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Factors influencing student retention university students: an analysis of institutional reputation, social responsibility and loyalty

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Introduction: This study investigates the impact of institutional reputation (IR), social responsibility (SR) and student loyalty (LY) on student retention (RT) in university students.

Methods: Using a quantitative, non-experimental, cross-sectional design, 409 students of private universities, both domestic and foreign, were surveyed.

Results: Analysis using Partial Least Square Structural Equation Modeling (PLS-SEM) revealed that SR positively influences LY (β = 0.218, p < 0.001) and RT (β = 0.123, p = 0.006). LY showed a strong impact on RT (β = 0.765, p < 0.001), whereas IR significantly influenced LY (β = 0.556, p < 0.001). Contrary to expectations, no direct relationship was found between institutional reputation and retention. In addition, it was shown that SR had a positive effect on IR (β = 0.531, p < 0.001).

Conclusion: Based on the results obtained, it is concluded that SR positively predicts LY, RT and IR, Ly positively predicts RT and IR LY, with significant implications for university management and research at this educational level.

KEYWORDS

students retention, university students, institutional reputation, social responsibility, student loyalty

1 Introduction

Private higher education institutions that wish to sustain themselves over time must learn how to compete in the competitive marketplace to attract and retain students. If they fail to do so, they will encounter financial problems, affect teaching quality and therefore have an impact on student satisfaction. Therefore, it is necessary to have strategies for students to commit and remain in the institution (Cardona et al., 2023; Xuerong and Kanjanapathy, 2024). For this reason, it is necessary to know the factors by which students decide to enroll in certain institutions.

Recent studies have identified several elements that contribute to student retention, including institutional reputation, university social responsibility (USR), and student loyalty (Latif et al., 2021; Rasoolimanesh et al., 2023; Snijders et al., 2020). These factors interact in a complex way, creating an ecosystem that directly affects the educational experience and, therefore, students' decision to continue their studies at a particular institution.

The factors highlighted in the perception and commitment towards their institutions are institutional reputation (Akıllı, 2023; Kihl et al., 2018) and university social responsibility (Latif et al., 2021; Suranta and Rahmawati, 2024), the latter factor taking more strength in influencing loyalty and the decision to remain in the educational institution. Nevertheless, while previous research emphasizes the significance of institutional loyalty and reputation, a knowledge gap exists due to the paucity of studies addressing these factors collectively, particularly from a strategic perspective that contributes to student retention in the university context (Raja, 2023).

We will also highlight that service quality generates student satisfaction and consequently trust in their institutions; these aspects favor student loyalty, being one of the important factors for student retention (Chandra et al., 2019; Khashab et al., 2022; Nguyen et al., 2024). This loyalty also fosters a sense of belonging and commitment to the institution. Nevertheless, while previous research emphasizes the significance of institutional loyalty and reputation, a knowledge gap exists due to the paucity of studies addressing these factors collectively, particularly from a strategic perspective that contributes to student retention in the university context, even more so in the Latin American context (Raja, 2023). In this regard, the present investigation aims to contribute to existing knowledge by addressing this gap. Therefore, the main objective of this research is to analyze how institutional reputation, university social responsibility and student loyalty influence student retention in university students.

1.1 Literature review

1.1.1 Influence of social responsibility on university student loyalty, institutional reputation and retention

The university social responsibility promotes with its actions the significant contribution to the care of the environment and society (Latif et al., 2021; Suranta and Rahmawati, 2024) and in turn this factor positively influences the loyalty of students of those institutions that develop these activities in addition to educational training. Likewise, Latif et al. (2021) had empirically evidenced that university social responsibility is of great influence on student loyalty. This study showed that the influence is also exerted through factors such as perceived service quality, student satisfaction, and trust in the university.

Congruent with this, Mostafa and Hamieh (2021) state that university social responsibility activities impact loyalty dimensions as well as student attitudes and behavior. Along the same lines, research by Suranta and Rahmawati (2024) found that institutional image and perception of service quality are considered factors that impact student loyalty and play a mediating role. This theoretical basis suggests that private educational institutions that effectively implement and communicate their social responsibility initiatives can expect an increase in student loyalty.

