

ISSN electrónico: 2172-9077

DOI: 10.48047/fjc.28.02.07

INVESTIGATING THE INFLUENCE OF STUDENT-FACULTY PARTNERSHIP ON STUDENT ENGAGEMENT, ACADEMIC PERFORMANCE, SENSE OF BELONGINGNESS, AND SATISFACTION IN HIGHER EDUCATION

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Fecha de recepción de la reseña: 5 June 2024

Fecha de aceptación definitiva: 8 July 2024

Abstract

This study analyzes the relationships among student-faculty partnership, student engagement, academic performance, sense of belongingness, and satisfaction in higher education institutes students. Student-faculty partnerships improve educational outcomes, but Chinese higher education need further study. This study examines Chinese educational system linkages and mediating processes to address this gap. This study finds significant gaps in the understanding of student-faculty partnerships and their results by reviewing the literature. A quantitative data from surveys of Chinese university students form students was used in this study. SEM statistical method was used to analyze the data to determine correlations and mediating effects. This study affects educational institutions and policymakers. Student-faculty partnerships positively affect student involvement, academic success, belonging, and higher education

satisfaction. Student engagement and sense of belonging influence the association between student-faculty interactions and academic success and satisfaction, respectively. These studies demonstrate how good student-faculty partnerships improve student outcomes and satisfaction in Chinese higher education. The paper adds empirical information and clarifies how these relationships affect crucial educational outcomes.

Keywords: Student-Faculty Partnership, Student Engagement, Academic Performance, Sense of Belongingness, Student Satisfaction, Higher Education.

1. INTRODUCTION

Student-faculty partnership and their effects on learning outcomes are being prioritized in higher education (Saucier et al., 2022). These connections between academics and students improve students' interest, performance, and happiness in higher education (Moussa & Ali, 2022). Researchers have studied student-faculty partnership and their impact on student achievement, recognizing their relevance (Hegazy & Elballah, 2023; Kalkbrenner et al., 2021). This chapter summarizes relevant research for the Chinese university system. This study examines student-faculty partnership, student engagement, academic performance, belonging, and satisfaction in higher education to add to the current literature. It does this by reviewing the literature and identifying research gaps.

Numerous studies have examined how student-faculty partnerships affect educational results (Curtis & Anderson, 2021; Samala et al., 2022). These collaborations improve student involvement, academic achievement, and satisfaction, according to Oluwajana et al. (2021). The importance of faculty-student partnership in establishing a feeling of community and connection inside the university has also been highlighted in Edenfield and McBrayer (2021). Collectively, these studies highlight the importance of successful student-faculty relationships in promoting student success and wellbeing.

Research on student-faculty partnership and their results in China is not as extensive (Vikhnevich et al., 2022; Zhu et al., 2023). However, other research have looked at associated issues, giving important new information about this subject (Alam, 2022). For instance, Xiong (2022) investigated how student involvement and academic performance were impacted by faculty-student relationships at Chinese universities. Their findings confirmed the applicability of this research issue in the Chinese educational system by highlighting the favorable relationship between excellent student-faculty connections and student engagement (Huang & Swanto, 2023; Teng & Wang, 2021).

Several knowledge gaps regarding student-faculty partnership and their effects on educational outcomes still exist in spite of the research that has already been done (Teng & Wang, 2021; Yoon, 2023). First, additional research is needed to precisely look at these processes inside the Chinese higher education system (Ho et al., 2021). Previous studies have mainly focused on the Western educational framework (Athanasiadis et al., 2023; Chen et al., 2021). This chasm necessitates research into the ways in which China's unique cultural, social, and educational factors shape student-teacher dynamics (Luo et al., 2022).

As a result, researchers have paid less attention to the processes that mediate the relationships between students and teachers and outcomes like student achievement and faculty satisfaction (Albeta et al., 2023; Longobardi et al., 2021). Particularly, little research has been done on the potential mediating effects of student engagement and sense of belonging (Luo et al., 2022). A fuller knowledge of the mechanisms by which partnerships between students and faculty affect educational results would result from looking into these mediating routes (Obaid et al., 2022; Rickert & Skinner, 2022).

This study intends to answer the following research issues in light of the highlighted research gaps:

- What is the relationship between student-faculty partnerships and student engagement, academic performance, sense of belongingness, and satisfaction in higher education in the Chinese context?
- To what extent does student engagement mediate the relationship between student-faculty partnerships and academic performance?
- How does the sense of belongingness mediate the relationship between student-faculty partnerships and student satisfaction in higher education?

This study will answer these research questions and achieve these goals by analyzing student-faculty partnerships, academic results, and student involvement and community.

2. LITERATURE REVIEW

The phenomenon of student-faculty partnerships has garnered increasing attention in recent times, with a focus on comprehending its impact on diverse facets of the higher education milieu such as student engagement, academic achievement, sense of affiliation, and overall contentment (Liu & Cui, 2023; Swain, 2022). The subject matter under investigation pertains to the analysis of the ever-changing connections and interplays that take place between pupils and instructors in the context of academia (Shafait et al., 2021; Wang & Kim, 2023).

