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Enhancing Student Retention through Academic Support and Course Design: Satisfaction as Mediator

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Abstract

This study highlights the critical role of student retention in higher education, focusing on academic support services, course design, and student satisfaction as a mediator. The study aims to explore these elements' interactions to enhance retention rates, offering actionable insights for educational institutions. Surveys were strategically distributed to capture diverse student experiences, yielding 476 responses from 588 surveys, with 433 suitable for analysis. Using Partial Least Squares Structural Equation Modeling (PLS-SEM) for data analysis, the study employed Smartpls4 to test hypotheses. Findings demonstrated that academic support services and course design positively impact student satisfaction and retention. Hypothesis testing indicated vital pathways between academic support and retention, course design and satisfaction, and satisfaction as a mediator. For future research, longitudinal studies should be conducted to assess the long-term impacts of enhanced academic support and course design on retention. Expanding the research to include diverse educational settings may provide nuanced insights across various student populations. Incorporating technological integration and qualitative methods can further enrich the findings. The study's implications are significant: By focusing on personalized academic support and engaging course design, institutions can boost student satisfaction and retention, enhancing reputation and loyalty.

This research lays a foundation for institutions seeking to excel in a competitive educational landscape by addressing evolving student needs and promoting sustained academic success and growth.

Keywords: Academic Support Service, Course Design, Students' Satisfaction, Students' Retention, Open Flexible Distance Learning

Introduction

Student retention is a critical focus for higher education institutions, especially in the context of open online flexible distance learning. The importance of retention in these institutions is underscored by the need to ensure educational accessibility and equity, addressing diverse learner needs without geographical and temporal limitations (Barbera et al., 2020). Current global issues in student retention include the challenge of maintaining student engagement in a digital environment and addressing socioeconomic and technological disparities (Tight, 2020). Moreover, flexible education models demand innovative retention strategies that accommodate varied learning paces and styles (Caballero, 2020). Research on student retention has identified significant gaps, particularly in understanding the nuanced factors influencing dropout rates in distance learning environments (Kebah et al., 2019). While traditional research often focuses on in-person academia, the intricacies of online learning environments, such as digital engagement and community building, are insufficiently explored (Bukhatir et al., 2023; Seery et al., 2021). Additionally, there is a need for more studies on predictive analytics to proactively identify students at risk of dropping out (Uliyan et al., 2021). This study's significance to policymakers, higher education institutions, and students is multifaceted. For policymakers, understanding retention dynamics is crucial for developing educational strategies that promote lifelong learning and workforce readiness (Shah et al., 2021). Institutions benefit through enhanced retention strategies that improve graduation rates and institutional reputation, while students gain from tailored support systems that enhance their educational experience (McDaniel et al., 2024). Addressing these research gaps will aid in building comprehensive systems that foster student engagement and success across diverse educational platforms (Nieuwoudt & Pedler, 2023; Palacios et al., 2021). Conclusively, strategic focus on retention can bridge existing educational disparities, fostering a more inclusive and influential higher education landscape (Yazdani et al., 2024). This study aims to assess the direct and indirect relationship between course design and academic support services with students' retention and students' satisfaction as a mediator in open online flexible distance learning higher education institutions.

Literature Review

Underpinning Theory

Tinto's Student Integration Model emphasizes the significance of both academic and social integration in influencing student retention within higher education settings. According to Tinto (1975), students are more likely to persist and succeed if they feel integrally connected to their academic institution on both an intellectual and social level. The model proposes effective integration through positive interactions within the formal academic system, including course structure and content, and informal social systems, such as peer and faculty relationships. In the context of open online flexible distance learning, Tinto's model can be adapted to focus on how course design and academic support services contribute to this sense of integration. The model suggests that well-structured and engaging course design can enhance students' academic integration by facilitating meaningful learning experiences and

promoting active engagement with course materials. Similarly, robust academic support services, such as tutoring and advising, can enhance academic and social integration by providing personalized guidance and fostering a supportive learning community (Tinto, 1993). Furthermore, student satisfaction serves as a mediating factor within this framework. When students find their coursework engaging and support services accessible and helpful, their satisfaction levels increase, leading to more substantial institutional commitment and higher retention rates (Tinto, 2012). Thus, applying Tinto's Student Integration Model to this study highlights the critical role of course design and academic support in promoting retention and a holistic educational experience that satisfies and engages students within distance learning environments. This approach underscores the importance of designing educational strategies that build strong academic foundations and supportive communities on online platforms.