Dzimińska et al. (2018) argue that institutional recognition remains a key factor in the competitiveness and positioning of the institution. Besides, Wati et al. (2024) in their study found that the image of the institution has a positive effect on students' perceptions of the quality of the educational service. Also, Bowden et al. (2021) highlight in their research the importance of emotional commitment to generate institutional reputation, stating that social responsibility

and community engagement activities foster this commitment among students and stakeholders. For their part, Harymawan et al. (2023) add that reputation is a crucial aspect that will have a differentiating effect on institutions in the educational sector. Likewise, Stein and Wei (2024) argue that student satisfaction is important for building a favorable institutional reputation. For their part, Massucci and Docampo (2019) state that periodically evaluating academic reputation and social responsibility initiatives makes an institution more attractive to talented students and professors, which in turn leads to an improvement in academic reputation.

According to Rasoolimanesh et al. (2023), social responsibility, which encompasses the actions of universities to contribute positively to society and the environment, can influence students' decisions regarding their choice and retention at an educational institution. Although their study focused on international student mobility, it suggests potential implications for student retention in general. So too, other studies, such as those of Chrysikos et al. (2017) and Cole et al. (2014), found that satisfaction and social integration are key factors in student retention. Although they did not focus specifically on SR, their findings suggest that social responsibility initiatives, by enhancing the student's overall experience and connection to the institution, could contribute positively to retention. In this context, Ladyshewsky (2013) highlights that constant and meaningful interaction between instructors and students enhances the educational experience and encourages retention. In the same vein, Vander Schee (2008) highlights those strategies such as academic support, time management and commitment to goals are crucial to keep students engaged and avoid attrition.

Alshamsi and Mohebi (2022), emphasize that good academic advising not only helps students plan their studies, but also increases their sense of belonging and commitment to the institution. Likewise, Leary et al. (2021) demonstrated that successful social integration leads to greater commitment to the institution and improves retention rates.

1.1.2 Influence of loyalty on student retention of university students

Snijders et al. (2020) report that the intensity of the emotional bond students develops with their educational institution and the tangible manifestations of this bond demonstrate student loyalty. Students exhibit a spectrum of attitudes and behaviors that reflect and reinforce their sense of belonging and commitment to the institution. Student participation in various extracurricular activities, positive recommendations, and the expressed intention to continue in the same institution demonstrate this loyalty (Phuengrod et al., 2021; Snijders et al., 2020). Along the same lines, Cardona et al. (2023) argue that student retention is an important factor that influences graduation rates and the overall effectiveness of the institution. Besides, Xuerong and Kanjanapathy (2024) report that they evaluate institutional performance using student retention rates to demonstrate its effectiveness. In this context, Chandra et al. (2019) and Nguyen et al. (2024) found that factors such as service quality and institutional image influence student satisfaction, which leads to student retention. In fact, Khashab et al. (2022), also confirm that loyalty contributes to increased student retention and institutional success.

Research by Osman and Saputra (2019) and Tóth and Surman (2019) highlights that service quality is a key factor affecting student satisfaction and, consequently, loyalty, which, in turn, positively

influences a student's decision to remain in school. For their part, Panda et al. (2020) highlight that interpersonal relationships with teachers and a pleasant environment are important factors in generating student retention.

In parallel, Tekel and Korumaz (2020), found in their study that strong relationships with students allow the development of loyalty and commitment to the institution.

Similarly, student retention is also influenced by innovative classroom strategies, as well as project-based learning and problem-solving methods (Egbes and Ajaja, 2023; Rumahlatu and Sangur, 2019). Complementing these results, Kanduri and Radha (2023) identified that student loyalty is generated by perceived satisfaction and the teacher's teaching method.

The theoretical basis affirms that those private educational institutions that execute strategies to develop student loyalty will achieve high retention rates, as concluded in the studies made by Dzimińska et al. (2018), Iqbal et al. (2023), and Osman et al. (2024), that the quality of service, the perceived satisfaction of students and the trust generated influence loyalty and this is vital for institutions to be sustainable because it will be reflected in the permanence or retention of students.

1.1.3 Influence of institutional reputation on the loyalty an retention of university students

Institutional reputation, according to Akıllı (2023), is defined as "the overall impression and perception of an institution by various stakeholders, such as staff, service recipients, participants, the press, and the public." So also, Kihl et al. (2018) describe it as "an enduring status categorization of an organization's quality as perceived by external audiences and stakeholders." In relation to student loyalty, Amegbe et al. (2019) add that it encompasses a psychological attachment based on feelings of identification and affiliation.

Whereas Chandra et al. (2019) and Nguyen et al. (2024) found that the reputation of the university, which is an important component of institutional reputation, has a significant impact on student satisfaction and loyalty. This suggests that a positive institutional reputation increases student loyalty.

