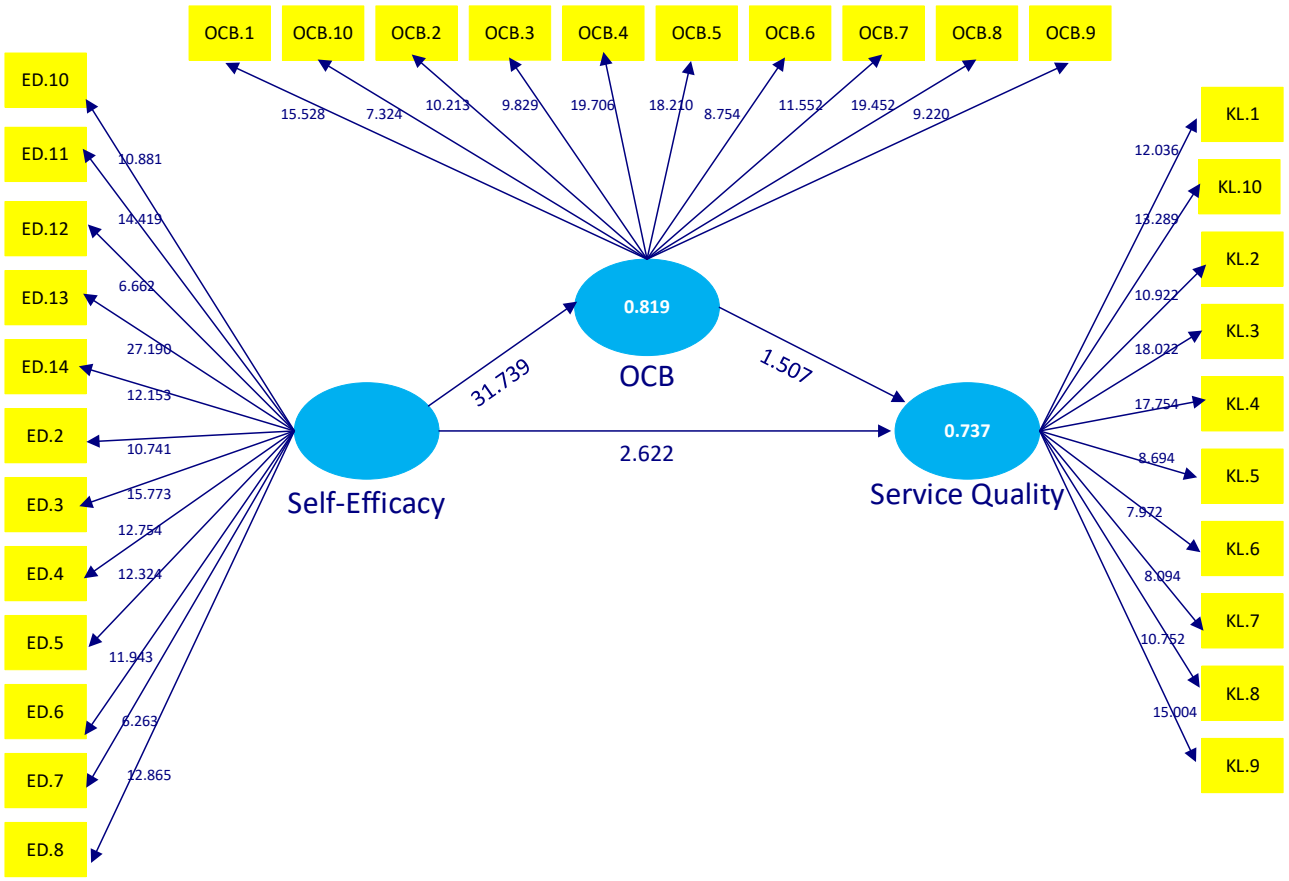

Fig. 4: Structural model

In the process of forming a full model, indicators are reduced if they do not have a statistically significant effect or do not have theoretical support. Therefore, model evaluation involves analyzing the bootstrap method in SmartPLS, not just the validity and reliability of the indicators. The results of model testing using the bootstrap approach provide additional information, and the results are listed in Table 6.