Relationship between Academic Support, Students' Satisfaction, & Students' Retention

Academic support and student retention are pivotal in higher education, with student satisfaction as a critical mediator (Kebah et al., 2019). Academic support services, which include tutoring, advising, and mentoring, are crucial for helping students overcome academic challenges and integrate into the institution's community (Li et al., 2020). When students perceive these services as effective and supportive, their overall satisfaction with the educational experience increases significantly (Al Hassani & Wilkins, 2022). This satisfaction plays a crucial mediating role, strengthening the student's commitment to their institution and enhancing retention rates (Nashaat et al., 2021). Student satisfaction acts as an emotional buffer and can amplify the positive effects of academic support on retention (Osman & Sentosa, 2013). When students feel satisfied with the support they receive, they are more likely to feel a sense of belonging and connection to the institution, which is crucial for their decision to continue their studies (Tian et al., 2021). Furthermore, the quality of interaction with academic and non-academic staff forms a robust support network that enhances this sense of satisfaction, thereby increasing retention (Abeysooriya et al., 2024). Therefore, enhancing academic support services is paramount for institutions aiming to improve student satisfaction and retention. This holistic approach targets academic needs and nurtures an engaging and supportive academic environment (Bukhatir et al., 2023). Therefore, the following hypotheses were proposed for this study:

H1: There is a relationship between academic support services and student retention in open online flexible distance learning higher education institutions

H2: There is a relationship between academic support services and student satisfaction in open online flexible distance learning higher education institutions

H3: Student satisfaction mediates the relationship between academic support services and student retention in open online flexible distance learning higher education institutions

Relationship between Course Design, Students' Satisfaction, & Students' Retention

The relationship between course design and student retention is crucial in online learning environments, with student satisfaction as a critical mediating factor. High-quality course design, which includes clear structure, interactive content, and ease of navigation, significantly impacts students' satisfaction and their decision to continue in a course (Puriwat & Tripopsakul, 2021). When students perceive the course design as compelling and engaging, their satisfaction levels rise, enhancing their motivation and likelihood of retention (Sharif Nia et al., 2023). Student satisfaction mediates the impact of course design on retention by

enhancing the learning experience and engagement (Osman et al., 2018). The satisfaction derived from a well-designed course leads to increased academic efficacy and a more substantial commitment to academic goals, which are crucial for retention in an online learning context (Amoozegar et al., 2022). Furthermore, the positive perception of course design can enhance students' self-efficacy and motivation, fostering a conducive learning environment that supports retention (Ye et al., 2022). Moreover, students' online learning experiences during the COVID-19 pandemic have shown that course satisfaction plays a mediating role in their intention to continue using online platforms for learning, highlighting the importance of thoughtful course design (Li et al., 2023). Therefore, institutions aiming to improve retention should prioritize enhancing course design to meet students' expectations and needs, fostering satisfaction and sustained engagement. Thus, the following hypotheses were proposed for this study:

H4: There is a relationship between course design and student retention in open online flexible distance learning higher education institutions

H5: There is a relationship between course design and student satisfaction in open online flexible distance learning higher education institutions

H6: There is a relationship between student satisfaction and student retention in open Online flexible distance learning higher education institutions

H7: Student satisfaction mediates the relationship between course design and student retention in open online flexible distance learning higher education institutions