The study of student-faculty collaborations has grown in importance in China's higher education sector (Mok, 2021). This is because of the dynamic character of modern classrooms and the ever-increasing need to enhance educational quality (Khryk et al., 2021). Students' academic careers may be profoundly impacted by the quality of the connections they develop with their teachers, and this is a fact that is well recognized (Pichainarongk & Bidaisee, 2022; Toropova et al., 2021).

2.1 Student-Faculty Partnerships

Student-faculty partnerships relate to cooperative efforts between college students and teachers (Curtis & Anderson, 2021). Collaborations like this are characterized by equal involvement, shared authority, and mutual regard (Gerdes et al., 2022). Students who actively participate in meaningful interactions with faculty members have a more comprehensive and richer educational journey (Namboodiri, 2022). Mentorship, research collaborations, cooperative ventures, and academic advice are all examples of such relationships (Humaira et al., 2022). Institutions want to foster an open and supportive atmosphere that encourages student achievement through building strong student-faculty collaborations (Lynn & Chase, 2022).

2.2 Student Engagement

Student participation is very important in molding students' educational experiences and achievements (Tao et al., 2022). It relates to how actively interested and invested students are in their learning processes (Barbu et al., 2022). Engaged students are more motivated, dedicated, and committed to their academic goals (Derakhshan et al., 2022). Engagement acts as a moderating variable in the context of student-faculty collaborations, relating the nature of the connection to specific educational outcomes (Miller et al., 2021). Students are more likely to participate in their learning activities when they feel valued and included in their interactions with faculty members, which leads to improved academic achievement, a higher feeling of belonging, and increased satisfaction (Moriña, 2022; Yifeng & bin Mohamad Haris, 2023).

2.3 Academic Performance

Academic performance is an important measure of students' acquisition of information and comprehension of course material (Guo et al., 2021). It displays their capacity to satisfy the educational institution's academic criteria and expectations (Cavallone et al., 2022). According to research, student-faculty collaboration has a considerable influence on academic success (Khan et al., 2021). Collaboration with faculty members provides students with vital advice, support, and feedback, which may improve their subject matter comprehension and overall performance (Chen et al., 2021). Student-faculty collaborations lead to higher academic performance by instilling a feeling of ownership and agency in their learning processes (Wallace, 2022).

Students' sentiments of acceptance, connection, and inclusion within the higher education community are referred to as a sense of belonging (Pedler et al., 2022). It includes the degree to which students see themselves as valuable members of their academic environment (Llamas et al., 2021). Student-faculty collaborations contribute to students' feeling of belonging by offering a supporting network and fostering a friendly environment (Peña et al., 2022). Students have a deeper feeling of belonging when they have pleasant interactions and meaningful relationships with faculty members, which has a favorable influence on their overall happiness and academic achievement (Kahu et al., 2022).

2.4 Student's Satisfaction in Higher Education

Higher education satisfaction is a multidimensional term that measures students' overall satisfaction with their educational experience (Wong & Chapman, 2022). It includes things like academic assistance, resources, faculty-student relationships, and campus atmosphere (Dingel & Puntí, 2023). Student-faculty collaboration has a substantial impact on student satisfaction (Wong & Chapman, 2022). Students express greater levels of satisfaction with their educational experience when they view their interactions with faculty members to be pleasant, polite, and meaningful (Choi et al., 2021). These connections generate effective communication, individualized assistance, and a feeling of belonging, all of which contribute to students' overall happiness (Anistranski & Brown, 2021). Student-faculty partnerships, engagement, academic achievement, belonging, and pleasure in higher education are linked, according to research (Gokpinar-Shelton & Pike, 2021). Student-faculty partnerships may increase student engagement, according to the theories (Curtis & Anderson, 2021). Engaged pupils are more motivated, dedicated, and active, which improves academic success (Mohamed Mohamed Bayoumy & Alsayed, 2021).

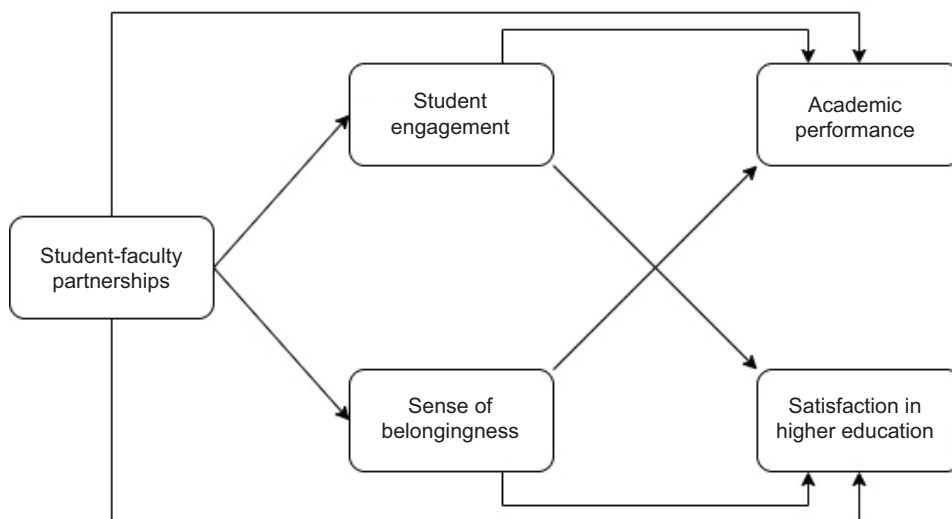


Fig. 1 Conceptual Model.