What's more, other authors have found that institutional reputation directly affects students' loyalty to higher education institutions Bakrie et al. (2019) and Masserini et al. (2019). By the way, Dzimińska et al. (2018) emphasized that in the context of higher education, institutional reputation, which is usually based on strong branding, has become an important determinant of an institution's competitiveness and status.

Above all, Wati et al. (2024) argue that students' perceived service quality is positively related to the image of the institution, which reflects the academic and non-academic characteristics of the institution. In their research, Bowden et al. (2021) highlight that students' emotional engagement determines an institution's reputation. Besides, Khashab et al. (2022) also highlights that student engagement favors higher retention rates and contributes to institutional success. Along the same lines, Stein and Wei (2024) argue that increased satisfaction favors student retention.

Bowden et al. (2021) and Harymawan et al. (2023) found that emotional engagement, well-being, and learning had a significant impact on institutional reputation, which was a key factor in student retention. However, Dzimińska et al. (2018) in their study, suggest

that institutional location is a factor in determining the competitiveness and recognition of an institutional brand. On the other hand, Wati et al. (2024) state that students relate the institutional image with their perception of the quality of service they receive. Along the same lines, (Stein and Wei, 2024) reinforce that increasing student satisfaction is a way to build institutional reputation. For their part, Proctor et al. (2018) identified the key strategies to promote student retention as favorable relationships with teachers and the various support systems offered by educational institutions.

And based on these questions, literature review was conducted, and hypotheses were developed regarding the influence of loyalty, social responsibility, and institutional reputation on student retention, as shown in Figure 1.

2 Method

2.1 Methodological approach

The aim of this study is to develop an explanatory model through empirical research and examine the impact of corporate reputation, social responsibility and student loyalty on student retention in private educational institutions. We adopted a non-experimental, cross-sectional, quantitative design because it allows the collection and analysis of data at a specific point and allows easy identification of relationships between variables without manipulating the research environment of the study (Hair et al., 2019).

2.2 Research questions

Based on the literature previously mentioned, the following research questions were formulated:

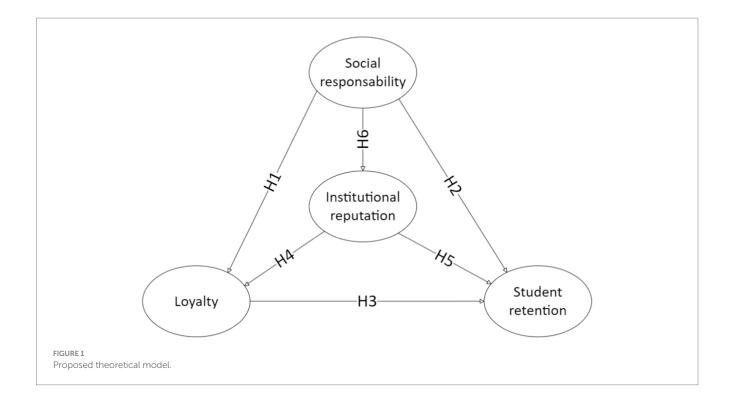
- 1 How does social responsibility influence the loyalty and retention of university students, as well as their institutional reputation?
- What influence does loyalty have on student retention?
- What is the effect of institutional reputation on the loyalty and student retention of university students in their institutions?

Hypotheses were developed as shown in Figure 1.

2.3 Sample and its characteristics

The sample consisted of 409 students and graduates of Peruvian and foreign higher education institutions. Random convenience sampling was used to facilitate the data collection process, ensuring that participants were selected based on their immediate availability and accessibility. To mitigate possible biases, efforts were made to diversify the sample within logistical constraints, including data collection in different Peruvian and foreign university institutions and at different times of the year.

Of the participants, 44% (n = 180) were men and 56% (n = 229) were women; 37% (151) were students and 63% (258) were graduates.



Regarding marital status, 39% (158) were single, 54% (213) were married, 26% (26) were cohabiting and 3% (12) were divorced. The mean age of the participants was 34.4 years, with ages ranging from 18 to 69 years. Regarding place of residence, 10% (42) were in Uruguay, 11% (43) in Ecuador, 8% (33) in Colombia and 71% (291) in Peru. As can be seen in Table 1.

2.4 Instruments

The following measurement instruments were used.

