



# Exploring the Impact of Student-Faculty Partnership on Engagement, Performance, Belongingness, and Satisfaction in Higher Education

Shang Zhao <sup>1</sup>, Lijung You <sup>2\*</sup>

<sup>1,2\*</sup> PhD, International College, Krirk University, Bangkok, Thailand

\* **Corresponding Author:** [lijungyu@gmail.com](mailto:lijungyu@gmail.com)

**Citation:** Zhao, S., You, L. (2024). Exploring the Impact of Student-Faculty Partnership on Engagement, Performance, Belongingness, and Satisfaction in Higher Education. *Educational Administration: Theory and Practice*, 30(2), 193-210. doi: 10.52152/kuey.v30i2.980

## ARTICLE INFO

Received: 10 Feb 2023

Accepted: 27 Apr 2023

## ABSTRACT

There has been an exponential growth in the higher education worldwide that has consequently triggered new challenges for educators and students. The relationship between student-faculty partnership, student engagement, academic performance, sense of belongingness and satisfaction in Chinese higher education institutes are examined by this study. The study examines the effect of student-faculty partnerships on educational results and fills gaps in understanding this relationship. We used structural equation modeling (SEM) and with quantitative data gathered from surveys of Chinese university students. After an exhaustive search of the relevant literature, we find considerable shortfalls in knowledge about student-faculty partnerships and their results. The results show that student-faculty cooperation has a positive impact on student participation, grades, sense of belonging and satisfaction with higher education. Furthermore, student involvement and feeling connected are important in negotiating the relationships between student-faculty interactions and academic success, and satisfaction. The present research implications offer a novel and more diverse perspectives of higher education in China aimed at advanced learning opportunities through student-faculty partnership.

**Keywords:** Student-faculty Partnership, Student Engagement, Academic Performance, Sense of Belongingness, Student Satisfaction.

## INTRODUCTION

Student-faculty partnerships have emerged as a significant area of focus in higher education due to their positive effects on learning outcomes (Saucier, Miller, Jones, & Martens, 2022). These connections between academics and students have been shown to improve student interest, academic performance, and overall satisfaction in higher education (Moussa & Ali, 2022). While the relevance of student-faculty partnerships is well-established, research on this topic in the context of Chinese universities is still limited (Hegazy & Elballah, 2023; Kalkbrenner, Jolley, & Hays, 2021). This study aims to address this research gap by examining the relationships between student-faculty partnerships and various educational outcomes, including student engagement, academic performance, sense of belongingness, and satisfaction in higher education within the Chinese context.

The significance of this study lies in the need to understand how student-teacher dynamics are shaped by China's unique cultural, social, and educational factors. Numerous studies have examined how student-faculty partnerships affect educational results (Curtis & Anderson, 2021; Samala, Marta, Anori, & Indarta, 2022). These collaborations improve student involvement, academic achievement, and satisfaction, according to Oluwajana, Adeshola, and Clement (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 well-being.

Research on student-faculty partnership and their results in China is not as extensive (Vikhnevich, Gao, Jiang, Chen, & Li, 2022; Zhu, Liu, & Seong, 2023). However, other research has 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, Cheong, & Weldon, 2021). Previous research in this area has predominantly focused on the Western educational framework, leaving a critical knowledge gap in understanding the specific dynamics of student-faculty partnerships in the Chinese higher education system (Athanasiadis, Papadopoulou, & Kasimatis, 2023; C. M. Chen, L. C. Chen, & Horng, 2021). Furthermore, while prior research has highlighted the importance of student-faculty relationships, little attention has been given to the potential mediating effects of student engagement and sense of belonging on educational outcomes (Luo, Zuo, & Wang, 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, Islami, Copriady, & Alimin, 2023; Longobardi, Settanni, Lin, & Fabris, 2021). Particularly, little research has been done on the potential mediating effects of student engagement and sense of belonging (Luo, Li, Zhao, Wu, & Zhang, 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, Mahdawi, & Khalaf, 2022; Rickert & Skinner, 2022).

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

1. 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?
2. To what extent does student engagement mediate the relationship between student-faculty partnerships and academic performance?
3. How does the sense of belongingness mediate the relationship between student-faculty partnerships and student satisfaction in higher education?