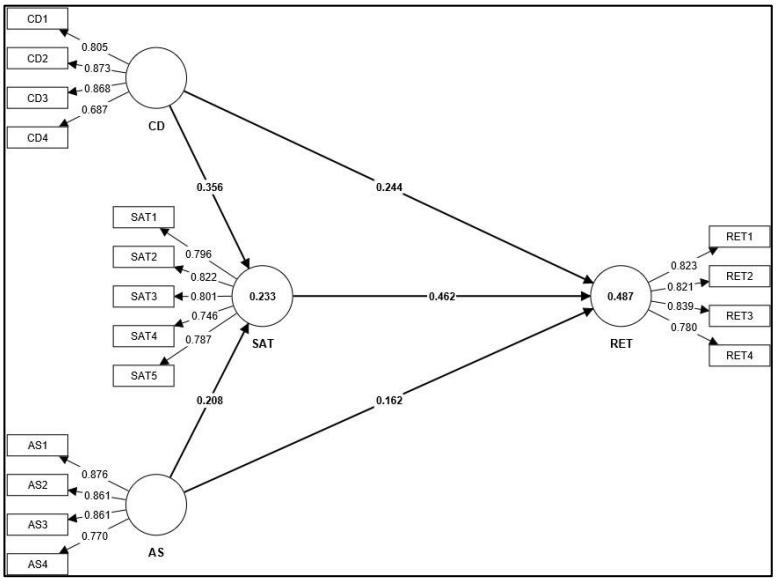

Figure 1: Research Model

Notes: CD=Course Design AS=Academic Support service SAT=Satisfaction RET=Retention

Methodology

This study was designed to thoroughly assess the direct and indirect impacts of timely feedback and lecturer quality on student retention within open, online, and flexible distance learning environments, with student satisfaction as a mediating factor. To achieve this, researchers utilized surveys for primary data collection, selecting valid and reliable measures based on a comprehensive literature review. Due to the absence of a complete population list, purposive sampling was used, and survey questionnaires were emailed to the selected participants. The study evaluated 17 observed variables, including exogenous variables like

academic support service (4 items) adopted from Joseph & Blair (2011), course design (4 items), and student satisfaction (5 items), all sourced from Bangert (2004). The endogenous variable for student retention was taken from Alison (2004) and included four items. Respondents assessed the constructs using a Likert scale with five options, ranging from strongly disagree to strongly agree. Out of 588 surveys distributed, 476 were returned, achieving an impressive response rate of 81%, suitable for structural equation modeling (SEM) analysis. Of these, 433 surveys were clean and adequate for further analysis. The data analysis and hypothesis testing were conducted using Smartpls4 software, which was recognized for its efficiency in SEM and multivariate analysis, as Ringle et al. (2022) recommended. This software enabled a detailed evaluation of the proposed hypotheses and a comprehensive analysis of measurement and structural models.

Data Analysis

Respondents' Profiles

Analyzing the demographic profiles of respondents reveals critical insights. Regarding gender distribution, the sample consists of 156 males, 36.0%, and 277 females, accounting for 64.0%, indicating a female-majority sample. In terms of age, the largest segment comprises 195 respondents under 30 years old, representing 45.0% of the sample. Those aged between 31- and 40-years number 172, or 39.7%. The 41 to 50 age group includes 56 respondents, constituting 12.9%. Smaller groups consist of those aged 51 to 60, with six respondents (1.4%), and over 60, with four respondents (0.9%). Considering the year of study, 125 respondents are first-year students, accounting for 28.9% of the sample, followed by 76 second-year students at 17.6%. Third-year students comprise 112 individuals, representing 25.9%, while fourth-year students' number 71, or 16.4%. There are 22 fifth-year students, making up 5.1%, and 27 students studying for over five years, representing 6.2%. As for academic level, 61 students (14.1%) are pursuing a diploma, while the largest group of 273 respondents (63.0%) are enrolled in bachelor's degree programs. Postgraduate diploma students are number 34, representing 7.9%. Master's students total 56, or 12.9%, and nine doctorate-level respondents constitute 2.1%. The data suggests a predominance of female respondents, primarily under 30.