2.4.1 Social responsibility (SR)

Social responsibility was measured using a questionnaire created by Quezado et al. (2022) and validated in the Peruvian context by Cabrera-Luján et al. (2023). It consists of 7 items on a Likert scale 1–5 (where 1 represents totally disagree; 2 disagree, 3 neither agree nor disagree, 4 agree and 5 totally agree). It reported good reliability (α = 0.938) and validity (CFI = 0.957, SRMR = 0.047, RSMEA = 0.071).

2.4.2 Institutional reputation (IR)

Questionnaire created by Jalilvand et al. (2017) and validated in the Peruvian context by Cabrera-Luján et al. (2023). It consists of 4 items on a Likert scale with 5 response options (where 1 represents totally disagree; 2 disagree, 3 neither agree nor disagree, 4 agree and 5 totally agree). It reported good reliability (α = 0.949) and validity (CFI = 0.957, SRMR = 0.047, RSMEA = 0.071).

2.4.3 Student retention (RT)

Questionnaire designed by Saleh et al. (2015) and validated in the Peruvian context by Cabrera-Luján et al. (2023). It consists of 2 items in a Likert scale with five response options (where 1 represents totally

TABLE 1 Sociodemographic profile.

Variables f % Sex Female 229 56 Male 180 44 Age 18 to 30 years old 151 37 31 to 49 years old 228 56 50 and over 30 7 Marital status Single 158 39 Cohabitant 26 6 Married 213 52 Divorced 11 3 Widowed 1 0 Condition Student 151 37 Graduate 258 63 Place of residence Uruguay 42 10 Ecuador 43 11 Colombia 33 8 Peru 291 71	TABLE 1 Sociodemographic profile.						
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Place of residence Uruguay 42 10 Ecuador 43 11 Colombia 33 8	Student	151	37				
Uruguay 42 10 Ecuador 43 11 Colombia 33 8	Graduate	258	63				
Ecuador 43 11 Colombia 33 8	Place of residence						
Colombia 33 8	Uruguay	42	10				
	Ecuador	43	11				
Peru 291 71	Colombia	33	8				
	Peru	291	71				

disagree; 2 disagree, 3 neither agree nor disagree, 4 agree and 5 totally agree). It reported good reliability ($\alpha = 0.904$) and validity (CFI = 0.957, SRMR = 0.047, RSMEA = 0.071).

2.4.4 Loyalty (LY)

Questionnaire was developed by Dagger et al. (2011) and validated by Zhang et al. (2021) in Chinese university students. It consists of 3 Likert-scale items with five response options (where 1 represents strongly disagree; 2 disagree, 3 neither agree nor disagree, 4 agree, and 5 strongly agree). It reported good reliability (α = 0.904) and validity (χ ²/df = 4.09, CFI = 0.929, RSMEA = 0.068).

2.5 Data collection and methods of analysis

Given that the loyalty scale was validated in English, it was back translated and adapted to the Peruvian context by means of two focus groups (Beaton et al., 2000). First, a certified translator oversaw the initial translation of the research instrument. Then, adjustments were made to ensure its adaptation to the local environment through focus groups conducted on two occasions, the first for the adaptation of the semantics and the second resulted in the validation of the modifications of the first one, leaving the questionnaire ready for application. The reliability of the scale, as well as its psychometric properties, was tested using the Partial Least Square PLS-SEMB (Hair et al., 2017).

Data collection was carried out using a Google Form, via email and social networks, such as WhatsApp. Once collected, the data were processed and subjected to statistical analysis using SPSS v.26 and AMOS v.24.

In the data analysis, Partial Least Square PLS-SEM was used to test the hypotheses. PLS- SEM is a comprehensive multivariate statistical analysis approach that includes measurement and structural components to simultaneously examine the relationships between each of the variables in a conceptual model, which has the characteristic of multivariate analysis, i.e., it involves a number of variables equal to or greater than three (Hair et al., 2013). In addition, PLS-SEM was employed in the present study because it facilitates theory building (Hair et al., 2017). WarpPLS version 8.0 was used to perform the PLS-SEM analysis. This software was used because according to Kock (2014), WarpPLS provides options to use different algorithms for external and internal models in the calculation of latent variable scores, such as the path coefficient and the parameters associated with the *p*-value, identifying and considering nonlinear relationships in the structural model.

3 Results

The evaluation of a model using PLS-SEM is a two-step process that involves the evaluation of the measurement and structural models (Chin, 2010; Hair et al., 2011).