The subsequent sections will provide details on the research design, methodology, data analysis, and discussion of findings, culminating in meaningful conclusions and implications for the field of higher education in China.

## LITERATURE REVIEW

The literature on student-faculty partnerships in higher education reveals a growing interest in understanding their impact on various aspects of the academic environment, such as student engagement, academic achievement, sense of affiliation, and overall satisfaction (Liu & Cui, 2023; Swain, 2022). Researchers have focused on analyzing the dynamic connections and interplays that occur between students and instructors in academic settings (Shafait, Khan, Sahibzada, Dacko-Pikiewicz, & Popp, 2021; Wang & Kim, 2023).

In China's higher education sector, the study of student-faculty partnerships has gained significance due to the ever-changing nature of modern classrooms and the need to enhance educational quality (Mok, 2021). The quality of these connections can profoundly impact students' academic careers (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, Myrberg, & Johansson, 2021).

### Student-Faculty Partnerships

Student-faculty partnerships encompass cooperative efforts characterized by equal involvement, shared authority, and mutual respect (Curtis & Anderson, 2021). Collaborations like this are characterized by equal involvement, shared authority, and mutual regard (Gerdes, Goei, Huizinga, & De Ruyter, 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, Rachmadtullah, Samsudin, & Nurtanto, 2022). Institutions want to foster an open and supportive atmosphere that encourages student achievement through building strong student-faculty collaborations (Lynn & Chase, 2022).

#### Student Engagement

Student engagement plays a crucial role in shaping students' educational experiences and achievements (Tao, Meng, Gao, & Yang, 2022). It relates to how actively interested and invested students are in their learning processes (Barbu, Popescu, & Moiceanu, 2022). Engaged students are more motivated, dedicated, and committed to their academic goals (Derakhshan, Doliński, Zhaleh, Enayat, & Fathi, 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, Fassett, & Palmer, 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; Zhang & bin Mohamad Haris, 2023).

#### Academic Performance

Academic performance is an important measure of students' acquisition of information and comprehension of course material (Guo, Saab, Wu, & Admiraal, 2021). It displays their capacity to satisfy the educational institution's academic criteria and expectations (Cavallone, Ciasullo, Manna, & Palumbo, 2022). According to research, student-faculty collaboration has a considerable influence on academic success (Khan, Azeem, Ahmed, Yasin., & Ali, 2021). Collaboration with faculty members provides students with vital advice, support, and feedback, which may improve their subject matter comprehension and overall performance (Chen, Wei, & Wu, 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, Willis, & Nieuwoudt, 2022). It includes the degree to which students see themselves as valuable members of their academic environment (Llamas, Nguyen, & Tran, 2021). Student-faculty collaborations contribute to students' feelings of belonging by offering a supporting network and fostering a friendly environment (Peña, Ruedas-Gracia, Cohen, Tran, & Stratton, 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, Ashley, & Picton, 2022).

#### 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 & Punti, 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, Robb, Mifli, & Zainuddin, 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 (Gokpınar-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).