Common Method Bias

Based on the table presented and following the recommendations of Kock (2015) and Kock & Lynn (2012), the full collinearity test indicates that variance inflation factors (VIFs) are below the threshold of 3.3, suggesting that common method bias is unlikely to be a significant issue in this study. For "Students' Retention," the VIFs range from 1.422 to 2.568, while "Course Design" and "Academic Support Service" have VIFs below 1.273 and 1.260, respectively. "Student Satisfaction" shows slightly higher VIFs up to 2.669; however, all values remain under the critical level. This analysis implies that the constructs do not exhibit problematic multicollinearity that would suggest common method bias.

Table 1
Full Collinearity Test

	RET	CD	AS	SAT
RET		2.558	2.568	1.422
CD	1.273		1.099	1.260
AS	1.246	0.933		1.241
SAT	1.483	0.378	2.669	

Measurement Model

In this study, we followed the methodology recommended by Hair et al. (2017) to evaluate each measurement in the first and second order, identifying items with loadings below the 0.7 threshold. The analyses of construct reliability and validity revealed that the Average Variance Extracted (AVE) for all constructs ranged from 0.625 to 0.711, surpassing the 0.5 benchmark, which indicates convergent solid validity (Hair et al., 2017) (Table 2). Furthermore, the composite reliability for all constructs exceeded 0.7, with values ranging from 0.834 to 0.864. Cronbach's alpha values also surpassed the 0.7 threshold, ranging from 0.824 to 0.863 (Table 2). To ensure discriminant validity, we initially assessed cross-loadings to verify the proper representation and measurement of the respective constructs (Table 2). Following this step, we used the Heterotrait-Monotrait (HTMT) ratio for further assessment, complying with the recommended criterion for evaluating discriminant validity in Variance-Based Structural Equation Modeling (VB-SEM) as suggested by Henseler, Ringle & Sarstedt (2015). Table 2 shows the HTMT ratios, original sample, and 95% confidence intervals, confirming adherence to the HTMT threshold 0.85.

Table 2
Construct Reliability and Validity & Hetrotrait-Monotrait (HTMT) Ratios

						HTMT		
Constructs	Items	Loadings	CA	CR	AVE	AS	CD	RET
Academic	AS1	0.876	0.863	0.864	0.711			
Support	AS2	0.861						
Service	AS3	0.861						
	AS4	0.770						
Course	CD1	0.805	0.824	0.834	0.659	0.497		
Design	CD2	0.873						
	CD3	0.868						
	CD4	0.687						
Retention	RET1	0.823	0.833	0.836	0.666	0.504	0.614	
	RET2	0.821						
	RET3	0.839						
	RET4	0.780						
Satisfaction	SAT1	0.796	0.850	0.852	0.625	0.417	0.525	0.743
	SAT2	0.822						
	SAT3	0.801						
	SAT4	0.746						
	SAT5	0.787						

Notes: CA=Cronbach Alpha CR=Composite Reliability AVE=Average variance Extracted

Structural Model

In this study, the structural model was analyzed following the methodology outlined by Hair et al. (2017), which entailed an in-depth evaluation of pathway coefficients (β) and coefficients of determination (R^2). The analysis was conducted using the Partial Least Squares (PLS) approach, utilizing 5000 subsamples to determine the significance of the path coefficients. Table 3 presents the findings from the hypothesis testing, including confidence intervals for the path coefficients (beta), as well as the corresponding t-statistics and p-values. This comprehensive analysis provides valuable insights into the significance and robustness of the relationships among variables within the structural model. The detailed results of the hypothesis testing in Table 3 offer an in-depth analysis of each hypothesis, showcasing beta coefficients, t-statistics, p-values, and conclusions regarding the support for each hypothesis, thereby enhancing the study's findings with greater depth and clarity.