3.1 Evaluation measurement model

To assess the quality of reflective constructs, the convergent validity and reliability of the construct, i.e., internal consistency, must be assessed (Chin, 2010; Hair et al., 2011; Kock, 2015), and the indicators presented must be met (see Table 2).

Table 3 shows that all the indicators evaluated are met. First, all loadings exceed the value of 0.7. Additionally, the construct shows good results overall, as both Cronbach's Alpha and CR exceed the 0.7 threshold. Similarly, the AVE also meets the requirements, with all

TABLE 2 Indicators for assessing convergent validity and reliability of constructs

Indicator	Level
Load (L)	> 0.7
Composite Reliability (CR)	> 0.7
Cronbach's alpha (α)	> 0.7
Average variance extracted (AVE)	> 0.5
Variance Inflation Factor (VIF)	< 5
Significance level (p-value)	< 0.05

values being above 0.681. In addition, the values of the VIF Total Collinearity are below 3.632, which is within the acceptable range. Therefore, since all indicators are satisfactory, we proceed to the discriminant evaluation.

Discriminant validity provides an indication of the extent to which each construct is distinct from other constructs in the model (Chin, 2010). To meet discriminant validity the square root of the AVE for each construct must be greater than the highest correlation between the construct and other constructs in the model (Chin, 2010; Hair et al., 2011; Kock, 2014). Table 3 indicates that the square root of the AVE for all constructs is higher than the correlation with the other constructs, suggesting that the model exhibits adequate discriminant validity.

3.2 Evaluation of structural model

To evaluate the structural model, it is essential to verify and report two preliminary criteria: the significance of the path coefficients and the value of the R² coefficient for the endogenous constructs. Each hypothesis is linked to a causal relationship in the structural model, representing the interactions between pairs of constructs. Path coefficients have been calculated for each relationship in the model, along with their respective *p*-values. While the path coefficients should be significant, the value of the R² coefficient is highly dependent on the area of investigation. Chin (1998) suggests values of 0.67, 0.33 and 0.19 as, respectively, substantial, moderate and weak measures of R. In behavioral studies, a value of 0.2 for R² is generally considered acceptable (Hair et al., 2014; Kock, 2013).

3.3 Influence of social responsibility on institutional reputation, loyalty and student retention

The findings indicate a significant positive effect of SR on LY ($\beta = 0.2$; p < 0.01), a significant positive effect of SR on RT ($\beta = 0.12$; p < 0.01) and a significant positive effect of SR on IR ($\beta = 0.53$; p < 0.01). This shows the importance of the social responsibility of higher education institutions in student retention and loyalty, as well as to improve their reputation in the community.

3.4 Impact of student loyalty on college student retention

The findings indicate a significant positive effect of LY on RT (β = 0.77; p < 0.01). In the global model, this is the relationship that

TABLE 3 Results of the evaluation of the measurement model.

Items	Cargo	<i>p</i> -value	CR	Cronbach	AVE	Total VIF collinearity
SR1	0.803	<0.001	0.937	0.922	0.681	1.529
SR2	0.834	<0.001				
SR3	0.867	<0.001				
SR4	0.812	<0.001				
SR5	0.787	<0.001				
SR6	0.832	<0.001				
SR7	0.839	<0.001				
IR1	0.894	<0.001	0.944	0.921	0.809	1.974
IR2	0.932	<0.001				
IR3	0.898	<0.001				
IR4	0.872	<0.001				
LY1	0.921	<0.001	0.946	0.914	0.853	3.632
LY2	0.93	<0.001				
LY3	0.92	<0.001				
RT1	0.951	<0.001	0.95	0.894	0.904	3.028
RT2	0.951	<0.001				

presented the largest effect size indicated by the standardized β coefficient with a high statistical significance, which indicates that a higher student retention will be obtained in those university institutions whose students present a high loyalty.

3.5 Influence of institutional reputation on university student loyalty and student retention

The results indicate that institutional reputation exerts a small but statistically significant effect on student retention among university students (β = 0.02; p < 0.38). This finding suggests that a university's reputation influences students' decisions to continue their enrollment at the institution. Although the effect size is modest, its statistical significance positions it as one of the contributing factors to student retention.