Student engagement and belongingness mediate another set of possibilities (Rowe et al., 2021). These hypotheses suggest that student engagement mediates the effect of student-faculty interactions on academic performance (Trolan et al., 2022). Student belongingness may also impact the relationship between student-faculty collaborations and higher education student satisfaction (Wong & Chapman, 2022). This suggests that student-faculty collaborations improve student happiness through student belongingness (Park et al., 2022). These hypotheses try to reveal how student-faculty partnerships affect higher education results (Mari et al., 2021). This study will illuminate ways to boost student participation, academic performance, belonging, and satisfaction (see Fig. 1).

H1: Student-faculty partnerships significantly impacts on student engagement.

H2: Student engagement positively influences academic performance.

H3: Student-faculty partnerships have a direct positive effect on academic performance.

H4: Student-faculty partnerships positively influence students' sense of belongingness.

H5: Sense of belongingness is positively related to student satisfaction in higher education.

H6: Student-faculty partnerships directly impact student satisfaction in higher education.

H7: Academic performance.

H8: Sense of belongingness significantly mediates the relationship a student-faculty partnerships and student satisfaction.

H9: Student engagement significantly mediates the relationship among student-faculty partnerships and academic performance.

H10: Student engagement significantly mediates the association among student-faculty collaboration and academic performance.

H11: Sense of belongingness significantly mediates the relationship among student-faculty partnerships and academic performance.

H12: Sense of belongingness mediates the relationship between student-faculty partnerships and student satisfaction in higher education.

3. METHODS

This was a quantitative study based on 287 undergraduate and postgraduate students as a sample size. The sample belonged to the two Beijing institutions. These universities were picked for their varied student body and academic standing. The sample size was chosen to ensure enough statistical power for the analysis. This study used a structured questionnaire. The questionnaire covered student-faculty partnerships, student participation, academic accomplishment, sense of belonging, and higher education satisfaction. The questionnaire items were taken from previously validated scales used in research projects, assuring their reliability and validity.

The teacher-student partnership was measured by using the Quinchiguango Alvear (2019) scale of 20-items. Whereas, for student engagement the scale of Bertolani et al. (2014) was employed with 8-items. Academic performance is assessed using 9-items scale of the Kimaro (2013). Moreover, sense of belonging was measured by using the Cox et al. (2021) scale of 4-items. Lastly, satisfaction with higher education was measured by using the Mahmood et al. (2014) scale of 10 items.

The PLS-SEM approach was used to analyze the data. PLS-SEM is a statistical analysis method that examines complex interactions between numerous variables. It is especially beneficial when attempting to comprehend the causal linkages between latent constructs and their indicators. The analysis examined correlations between variables by comparing the measurement model and structural model. Ethics were considered throughout the study to protect participants' data. Student-faculty interactions, student involvement, academic performance, sense of belonging, and contentment in higher education will be revealed through PLS-SEM analysis.

4. RESULTS

Cronbach's alpha scores for the tabled variables are generally consistent with this conclusion. Cronbach's Alpha for the dependent variable "Academic Performance" was 0.881, indicating great internal consistency between the items used to gauge academic success. The internal consistency of the "Satisfaction in Higher Education" variable was also high, with a Cronbach's Alpha of 0.796. This shows that the items used to measure happiness with one's college experience were valid and reliable measures of the construct of interest.

With a Cronbach's Alpha of 0.773, the "Sense of Belongingness" measure likewise demonstrated high levels of internal consistency. This suggests that the items evaluating a person's sense of belonging were accurate indicators of that construct. Similarly, the "Student Engagement" variable had high levels of internal consistency (0.795 on Cronbach's Alpha). This indicates that the items used to measure student involvement were reliable and valid.

The Cronbach's Alpha for the variable "Student Faculty Partnership" was 0.885, indicating a very high degree of internal consistency. This indicates that the student-faculty collaboration items

Table 1 Cronbach's Alpha.

	Cronbach's Alpha
Academic Performance	0.881
Satisfaction in Higher Education	0.796
Sense of Belongingness	0.773
Student Engagement	0.795
Student Faculty Partnership	0.885

accurately measured the construct. The internal consistency and reliability of the measurement scales employed for the variables in the study are supported by the findings of the Cronbach's Alpha analysis (see Table 1).