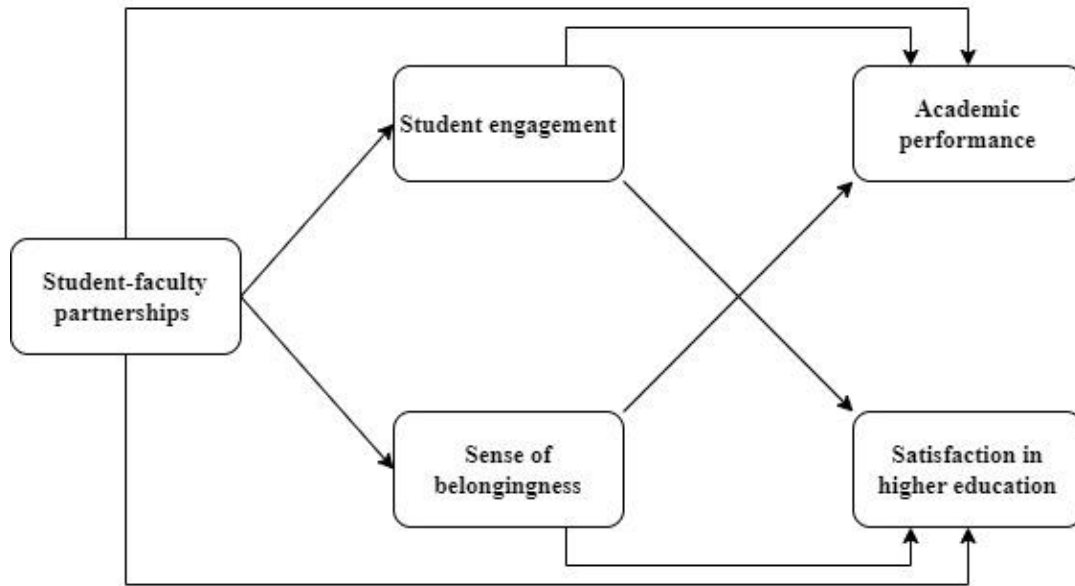


Figure 1. Conceptual Model

Student engagement and belongingness mediate another set of possibilities (Rowe, Jackson, & Fleming, 2021). These hypotheses suggest that student engagement mediates the effect of student-faculty interactions on academic performance (Trolian, Archibald, & Jach, 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, Kim, Salazar, & Eagan, 2022). These hypotheses try to reveal how student-faculty partnerships affect higher education results (Mari, Gunasagaran, Srirangam, Kuppusamy, & Lee, 2021). This study will illuminate ways to boost student participation, academic performance, belonging, and satisfaction (Figure 1).

H1. Student-faculty partnerships significantly impact 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 between student-faculty partnerships and academic performance.

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

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

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

## METHODOLOGY

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, Mortari, and Carey (2014) was employed with 8-items. Academic performance is assessed using a 9-item scale by Kimaro and Machumu (2015). Moreover, the sense of belonging was measured by using the Cox, Stepovich, Bennion, Fauconier, and Izquierdo (2021) scale of 4 items. Lastly, satisfaction with higher education was measured by using the Mahmood, Mohamad Ridhuan, Mat Dangi, Anuar, and Ali (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. The PLS-SEM was employed as per the suggestions of (Hair, Hollingsworth, Randolph, & Chong, 2017; Hair Jr, Matthews, Matthews, & Sarstedt, 2017; Shaikh, Afshan, Anwar, Abbas, & Chana, 2023). 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.

Ethical guidelines were strictly adhered to throughout the research. Informed consent was obtained from all participants, guaranteeing their voluntary involvement and confidentiality. Participants' identities were protected by assigning unique identifiers to their responses. Data were handled with the utmost confidentiality, and any personal information was anonymized to ensure ethical integrity. It is important to acknowledge that the sample size, while sufficient for our specific research focus, may limit the generalizability of the findings beyond the sampled population. Additionally, the use of structured questionnaires, while providing quantitative data, may not capture the full complexity of the constructs studied. Future research could explore these areas in greater depth using larger and more diverse samples and a mixed-methods approach.

## RESULTS

### Publish Date

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 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 Cronbach's Alpha analysis (Table 1).

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

The composite dependability was determined to be 0.907 for the variable "Academic Performance," suggesting a good degree of internal consistency (Figure 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 the feeling of belongingness accounts for 61% of the variation in the observed variables. SB4 has the greatest composite dependability score of 0.898.