The table presents the hypothesis testing results, providing insights into the relationships between academic support service, course design, satisfaction, and student retention. The first hypothesis *(H1)* investigates the direct effect of academic support services on retention, with a beta coefficient of 0.162, a t-statistic of 3.319, and a p-value of 0.001, all of which indicate statistical significance; hence, H1 is accepted, showing that academic support services positively impact student retention. The second hypothesis (H2) focuses on academic support services' effect on student satisfaction, revealing a beta of 0.208, a t-statistic of 4.276, and a p-value of 0.000. These results are significant, leading to the acceptance of H2, which confirms that academic support services significantly enhance student satisfaction. The third hypothesis *(H3)* assesses the mediating role of satisfaction in the relationship between academic support services and retention, presenting a beta of 0.096, a t-statistic of 3.841, and a p-value of 0.000. This hypothesis is accepted, indicating satisfaction's mediating effect on retention. The fourth hypothesis *(H4)* examines the direct impact of course design on retention, featuring a beta of 0.244, a t-statistic of 5.052, and a p-value of 0.000; these significant results lead to the acceptance of H4, signifying that well-designed courses contribute significantly to retention. According to the fifth hypothesis *(H5)*, course design affects satisfaction, with a beta of 0.356, a t-statistic of 7.202, and a p-value of 0.000. The vital significance here supports the acceptance of H5, confirming that effective course design greatly enhances satisfaction. Moving to the sixth hypothesis *(H6),* the effect of satisfaction on retention is assessed, showing a beta of 0.462, a t-statistic of 11.042, and a p-value of 0.000, which highlights a highly significant relationship; thus, H6 is accepted, indicating that higher satisfaction significantly boosts retention. Finally, the seventh hypothesis *(H7)* investigates the mediating effect of satisfaction on the relationship between course design and retention, presenting a beta of 0.165, a t-statistic of 5.980, and a p-value of 0.000. This hypothesis is accepted, demonstrating that satisfaction mediates the positive influence of course design on retention.

Effect Sizes (f^2) & Variance Inflation Factor (VIF)

The effect sizes (f^2), which are evaluated independently of the sample size, adhere to Cohen's criteria (1992), categorizing them into small (0.020 to 0.150), medium (0.150 to 0.350), or large (0.350 or above). In this research, the identified effect sizes ranged from small (0.040) to large (0.319). According to Table 3, all Variance Inflation Factor (VIF) values were under the relatively lenient threshold of 5, with the maximum recorded value being 1.384. This acceptable level of collinearity permits meaningful comparisons and interpretations of

coefficients within the structural model. Additionally, the model demonstrates a notable degree of explained variance for the endogenous construct, as depicted by an (R^2) value of 0.487 (Figure 1). Regarding the mediator, the model accounted for approximately 23.3% of the variance within the structure, as evidenced by an (R^2) value of 0.233.

Table 3
Hypotheses Testing Results, f^2 & variance Inflation Factor (VIF)

Hypotheses	Path	T statistics	P values	f^2	VIF	2.50%	97.50%	Decision
H1: AS -> RET	0.162	3.319	0.001	0.040	1.275	0.061	0.253	*Accepted*
H2: AS -> SAT	0.208	4.276	0.000	0.046	1.218	0.111	0.298	*Accepted*
H3: AS -> SAT -> RET	0.096	3.841	0.000			0.050	0.147	*Accepted*
H4: CD -> RET	0.244	5.052	0.000	0.084	1.384	0.151	0.336	*Accepted*
H5: CD -> SAT	0.356	7.202	0.000	0.136	1.218	0.254	0.447	*Accepted*
H6: SAT -> RET	0.462	11.042	0.000	0.319	1.304	0.378	0.542	*Accepted*
H7: CD -> SAT -> RET	0.165	5.980	0.000			0.111	0.220	*Accepted*

Note: significant p<0.05

PLSpredicts & Cross-Validated Predictive Ability Test (CVPAT)

The model's inference and management recommendations were assessed using an out-of-sample predictive analysis via the PLSpredict method, as introduced by Shmueli et al. (2016, 2019). According to Table 4, PLS-SEM provided superior (Q^2) predictions (greater than 0) compared to naive mean predictions and consistently achieved lower RMSE values than those of linear model (LM) benchmarks, indicating robust predictive power. In six of nine cases, the RMSE values for PLS-SEM predictions were lower than those of the LM benchmark, highlighting the model's predictive solid capacity, as shown in Table 6. The Cross-Validated Predictive Ability Test (CVPAT), as proposed by Hair et al. (2022) and its application in conjunction with PLSpredict analysis by Liengaard et al. (2021), is noteworthy. Table 5 further corroborates PLS-SEM's superior predictive performance, with lower average loss values than indicator averages and LM benchmarks, thus demonstrating its enhanced predictive capabilities.