The composite dependability was determined to be 0.907 for the variable "Academic Performance," suggesting a good degree of internal consistency (see Fig. 2). The average variance extracted (AVE) was 0.555, indicating that the latent construct of academic achievement accounts for 55.5% of the variation in the observed variables. AP10 had the best composite dependability of 0.841 among the particular components. In the case of the variable "Sense of Belongingness," the composite reliability was 0.857, showing a high level of internal consistency. The AVE for this variable was 0.610, indicating that the latent construct of feeling of belongingness accounts for 61% of the variation in the observed variables. SB4 has the greatest composite dependability score of 0.898.

For the variable "Student Engagement," the composite reliability was 0.851, showing acceptable internal consistency. The AVE for this variable was 0.552, indicating that the latent construct of student involvement can explain 55.2% of the variation in the observed variables. SE1 had the greatest composite dependability, with a score of 0.779. In the case of the measure "Satisfaction with Higher Education," the composite reliability was 0.857, showing high internal consistency. The AVE for this measure was 0.507, suggesting that the latent construct of satisfaction in higher education accounts for 50.7% of the variation in the observable variables. With a composite dependability of 0.835, SS2 was the most reliable.

Finally, for the variable "Student Faculty Partnership," the composite dependability was 0.905, showing a high level of internal consistency. The AVE for this variable was 0.550, indicating that the latent construct of student faculty cooperation can explain 55% of the variation in the observed variables. The greatest composite dependability was 0.827 for STR8. These findings provide information on the consistency and amount of variation explained by the underlying constructs, as well as the reliability and validity of the measuring scales utilized for each variable (Table 2).

Academic performance and sense of belongingness have a 0.708 correlation in the correlation matrix. Students with a higher sense of belonging perform better academically. Academic performance is positively correlated with student-faculty partnership (0.839). Students with stronger faculty relationships perform better academically. Satisfaction in higher education was positively correlated with belongingness (0.712). This suggests that students who feel more connected to their school are happier. Student engagement and higher education satisfaction had a 0.877 correlation.

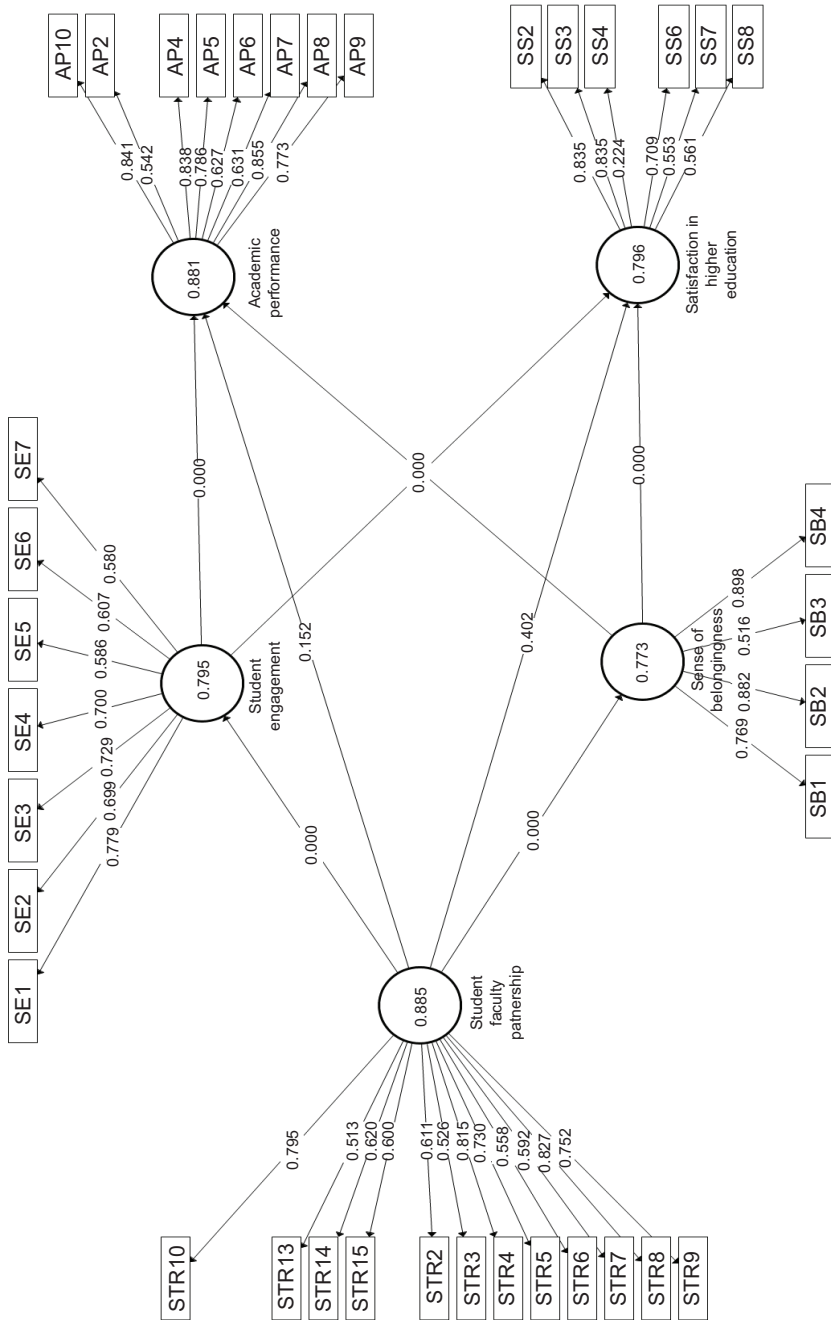


Fig. 2 PLS-SEM Estimation Model.