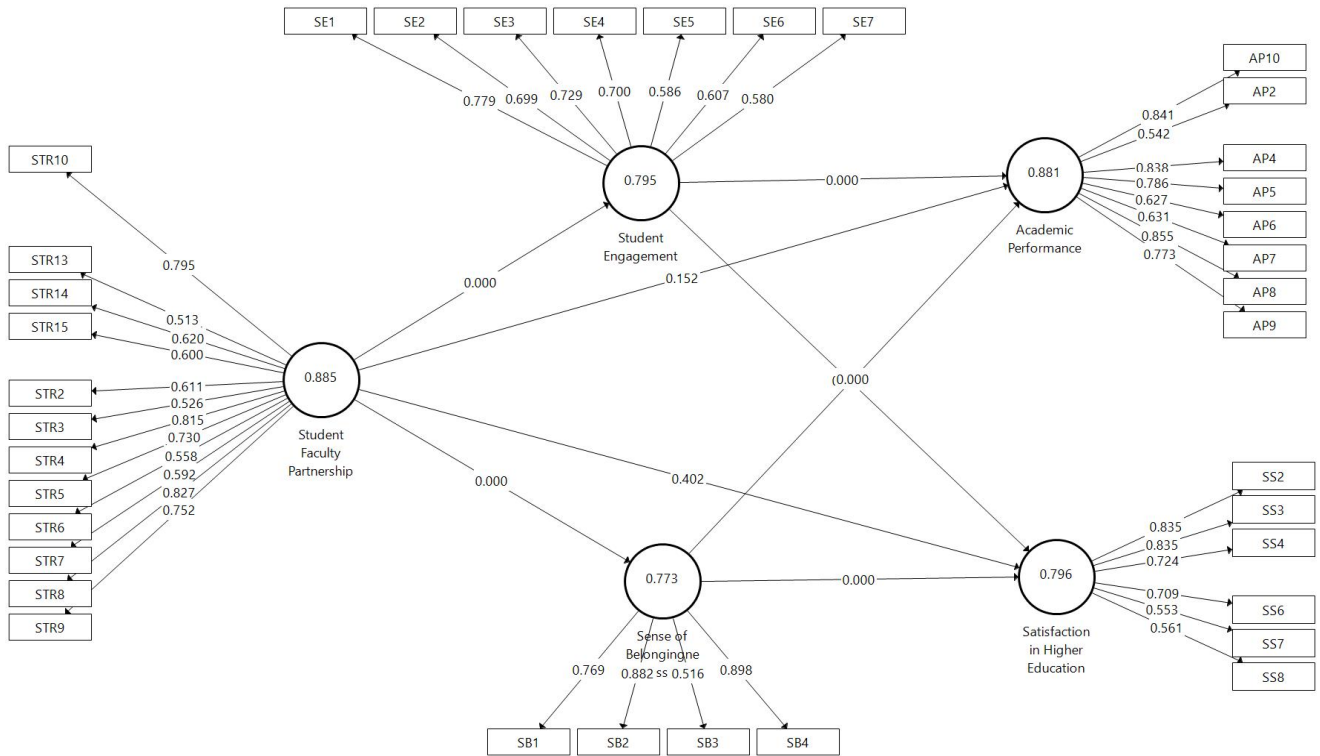


Figure 2. PLS-SEM Estimation Model

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).

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		

	Factor	Original Sample	Composite Reliability	Average Variance Extracted
	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			

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 suggested that students who feel more connected to their school are happier. Student engagement and higher education satisfaction had a 0.877 correlation. Finally, student engagement and belongingness have a 0.781 correlation. This suggested 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 (Table 3).

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

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 who have closer ties with their professors perform better academically.

Higher education satisfaction was positively associated with 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, a sense of belonging, student participation, and student-faculty interaction (Table 4).

**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	

The Q<sup>2</sup>predict 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 Q<sup>2</sup> predictive 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. 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<sup>2</sup>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 (Table 5).

**Table 5.** Model Fit

Q <sup>2</sup> predict	RMSE	MAE
0.073	0.067	0.075

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 the 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, emphasizing the independent variables' predictive ability on academic success, happiness with higher education, sense of belonging, and student involvement (Table 6).

**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 (Table 7).

Table 7. PLS-SEM Direct Path Analysis

	<b>Original Sample</b>	<b>Standard Deviation</b>	<b>T Statistics</b>	<b>P Values</b>
Student Faculty Partnership -> Sense of Belongingness	0.721	0.057	12.681	0.0001
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	0.0001
Student Faculty Partnership -> Academic Performance	0.687	0.137	4.999	0.0001
Student Faculty Partnership -> Satisfaction in Higher Education	-0.136	0.069	1.976	0.024