In this study, the R² for the IR, LY and RT coefficients were 0.28, 0.48 and 0.70, respectively. Therefore, all R² values had relatively high and acceptable values. The values in this study suggest that the variables (SR, IR, and LY) account for a high percentage of the variance in RT. Table 4 and Figure 2 present the results of hypothesis testing and evaluation of path coefficients. For the overall model fit index, the six goodness-of-fit indices (Kock, 2014) were considered, with a confidence level of 95%, the efficiency indices are as follows:

- Average Path Coefficient (APC) and p < 0.05.
- Average R-squared (ARS) and p < 0.05.
- Adjusted Average Root Mean Square (AARS) > 0.02 and p < 0.05.
- Average block VIF (AVIF), acceptable si ≤ 5 , ideally ≤ 3.3 .
- Average full collinearity (AFVIF), acceptable si \leq 5, ideally \leq 3.3.
- Tenenhaus GoF (GoF), small≥0.1, medium≥0.25, large≥0.36.

TABLE 4 Discriminant validity.

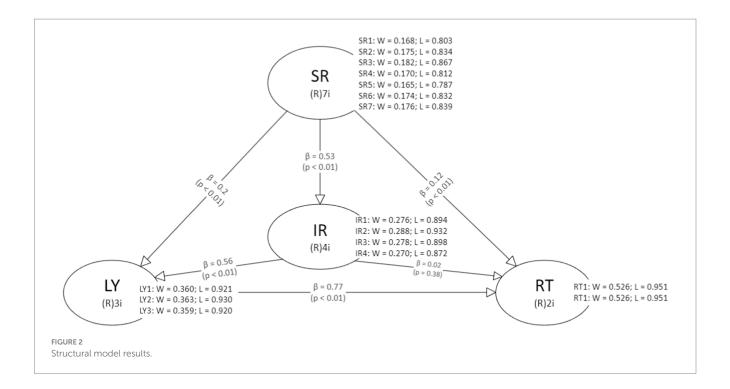
	SR	IR	LY	RT
SR	0.825			
IR	0.527	0.899		
LY	0.511	0.669	0.924	
RT	0.509	0.562	0.811	0.951

In the case of the present study the six fit indices suggested that the model fit was more than acceptable: average path coefficient (APC) = 0.368, p < 0.001; average R2 (ARS) = 0.488, p < 0.001; average adjusted average R2 -squared (AARS) = 0.486, p < 0.001; average block variance inflation factor (AVIF) = 1.645 (acceptable if \leq 5, ideally \leq 3.3); average full collinearity variance inflation factor (AFVIF) = 2.541 (acceptable if \leq 5, ideally \leq 3.3); and Tenenhaus GoF (GoF) = 0.629 (small \geq 0.1, medium \geq 0.25, large \geq 0.36). The predictive validity of a construct can be confirmed when the value of the associated R² coefficient is greater than zero. In this study, all the values of the endogenous variables in the model meet this criterion, suggesting acceptable predictive validity for the entire model.

4 Discussion

4.1 Effect of social responsibility on student loyalty, retention, and institutional reputation

According to the results of the first hypothesis (H1), social responsibility influences the loyalty of students in private educational institutions, these results are in agreement with those of Latif et al. (2021) who showed that university social responsibility (USR)



positively predicts student loyalty, with perceived service quality, student satisfaction and trust in the university as key mediators. Similarly, Mostafa and Hamieh (2021) found that SR activities have a significant impact on students' attitudinal and behavioral loyalty in the Lebanese education sector.

Also, Suranta and Rahmawati (2024) highlighted that higher education image and service quality measured the effect of SR on student loyalty in Indonesia. In the same vein, Wong et al. (2023) added that an institution's brand reputation acts as a mediator between SR and student loyalty, suggesting that a positive perception of SR initiatives enhances loyalty through the institution's reputation. So also, (Hossain et al., 2019). Research on the impact of CP on the health sector has shown that CP practices increase patient satisfaction and loyalty. These results are consistent with the notion that SR practices can increase loyalty among various stakeholders, including students at private institutions. The results of this study show that social responsibility plays an important role in motivating students in private educational institutions.

Social responsibility influences student retention in private institutions. There are several studies that have examined factors associated with student retention in higher education, such as (Thai and Tho, 2024) study that examined the impact of university service quality, student satisfaction, and change resistance on student privacy. Higher education institutions. Emphasizes service quality and student satisfaction in student retention. Similarly, Xuerong and Kanjanapathy (2024) indicated that the financial burden on students in higher education institutions indicated that student tuition fees and fees are the main cost of these institutions. Similarly, Al Hassani and Wilkins (2022) discussed the impact of organizational identification and institutional reputation on student satisfaction and behavior, noting that these factors play an important role in student retention. In terms of social responsibility, Nirmalasari et al. (2024) emphasized the social and emotional power of students to increase their concentration, attendance and learning ability. This suggests that creating a socially responsible environment in educational institutions can have a positive impact on student retention.