Table 2 Factor and Reliability Analysis.

	Factor	Original Sample	Composite Reliability	Average Variance Extracted
Academic Performance	AP10	0.841	0.907	0.555
	AP2	0.542		
	AP4	0.838		
	AP5	0.786		
	AP6	0.627		
	AP7	0.631		
	AP8	0.855		
	AP9	0.773		
	Sense of Belongingness	SB1		
SB2		0.882		
SB3		0.516		
SB4		0.898		
Student Engagement	SE1	0.779	0.851	0.552
	SE2	0.699		
	SE3	0.729		
	SE4	0.700		
	SE5	0.586		
	SE6	0.607		
	SE7	0.580		
Satisfaction in Higher Education	SS2	0.835	0.857	0.507
	SS3	0.835		
	SS4	0.724		
	SS6	0.709		
	SS7	0.553		
Student Faculty Partnership	STR10	0.795	0.905	0.550
	STR13	0.513		
	STR14	0.620		
	STR15	0.600		
	STR2	0.611		
	STR3	0.526		
	STR4	0.815		
	STR5	0.730		
	STR6	0.558		
	STR7	0.592		
	STR8	0.827		
STR9	0.752			

Finally, student engagement and belongingness have a 0.781 correlation. This suggests that students who feel more connected are more engaged in school. These findings show how variables are interconnected and reveal the relationships between academic performance, satisfaction in higher education, sense of belonging, student engagement, and student-faculty partnership (see Table 3).

In the correlation matrix, academic success and sense of belonging have a 0.708 association. Students who feel more connected to their peers perform better academically. Academic success is connected with student-faculty collaboration (0.839). Students that have closer ties with their professors perform better academically.

Higher education satisfaction was positively associated to belongingness (0.712). This shows that happy pupils are those who feel more connected to their school. The connection between student involvement and higher education satisfaction was 0.877. This implies that students who are more involved in their academics are happier with their schooling.

Finally, there is a 0.781 link between student involvement and belongingness. This implies that children who feel more connected to their peers are more interested in school. These studies illustrate the links between academic success, contentment with higher education, sense of belonging, student participation, and student-faculty interaction (see Table 4).

The Q2predict value achieved was 0.073, indicating the model's predictive usefulness. This score indicates that the model accounts for approximately 7.3% of the variance in projected outcomes. A higher Q2predict value suggests that the model is more predictive. RMSE, the average difference between observed and projected values, was 0.067. The model fits data better with lower RMSE numbers. The mean absolute error (MAE) between observed and anticipated values was 0.075.

Table 3 Fornell and Lacker's Model Estimates.

	1	2	3	4	5
Academic Performance	0.745				
Satisfaction in Higher Education	0.249	0.712			
Sense of Belongingness	0.708	0.348	0.781		
Student Engagement	0.279	0.877	0.319	0.672	
Student Faculty Partnership	0.839	0.266	0.721	0.323	0.671

Table 4 Heterotrait-Monotrait Ratio (HTMT).

	1	2	3	4	5
Academic Performance					
Satisfaction in Higher Education	0.315				
Sense of Belongingness	0.819	0.503			
Student Engagement	0.350	0.794	0.462		
Student Faculty Partnership	0.846	0.328	0.829	0.409	

A lower MAE value, similar to RMSE, suggests a better model fit, with smaller errors between predicted and observed values.

These findings shed light on the predictive model's performance. The $Q^2_{predict}$ value indicates that the model only explains a small percentage of the variance in projected outcomes. The RMSE and MAE values suggest that the model predicts outcomes with a relatively low amount of error. However, it is critical to analyze these findings in the context of the specific area and the study's requirements (see Table 5).

The R Square value for the variable "Academic Performance" was discovered to be 0.726. The model factors explain 72.6% of academic performance variance. The indicated independent factors explain a lot of academic success diversity. In the case of the variable "Satisfaction in Higher Education," the R Square value was 0.783. This means that the variables in the model can explain roughly 78.3% of the variation in higher education satisfaction. It implies that the selected independent factors have a significant influence on individuals' satisfaction levels in the higher education context.

For the variable "Sense of Belongingness," the R Square value was 0.520. This means that the predictors in the model can explain roughly 52% of the variation in sense of belongingness. It implies that the independent factors chosen have a modest effect on people's sense of belonging in the educational setting. Finally, for the variable "Student Engagement," R Square was 0.104. This implies that the predictors in the model may explain roughly 10.4% of the variance in student involvement. It suggests that the independent factors chosen had a comparatively smaller influence on student involvement than the other variables investigated. These findings shed light on the degree of variability explained by the model's predictors for each dependent variable. The R Square values represent the amount of variation explained for, emphasizing the independent variables' predictive ability on academic success, happiness with higher education, sense of belonging, and student involvement (see Table 6).