Table 6: R-squared value

Variable	R-squared	R-squared adjusted
OCB	0.819	0.817
Quality of service	0.737	0.730

The results in Table 6 follow the rule of thumb for evaluating predictive model strength. An R-squared value of 0.819 in Structure I indicates a strong model, meaning that the Substructure I model effectively explains variations in the sample data for predicting the population. In Structure II, the R-squared value of 0.737 suggests a moderate model.

Table 7 presents the effect size (f^2) value of 0.187, indicating that the latent variable self-efficacy has a significant influence on service quality. This classification aligns with the rule of thumb for evaluating effect sizes in the inner model. The hypothesized relationships between variables are detailed in Table 8.

Based on Table 8, one hypothesized relationship is not supported, as it does not show a positive and significant direct effect between self-efficacy and service quality. The findings are as follows:

- Self-efficacy and Service Quality: Self-efficacy positively affects service quality with a coefficient of 0.522 (52.2%) and is statistically significant (t-value = 1.507, p-value = 0.009). This result

suggests that higher self-efficacy leads to better service quality.

- Self-efficacy and OCB: Self-efficacy positively affects OCB with a coefficient of 0.905 (90.5%) and is statistically significant (t-value = 31.739). This indicates that good self-efficacy enhances OCB.
- OCB and Service Quality: OCB positively affects service quality with a coefficient of 0.356 (35.6%), but this effect is not statistically significant (t-value = 1.507). This suggests that OCB has a limited influence on service quality.
- Mediating Effect of OCB: The effect of self-efficacy on service quality, mediated by OCB, is positive but not significant, with a coefficient of 0.138. This indicates that OCB is a weak intermediary variable in the relationship between self-efficacy and service quality.

The mediating effect in this study is classified as high if the value exceeds 0.175, medium if it is around 0.075, and low if it is approximately 0.01. These classifications are detailed in Table 9.

Table 7: Effect size (f^2) values for latent variables

Variable	Self-efficacy	OCB	Quality of service
Self-efficacy		4.526	0.187
OCB			0.087
Quality of service			

Table 8: Path coefficients, t-statistics, and p-value

Variable	O	M	SD	T-statistics (|O/SD|)	P-value
Self-efficacy-> service quality	0.522	0.536	0.199	2.622	0.009
Self-efficacy -> OCB	0.905	0.910	0.029	31.739	0.000
OCB-> service quality	0..356	0.356	0.236	1.507	0.132

O: Original sample; M: Sample means; SD: Standard deviation;

Table 9: Indirect effect

Relation	O	M	SD	T-statistics (|O/SD|)	P-value
Self-efficacy->OCB->service quality	0.322	0.324	0.217	1.483	0.138

OCB was less successful in mediating the relationship between self-efficacy and service quality, with a low mediating effect. So, a new strategy is needed to improve self-efficacy and service quality.

4.4. Discussion

The results show that the most significant factor contributing to self-efficacy is "Having a responsible attitude" (75.69%). For OCB, the dominant indicator is "Courtesy" (71.23%), while for service quality, "Reliability" stands out as the most influential indicator (66.1%). These findings highlight the importance of self-efficacy in improving service quality in higher education and offer valuable insights for educational management.

Self-efficacy, defined as an individual's belief in their ability to perform tasks and achieve goals, is a critical factor influencing performance across various contexts, including education. Lecturers with high self-efficacy are more motivated to perform their duties effectively. They feel confident in overcoming challenges and meeting student expectations, which contributes to higher-quality services.

Self-efficacy also shapes lecturers' attitudes and behaviors toward their work. Lecturers with strong self-belief tend to be more enthusiastic and committed, striving to enhance their teaching quality and provide better support to students. Moreover, self-efficacy positively impacts lecturer-student interactions. Confident lecturers are more likely to engage effectively with students, respond to their needs, and provide better guidance during the learning process.

The significant relationship between self-efficacy and OCB is another noteworthy finding. In the workplace, including higher education, high self-efficacy can motivate individuals to engage in behaviors that go beyond their formal duties. For lecturers, this may include assisting colleagues, contributing to curriculum development, or offering additional support to students. High self-efficacy thus fosters positive OCB behaviors.

Individuals with high self-efficacy are more likely to take initiative, try new approaches, and contribute to organizational goals beyond their specific responsibilities. This proactive attitude leads to greater OCB and enhances the overall work environment in higher education institutions (Almutairi, 2020; Bayır and Aylaz, 2021; Burhan, 2019; Zaini et al., 2022).