On the other hand, the results indicate states that social responsibility influences the institutional reputation of private educational institutions. This is consistent with the study by Rasoolimanesh et al. (2023) who found that demonstrating social responsibility practices not only contributes to the welfare of society, but also enhances the image and reputation of higher education institutions. In the same vein, Azeem et al. (2019) identified a positive relationship between the social responsibility of institutions and their reputation, indicating a strong link between these two factors. Besides, Chen et al. (2020) argued that maintaining social responsibility requires building and maintaining external social capital, which improves corporate reputation. In addition, Taamneh Mohammad et al. (2022) found various corporate social responsibility (CSR) practices, including ethical, philanthropic, and legal aspects, significantly improve the reputation of universities, especially in developing countries such as Jordan. Furthermore, other authors believe that the implementation of social responsibility in universities and involvement in student misconduct and humanitarian activities helps to improve the institution's reputation (Berei, 2020; Jie and Huam, 2019). Furthermore, Prodanova et al. (2021) emphasized that perceived organizational support has a significant impact on student satisfaction, which affects the reputation of the institution.

4.2 Effect of college student loyalty on student retention

The research results support that student loyalty affects student retention (Bakrie et al., 2019; Lee and Seong, 2020; Ong et al., 2023; Sugiharto et al., 2021; Wang et al., 2024; Xuerong and Kanjanapathy, 2024). These authors analyzed this relationship in detail and concluded that the relationship between the factors was associated with student loyalty and subsequent student retention. Likewise, in higher education, factors such as the quality of student instructors, institutional

involvement, and reputation play an important role in increasing student loyalty (Bakrie et al., 2019; Snijders et al., 2020). Likewise, the commitment-trust theory positively supports student loyalty, promoting the development of strong relationships and a positive institutional image (Bakrie et al., 2019; Snijders et al., 2020). Furthermore, an institution's reputation, along with service quality and student satisfaction, has a significant impact on student loyalty and retention (Bakrie et al., 2019; Sugiharto et al., 2021). The financial burden on students in the country is high, as tuition fees are the primary source of revenue for private institutions (Xuerong and Kanjanapathy, 2024). Thus, strategies to increase student loyalty by improving service quality, satisfaction, and engagement are critical to the sustainability and success of these institutions (Jie and Huam, 2019; Wang et al., 2024). Furthermore, the recognition of training and development programs for teachers and staff as a tool to enhance satisfaction, loyalty, and retention underscores the importance of investing in human resources to enhance the overall student experience (Mampuru et al., 2024).

4.3 Influence of institutional reputation on university student loyalty and retention

This result is supported by Bakrie et al. (2019) who found in their study that there is a statistically significant relationship between university reputation and student loyalty, emphasizing the role of the reputation of institutions in fostering student loyalty. Besides, Wong et al. (2023) argue in their findings that institutional reputation is an influence on student loyalty, as well as satisfaction and service quality. Undoubtedly, Mulyono et al. (2020) found that reputation is an important predictor of loyalty in higher education, emphasizing its mediating role in shaping student loyalty. These results support the idea that an institution's reputation plays an important role in shaping student loyalty. Indeed, Hasan and Hosen (2022) emphasized the relationship between university reputation and service quality, satisfaction, and student loyalty.

Finally, the findings shown that institutional reputation influences student retention in private educational institutions. Various studies carried out support this rejection since the important factors for student retention are service quality, student satisfaction and loyalty, and not only institutional reputation (Al Hassani and Wilkins, 2022; Forid et al., 2022; Moslehpour et al., 2020; Tan et al., 2022). Although institutional reputation can influence student loyalty (Raja, 2023), it does not determine student retention, suggesting the involvement of other intervening variables in this relationship. Furthermore, higher organizational reputation could instill high expectations in students, which they might not meet, resulting in higher dissatisfaction and lower organizational retention (Sears et al., 2017).

Private higher education institutions must retain recruited students in order to maintain their institutional budgets (Le et al., 2021). In addition, it has been highlighted that low student retention can have a negative impact on the reputation of the institution (Adeola Atobatele et al., 2024). However, studies have shown that student satisfaction, service quality, and barriers to change mediate the relationship between service quality and student behavioral intentions in private universities (Tan et al., 2022). So also, Forid et al. (2022) suggest that institutions that fail to ensure student retention jeopardize their reputation, financial gains, and possibly their survival. On the other hand, Moslehpour et al. (2020) indicate that student satisfaction

mediates the influence of service quality on institutional reputation. Likewise, Varol and Catma (2021) and (Wade, 2019) noted that institutional selectivity and governance structures are also significant predictors of student retention.