Table 5 Model Fit.

$Q^2_{predict}$	RMSE	MAE
0.073	0.067	0.075

Table 6 R-Square.

	R Square
Academic Performance	0.726
Satisfaction in Higher Education	0.783
Sense of Belongingness	0.520
Student Engagement	0.104

The following are the findings of the study of the direct paths in the provided table:

Student Faculty Partnership and Sense of Belongingness were found to have a strong link. A high positive association was found, demonstrating that when students have a closer partnership with faculty members, they tend to feel more at home in the educational setting. Similarly, a substantial association was discovered between Student Faculty Partnership and Student Engagement. It indicated a positive relationship, implying that students who have greater ties with faculty members are more likely to engage in their academic pursuits. The link between Sense of Belonging and Academic Performance was discovered to be strong. It revealed a positive relationship, implying that pupils who feel more connected to their peers perform better academically. Sense of Belonging and Higher Education Satisfaction were strongly correlated. Students who feel at home in school are more satisfied.

Student Engagement did not affect Academic Performance. In this study, student participation does not directly affect academic success. However, student engagement and higher education satisfaction were strongly linked. Student participation was positively correlated with higher education satisfaction. It was discovered that there is a significant association between Student Faculty Partnership and Academic Performance. A positive relationship was discovered, implying that students who have closer ties with faculty members perform better academically.

Finally, a substantial association was discovered between Student Faculty Partnership and Satisfaction in Higher Education. However, students with stronger faculty partnerships may be less satisfied with higher education. These findings demonstrate how student-faculty partnerships, belongingness, engagement, academic performance, and satisfaction in higher education are linked. They also reveal the study's variables' direct relationships (see Table 7).

The table's mediating paths yielded these results:

The relationships between student faculty partnership, sense of belongingness, and academic performance were significant (see Fig. 3). This suggests that student belongingness partially explains the positive effect of student-faculty partnership on academic performance. Thus, students with

Table 7 PLS SEM Direct Path Analysis.

	Original Sample	Standard Deviation	T Statistics	P Values
Student Faculty Partnership → Sense of Belongingness	0.721	0.057	12.681	0.000
Student Faculty Partnership → Student Engagement	0.323	0.099	3.247	0.001
Sense of Belongingness → Academic Performance	0.216	0.114	1.893	0.029
Sense of Belongingness → Satisfaction in Higher Education	0.169	0.076	2.217	0.014
Student Engagement → Academic Performance	-0.012	0.030	0.400	0.345
Student Engagement → Satisfaction in Higher Education	0.867	0.030	28.875	0.000
Student Faculty Partnership → Academic Performance	0.687	0.137	4.999	0.000
Student Faculty Partnership → Satisfaction in Higher Education	-0.136	0.069	1.976	0.024