The significant influence between self-efficacy and OCB can also be understood from a psychological perspective. Individuals who feel capable of achieving certain goals have a more positive perception of their work environment and feel more satisfied with their work. In this positive atmosphere, they are more likely to exhibit OCB behaviors, such as helping others, collaborating with coworkers, and making additional contributions to the organization. Thus, the finding that self-efficacy has a significant effect on OCB and service quality highlights the importance of paying attention to psychological and motivational factors in improving individual performance and contribution to the work environment. Encouraging and developing lecturers' self-efficacy in higher education can be an effective strategy in stimulating positive OCB behavior and improving the quality of services in higher education, which in turn can contribute to the overall welfare of the organization. Further research can be directed toward understanding the deeper mechanisms behind the relationship between self-efficacy and OCB, as well as the implications for

human resource management and organizational development in higher education and other sectors (Boglerand Somech, 2023; Ocampo et al., 2018).

The findings that OCB does not significantly influence service quality in higher education and does not act as a mediator in the relationship between self-efficacy and service quality raise several important considerations. Although OCB is an expected behavior from lecturers in higher education, its contribution to service quality is not statistically significant. This suggests that other factors, such as organizational structure, institutional policies, or other individual characteristics, play a more dominant role in influencing the quality of services in higher education. These findings highlight the complexity of the relationship between organizational behavior and service quality in higher education contexts. While OCB is generally considered a factor contributing to organizational effectiveness and service quality, these findings suggest that the relationship may not be linear or direct. This underscores the importance of considering contextual and situational factors that may moderate the relationship between OCB and service quality in higher education. Previous studies have shown that other mediation variables can be used to mediate the effect of self-efficacy on service quality, such as locus of control and work engagement, which have been proven to mediate the influence of self-efficacy on service quality effectively.

These findings suggest that in efforts to improve the quality of services in higher education, focusing only on developing OCB may not be enough. While OCB can be an important part of a healthy organizational culture, other factors such as technical expertise, teaching experience, effective communication, and good time management must also be considered. Further research could explore the role of factors such as leadership, organizational culture, institutional support, and student characteristics in influencing the quality of services in higher education. Thus, this research provides valuable insights into the development of more holistic strategies and policies in improving service quality in private universities, as well as in understanding the complex dynamics between factors that influence service quality.

This study does not completely reject the Job Demands-Resources (JD-R) Model (Demerouti et al., 2001) but provides a more complex picture of how self-efficacy affects service quality through OCB. The finding that OCB does not significantly mediate indicates that in the context of private universities, there are other factors that are more relevant in improving service quality. This may indicate that the JD-R Model may be more appropriate if it considers other aspects, such as work engagement or specific job resources, that are more significant in this context.

The practical recommendation to enhance service quality by focusing on assurance and self-efficacy provides universities with clear, actionable strategies to improve their service delivery. By investing in staff development and creating a supportive, professional environment, universities can ensure that their staff not only feel confident in their abilities but are also able to consistently deliver the high-quality service that students and stakeholders expect. This holistic approach to service quality improvement will ultimately strengthen the institution's reputation and contribute to long-term success.

5. Conclusions

The hypothesis testing results show that self-efficacy has a significant influence on service quality (52.2%) and OCB (90.5%). However, while OCB has a positive effect on service quality (35.6%), this effect is not statistically significant. The mediation test indicates that OCB is not effective in mediating the relationship between self-efficacy and service quality, showing a low mediating effect. This suggests the need for a new strategy to enhance both self-efficacy and service quality.

The findings highlight that self-efficacy significantly impacts service quality in higher education, particularly through dominant indicators such as reliability. However, OCB's limited mediating role suggests that other factors, such as technical skills and institutional policies, might have a greater influence on improving service quality.

A practical recommendation for universities is to enhance service quality by focusing on assurance and self-efficacy. This can be achieved by building staff confidence and professionalism to ensure consistent and high-quality service delivery, thereby strengthening the institution's reputation and long-term success.

Future research should explore the deeper relationship between self-efficacy and service quality, as well as the factors that moderate this relationship. Such research can provide more comprehensive insights for practitioners and decision-makers in the field of education.

Compliance with ethical standards

Ethical considerations

Informed consent was obtained from all participants, ensuring they were aware of the study's purpose and their rights, including confidentiality. Data was anonymized and securely stored.

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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