Table 4
PLSpredicts

	Q^2predict	PLS-RMSE	LM_RMSE	PLS-LM
RET1	0.241	0.651	0.653	-0.002
RET2	0.222	0.620	0.624	-0.004
RET3	0.226	0.687	0.694	-0.007
RET4	0.134	0.728	0.730	-0.002
SAT1	0.128	0.656	0.653	0.003
SAT2	0.143	0.649	0.652	-0.003
SAT3	0.124	0.681	0.668	0.013
SAT4	0.116	0.691	0.697	-0.006
SAT5	0.181	0.620	0.619	0.001

Table 5
Cross-Validated Predictive Ability Test (CVPAT)

	Average loss difference	t-value	p-value
RET	-0.118	5.706	0.000
SAT	-0.069	4.536	0.000
Overall	-0.091	6.068	0.000

Importance-Performance Map Analysis (IPMA)

The Importance-Performance Map Analysis (IPMA), as recommended by Ringle and Sarstedt (2016) and Hair et al. (2018), provides insights into how various constructs contribute to the target construct's performance in a Partial Least Squares Structural Equation Modeling (PLS-SEM) approach. Table 6 shows that student satisfaction is the most influential factor, with an importance score of 0.462, although its performance is relatively lower at 61.212. The course design has a significant importance of 0.409 and performs slightly better at 63.853. While having the most minor importance at 0.258, academic support service shows the highest performance score of 66.977. These findings suggest that improving satisfaction could substantially impact the target construct due to its high importance, even though its current performance is lower. Prioritizing enhancements in student satisfaction and course design would likely yield the most significant benefits in overall performance.

Table 6
Importance-Performance Map Analysis

	Importance	Performance
AS	0.258	66.977
CD	0.409	63.853
SAT	0.462	61.212

Discussion & Conclusion

Discussion

This study assesses the direct and indirect relationship between course design, academic support services, and students' retention and satisfaction as a mediator in open, online, flexible distance learning higher education institutions. Institutions must adopt strategic measures to ensure that academic support services and course design effectively enhance student retention, with student satisfaction serving as a critical mediator. The hypothesis testing analysis reveals strong relationships, indicated by the beta values: 0.162 for the influence of academic support services on retention and 0.244 for the effect of course design on retention. Additionally, academic support services significantly impact satisfaction with a beta of 0.208, while course design shows an even stronger relationship with satisfaction, boasting a beta of 0.356. These findings underscore the importance of targeting improvements in these areas to boost student retention (Al Hassani & Wilkins, 2022; Puriwat & Tripopsakul, 2021). Academic support services should be customized to meet individual student needs. This includes providing accessible resources such as tutoring, mentoring, and advising to create a supportive and inclusive learning environment (Sharif Nia et al., 2023). Personalized support builds students' confidence and encourages persistence by addressing their unique challenges. Meanwhile, course design must deliver engaging content, maintain a clear structure, and incorporate interactive elements to sustain student interest and satisfaction (Tian et al., 2021). Effective course design enhances learning experiences and

fosters deeper engagement, which is pivotal in maintaining high satisfaction levels and retention. The mediating role of student satisfaction, with a significant beta of 0.462 related to retention, highlights the necessity of sustaining high satisfaction levels to optimize retention outcomes (Ye et al., 2022). Satisfaction is a conduit, translating the benefits of academic support and well-designed courses into sustained student commitment. By strengthening both academic support and course design, institutions can effectively leverage these components to enhance student satisfaction and retention. These strategies will likely contribute to a more engaging and practical educational experience, ultimately fostering long-term student success and improved institutional performance. As institutions continue to focus on these areas, they can expect sustained improvements in student outcomes and overall educational quality.