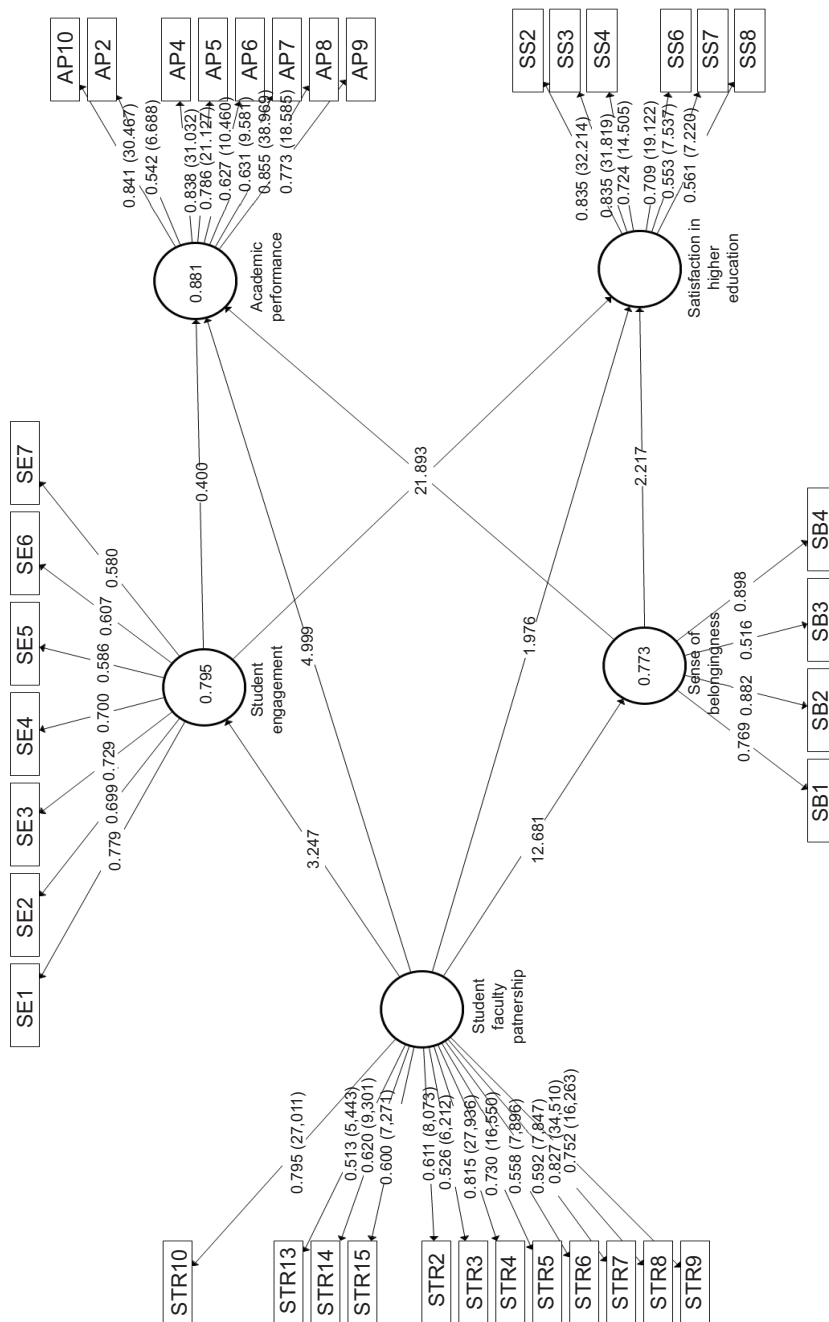


Fig. 3 Path analysis Model.

stronger faculty partnerships feel more connected, which improves their academic performance. However, the relationships between student faculty partnership, student engagement, and academic performance were not significant. In this study, student faculty partnership does not affect academic performance through student engagement.

Student faculty partnership, sense of belongingness, and satisfaction in higher education also had significant relationships. This suggests that student belongingness partially explains the positive effect of student faculty partnership on higher education satisfaction. thus, stronger faculty-student relationship lead to a greater sense of belongingness and it improves student satisfaction in higher education. Whereas, student faculty partnership through the student engagement affects higher education satisfaction of students; this relationship was found to be significant. Student engagement partially explains the positive effect of student faculty partnership on higher education satisfaction. Thus, students with stronger faculty partnerships are more engaged, which improves their higher education satisfaction.

These findings reveal how student faculty partnership affects higher education academic performance and satisfaction. sense of Belongingness and Student Engagement mediate complex educational relationships, highlighting their importance (see Table 8).

6. DISCUSSION

This research investigated numerous hypotheses based on the literature and outcomes. This study supports earlier studies on student-faculty partnership, student engagement, academic performance, sense of belonging, and satisfaction in higher education. Data validated all hypotheses except H2 and H9, demonstrating good empirical evidence for the postulated correlations.

Previous research have shown that student-faculty relationships increase student engagement (H1) (Beasley, 2021; Chhetri & Baniya, 2022). To improve student involvement, educators and students should collaborate. Student-faculty relationships directly impact academic achievement (H3),

Table 8 PLS SEM Indirect Paths Analysis.

	Original Sample	Standard Deviation	T Statistics	P Values
Student Faculty Partnership → Sense of Belongingness → Academic Performance	0.156	0.083	1.872	0.031
Student Faculty Partnership → Student Engagement → Academic Performance	-0.004	0.010	0.376	0.353
Student Faculty Partnership → Sense of Belongingness → Satisfaction in Higher Education	0.122	0.056	2.195	0.014
Student Faculty Partnership → Student Engagement → Satisfaction in Higher Education	0.280	0.089	3.155	0.001

supporting earlier study (Guzzardo et al., 2021; Llamas et al., 2021). Strong faculty connections improve academic achievement.

Student-faculty partnership improve students' feeling of belonging (H4), according to research (Cook-Sather & Seay, 2021; De Grandi et al., 2021). Students feel more connected to the academic community when professors are friendly and welcoming. Prior research supports the positive association between sense of belonging and higher education student happiness (H5) (Liu et al., 2023; Zheng & Zheng, 2023). It shows that pupils with a strong feeling of belonging are happier with their schooling.

Student-faculty relationships directly affect higher education student satisfaction (H6), as previously shown (Singh & Jasial, 2021; Snijders et al., 2022). This underlines the importance of excellent student-faculty connections in student satisfaction with higher education. Student involvement mediates student-faculty relationships and academic performance (H7), according to research (Guo et al., 2022; Su & Huang, 2021). Student-faculty partnership affect academic success via student participation.

According to prior research (Kim et al., 2023; Tholen et al., 2022), sense of belongingness mediates student-faculty partnership and student happiness in higher education (H8). This suggests that student-faculty relationships improve student happiness partly because students feel like they belong. This research did not support H2 or H9, however contextual considerations or measurement constraints may explain these results.

The intricate linkages between student-faculty interactions, student participation, academic performance, belongingness, and pleasure in higher education are supported by this study and are now more understood. The evidence indicates that student-faculty partnerships enhance student engagement, academic success, sense of belonging, and happiness. These results have significance for educational institutions seeking a supportive and inclusive learning environment that improves student success.