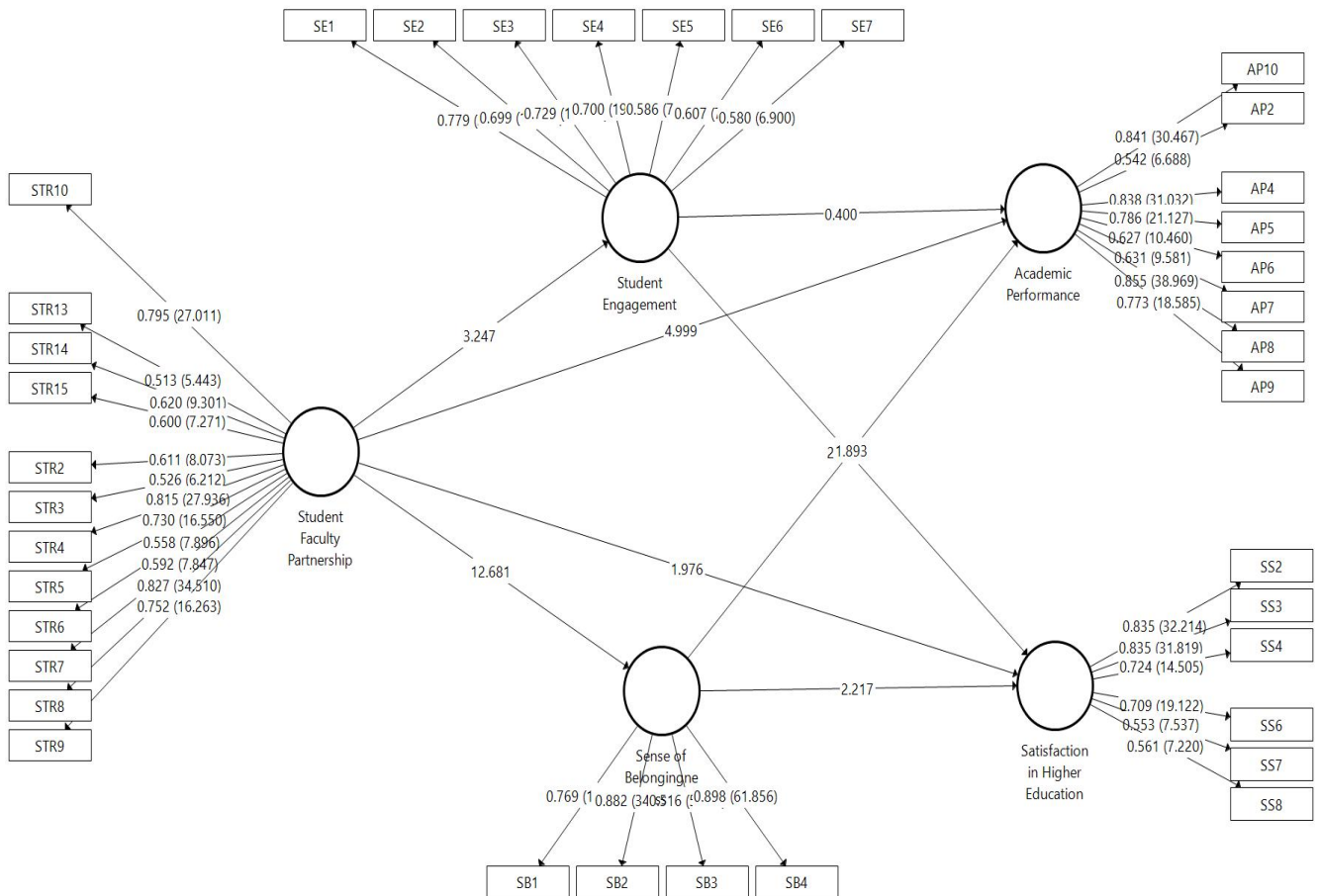


Figure 3. Path Analysis Model

The table's mediating paths yielded these results:

The relationships between student-faculty partnership, sense of belongingness, and academic performance were significant (Figure 3). This suggests that student belongingness partially explains the positive effect of student-faculty partnerships on academic performance. Thus, students with 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 partnerships do 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 partnerships on higher education satisfaction. Thus, stronger faculty-student relationships lead to a greater sense of belongingness and it improves student satisfaction in higher education. Whereas, student-faculty partnerships through student engagement affect higher education satisfaction of students; this relationship was found to be significant. Student engagement partially explains the positive effect of student-faculty partnerships 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 (Table 8).