Theoretical Implications

The theoretical implications of this study align with Tinto's Student Integration Model, emphasizing the importance of academic and social integration in student retention (Tinto, 1993). The findings bolster the model by showing that academic support services and course design significantly enhance student satisfaction, a key mediator for retention. Personalized academic support fosters an environment where students feel intellectually and socially integrated, increasing their persistence. According to Tinto, strong academic integration facilitated by quality course design leads to greater engagement and satisfaction (Tinto, 2012). This study supports this notion, indicating that well-structured, engaging courses significantly boost student satisfaction, enhancing retention (Sharif Nia et al., 2023). Highlighting student satisfaction as a mediator underscores the necessity of aligning educational practices with student expectations, expanding the understanding of how integration influences academic outcomes (Ye et al., 2022). Leveraging Tinto's framework suggests that focusing on course design and academic support benefits student experiences and broader goals like institutional reputation and loyalty (Bukhatir et al., 2023). By entering student satisfaction, institutions can better adhere to Tinto's model, demonstrating that satisfaction is a critical pathway for achieving academic and social integration goals, ultimately leading to improved student retention and success.

Practical Implications

The practical implications of this study emphasize the pivotal role that academic support services and course design play in enhancing student retention through improved satisfaction. Institutions can implement tailored academic support programs that address individual student needs, such as personalized tutoring and mentoring systems, which have been found to foster a supportive and inclusive learning environment (Al Hassani & Wilkins, 2022). Additionally, course design should prioritize engaging and interactive content, clear organization, and accessibility, ensuring that students remain motivated and satisfied with their learning experiences (Puriwat & Tripopsakul, 2021). By focusing on these areas, educational institutions can directly influence student satisfaction and improve retention rates. Moreover, the study suggests that by adopting these strategies, institutions can enhance their reputational capital and student loyalty, as satisfied students are more likely to persist in their studies and recommend their programs to others (Bukhatir et al., 2023). This can help institutions build a competitive edge in the increasingly dynamic field of higher education. Implementing these changes improves student outcomes and aligns with broader institutional goals, creating an environment conducive to academic success and continuous

institutional improvement, thus strengthening the overall education system's effectiveness and attractiveness to prospective students.

Suggestions for Future Study

Future research could explore several avenues to deepen our understanding of how academic support services and course design impact student retention through the lens of student satisfaction. One suggestion is to conduct longitudinal studies that track student satisfaction and retention changes over time, providing insights into the long-term impact of support services and course design improvements. Expanding the study to include diverse educational settings, such as vocational and technical institutions, could reveal variations in how student populations interact with academic supports and course structures. Another area for future research is the integration of technology-enhanced learning platforms, examining how digital tools and resources further influence student satisfaction and retention. Finally, qualitative approaches such as interviews or focus groups could supplement quantitative findings, offering rich, contextual insights into student experiences and needs. By pursuing these directions, future studies can offer more comprehensive strategies for effectively enhancing student satisfaction and retention.

Conclusion

The study highlights the critical roles of academic support services and course design in enhancing student retention, mediated significantly by student satisfaction. By demonstrating the interconnectedness of these elements, the research underscores the importance of personalized academic support and engaging course structures in fostering a conducive learning environment. The findings suggest that institutions prioritizing these factors improve student experiences and bolster their reputation and student loyalty. Contextually, as the educational landscape becomes more competitive and student-centered, these insights offer practical frameworks for institutions aiming to distinguish themselves. Schools can better meet diverse student needs by focusing on satisfaction-driven strategies, promoting higher retention rates and academic success. Such efforts align with broader educational objectives, ultimately leading to an enriched learning environment and better student and institution outcomes. This comprehensive approach supports ongoing education quality and responsiveness enhancements, vital in today's rapidly evolving academic landscape.

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