7. CONCLUSIONS

This study illuminates the intricate relationships between student-faculty collaboration, academic accomplishment, belonging, and satisfaction in higher education. Academic institutions and practitioners seeking meaningful student outcomes and experiences should consider the study's conclusions. The findings of this study firmly establish the importance of fostering friendly and cooperative connections between students and instructors. The gathered data unmistakably show that student-faculty collaborations are directly and significantly linked to student involvement, academic success, feeling of community, and pleasure in higher education. These compelling results, which emphasize the critical need for creating inclusive and supportive learning environments where students actually feel valued and connected to their faculty members, are in perfect alignment with previous studies. Furthermore, the research unmistakably demonstrates the crucial position that student participation plays in mediating between student-faculty collaborations and academic success. These results highlight how crucial it is to actively include students in their learning process in order to increase their enthusiasm, dedication, and active engagement.

Additionally, the study successfully highlights the mediating role of student-faculty relationships' feeling of belongingness on both academic achievement and student happiness. These important results clearly demonstrate how vital it is to foster a feeling of community and belonging among students since it has a large and beneficial impact on their academic success and general happiness with their educational experience.

Despite the fact that the data mostly confirmed the bulk of the assumptions put out in this research, it is important to recognize the inherent intricacy of these interactions and the possible impact of contextual variables. Future study should include other characteristics and contextual elements to better understand the complex linkages between student-faculty cooperation and student outcomes. The concluding statement shows that, student-faculty partnership promotes student engagement, academic performance, a sense of belonging, and satisfaction, making this study a significant contribution to higher education. Recognizing and respecting faculty-student interactions allows educational institutions to design targeted strategies and initiatives that improve student experiences, foster pleasant and inclusive learning environments, and improve student performance and well-being.

7.1 Theoretical and Managerial Implications

The paper affects several higher education stakeholders. For starters, the results highlight the significance of excellent student-faculty collaborations inside educational institutions. By promoting meaningful student-faculty relationships, institutions may boost student engagement, academic achievement, and satisfaction. This shows a need for professional development programs that teach educators how to mentor, form connections, and create a supportive learning environment.

Furthermore, the research emphasizes the importance of student participation in promoting excellent educational results. Institutions should engage in initiatives that foster students' active involvement, motivation, and dedication. This might include using creative teaching techniques, experiential learning opportunities, and technological integration to increase student engagement. Furthermore, it is critical for institutions to foster a feeling of belonging among students. Creating inclusive environments in which students feel respected, supported, and connected promotes a good learning environment and improves academic achievement and happiness.

The results also highlight the need of understanding the mediating impacts of student involvement and feeling of belonging. Institutions should think about developing treatments that target these elements in order to improve academic achievement and student happiness. Mentorship programs, peer support networks, and activities that foster a feeling of community and inclusion might all be implemented.

Finally, this study demonstrates the transformational potential of student-faculty collaborations, student participation, and a feeling of belonging in higher education. The ramifications indicate that schools should promote relationship-building, student participation, and inclusion as fundamental cornerstones of their educational approach. Institutions may establish an engaging and supportive learning environment that optimizes student potential, supports academic achievement, and cultivates a feeling of fulfillment and pleasure among students by doing so.

7.2 Limitations and Recommendations for Future Research

While this study offers useful insights into the linkages between student-faculty partnerships, student involvement, academic achievement, feeling of belonging, and happiness in higher education,

it is critical to recognize its limitations. The use of self-reported measurements, which are vulnerable to response bias and possible errors, is one restriction. To improve the validity of the results, future study might use objective metrics or various data sources. Furthermore, the research focused on a unique environment, namely higher education in China, which may restrict the findings' applicability to other cultural and educational contexts. Conducting comparable research in various countries and with distinct student demographics might help us get a better grasp of these processes.

Exploration of other mediating and moderating factors is another subject for future research. While student involvement and a feeling of belonging were found as mediators in this research, there may be additional variables at work that impact the links between student-faculty interactions, academic success, and satisfaction. Examining characteristics like motivation, self-efficacy, and institutional support may give more insights into the underlying processes. Furthermore, longitudinal studies that capture the dynamics and changes over time would provide a more detailed understanding of these factors' interactions.

Furthermore, the emphasis of this study was largely on student views. Incorporating faculty and other relevant stakeholders' viewpoints, such as administrators or alumni, might give a more complete picture of the influence of student-faculty relationships on educational outcomes. Furthermore, investigating the significance of particular treatments or programs targeted at improving student-faculty interactions and their subsequent outcomes might provide educational institutions with practical consequences.

To summarize, although this study adds significant information, it is critical to realize its limits. Scholars can continue to expand our understanding of the complex dynamics between student-faculty partnerships, student engagement, academic performance, sense of belongingness, and satisfaction in higher education by addressing these limitations and pursuing future research directions, ultimately leading to more effective strategies and practices in supporting student success and well-being.

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