4.4 Theoretical implications

The research expands the comprehension of quality management theory (Grönroos, 1984), incorporating variables pertaining to educational quality, such as social responsibility, institutional reputation, and student loyalty as significant factors in the retention of university students. This approach offers a more comprehensive perspective on the dynamics that influence student retention. The findings substantiate the theoretical significance of social responsibility, not only as an ethical practice but also as a strategic factor that directly impacts student loyalty and retention. This suggests the necessity to integrate social responsibility more prominently into theoretical models of university management. Furthermore, the study elucidates a more complex relationship between institutional reputation and retention than previously postulated, challenging certain prior theoretical assumptions and indicating the need to re-evaluate existing models of institutional reputation within the context of higher education.

The mediating role of student loyalty between various institutional factors and retention emerges as a significant theoretical finding. This contributes to a more nuanced understanding of how student retention is developed and maintained, underscoring the importance of considering loyalty as a central construct in retention models. These theoretical insights provide a solid basis for future research and the development of more accurate models in the field of higher education management.

4.5 Practical implications

Educational institutions should prioritize and integrate USR practices into their overall strategies, not only as an ethical obligation, but as an effective tool to improve student loyalty and retention. It is crucial to implement specific programs to cultivate student loyalty, such as student experience improvements, mentoring programs, and opportunities for participation in the university community. Effective communication about social responsibility initiatives and other factors that influence reputation and loyalty is critical, making sure students are aware of and value these efforts. Take a more holistic approach to their retention strategies, considering the interplay between MSW, reputation, loyalty, and other institutional factors. In addition, it is crucial to train academic and administrative staff on the importance of SR and its role in fostering student loyalty and retention. In addition, institutions can develop more personalized services and programs that address the specific needs of their student population, based on an understanding of the factors that influence loyalty and retention.

5 Conclusion

The results of this study highlight the importance of SR in university educational institutions. SR practices had a significant impact on student acceptance. They aspire to sustain a lasting

connection with the institution. Furthermore, the identification of SR as a factor influencing student retention holds significant implications for institutional strategy, student experience management, and competitive positioning in the education market. Researchers discovered that student loyalty significantly predicts retention, highlighting its importance in retention strategies and institutional reputation. Research indicates that while an institution's reputation may not directly correlate with retention, it positively impacts student trust and satisfaction, thereby enhancing institutional loyalty. Finally, specific SR activities such as community projects, environmental sustainability programs, and commitment to social causes can significantly contribute to enhancing an organization's image and reputation. These results highlight the importance of integrating SR into a CSO's overall strategy. This is not only an ethical obligation but also a critical element for the success and long-term sustainability of institutions of higher learning.

5.1 Limitations and recommendations

It is known that selecting a convenience sample comes with limitations, including a lack of representativeness and potential bias in participant selection. To minimize these effects, we implemented the following steps: We ensured quality control in both data collection and analysis by providing a variety of data collection centers by institution and country. Moreover, the cross-sectional nature of data collection can be a limiting factor in establishing causal relationships between variables (Finkel, 1995). Future studies should conduct longitudinal investigations of these variables. Because the variables are self-reported measures, the results may be biased (Podsakoff et al., 2003). This comprehensive study lays the groundwork for future research on the influence of various factors. Future research would benefit from expanding the analysis to include more institutional and cultural contexts, as well as using longitudinal methods to better understand how the influence of these factors changes over time. We also recommend examining potential mediators or moderators of the relationship, including quality of education, institutional support, and socioeconomic factors.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

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Ethics statement

The studies involving humans were approved by the study was conducted in accordance with the Declaration of Helsinki, and approved by the Ethics Committee of the Peruvian Union University with a protocol code (2023-CE-EPG-00115). The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

RA-T: Conceptualization, Investigation, Methodology, Writing – original draft, Writing – review & editing. RM-H: Conceptualization, Investigation, Methodology, Resources, Writing – original draft. SH-C: Conceptualization, Investigation, Methodology, Resources, Writing – original draft. CA-R: Investigation, Project administration, Supervision, Validation, Writing – original draft, Writing – review & editing.

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