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

	<b>Original Sample</b>	<b>Standard Deviation</b>	<b>T Statistics</b>	<b>P Values</b>
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

## DISCUSSION

This research investigated numerous hypotheses based on the literature and outcomes. This study supported earlier studies on student-faculty partnerships, 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 has 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), supporting earlier studies (Curtis & Anderson, 2021). Strong faculty connections improve academic achievement.

Student-faculty partnerships improve students' feeling of belonging (H4), according to research (Eli, 2021). Students feel more connected to the academic community when professors are friendly and welcoming. Prior research supports the positive association between a sense of belonging and higher education student happiness (H5) (Liu, Zhu, & Seong, 2023; Q. Zheng & G. 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, Wijnia, Dekker, Rikers, & Loyens, 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, Yang, Zhang, & Gan, 2022; Su & Huang, 2021). Student-faculty partnerships affect academic success via student participation.

This study, in alignment with previous research (Kim, Woo, Song, & Son, 2023; Tholen, Wouters, Ponnet, de Bruyn, & Van Hal, 2022), reveals that the sense of belongingness plays a mediating role in the relationship between student-faculty partnerships and student happiness in higher education. This finding suggests that student-faculty relationships contribute significantly to student happiness, in part because students feel a strong sense of belonging within their academic community. This insight emphasizes the role of inclusive and supportive environments in enhancing student well-being.

It's noteworthy that our research did not provide support for H2 and H9, which postulated relationships between student engagement and academic performance and between student-faculty partnerships, student engagement, and academic performance, respectively. While these hypotheses did not find empirical support in our study, it is important to consider potential contextual factors or measurement constraints that may have influenced these results. Further investigation and refinements in future research may help clarify the underlying dynamics of these relationships.

In conclusion, our study contributes to a deeper understanding of the complex interplay among student-faculty interactions, student engagement, academic performance, sense of belonging, and student happiness in higher education. The evidence underscores the significance of fostering strong student-faculty partnerships for enhancing student engagement, academic success, sense of belonging, and overall happiness. These findings hold substantial implications for educational institutions striving to create supportive and inclusive learning environments that promote student success.

## CONCLUSION

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.

In addition, the study successfully highlighted 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 studies 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 promote 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.

### **IMPLICATIONS**

This research has significant implications for various stakeholders in higher education. Firstly, it highlights the critical role of robust student-faculty partnerships within educational institutions. By emphasizing the importance of fostering meaningful connections between students and faculty members, the study underscores the potential to enhance student engagement, academic performance, and overall satisfaction. This underscores the need for professional development programs that equip educators with the skills to mentor, build relationships, and create a supportive learning environment.

Furthermore, the research underscores the significance of student engagement in driving positive educational outcomes. Institutions should actively pursue initiatives that encourage students' active participation, motivation, and dedication. This might involve adopting innovative teaching methods, offering experiential learning opportunities, and integrating technology to boost student engagement. Additionally, institutions should prioritize creating inclusive environments where students feel valued, supported, and connected, as this fosters a conducive learning environment and positively impacts academic achievement and happiness.

### **LIMITATIONS AND FUTURE RESEARCH**

This study offers valuable insights into the interplay between student-faculty partnerships, student engagement, academic achievement, a sense of belonging, and happiness in higher education. However, it is essential to acknowledge its limitations. One limitation pertains to the use of self-reported measurements, which may be susceptible to response bias and potential errors. To enhance the robustness of future research findings, objective metrics or diverse data sources could be considered. Additionally, the study's focus on higher education in China may constrain the generalizability of the results to other cultural and educational contexts. Conducting similar research in different countries with varying student demographics could provide a broader understanding of these processes. Furthermore, future research avenues could explore additional mediating and moderating factors. While this study identified student involvement and a sense of belonging as mediators, there might be other variables influencing the relationships between student-faculty interactions, academic success, and satisfaction. Investigating factors like motivation, self-efficacy, and institutional support could offer deeper insights into the underlying mechanisms. Longitudinal studies capturing the dynamics and changes over time would also contribute to a more comprehensive understanding of these factors interactions.

Moreover, this study predominantly focused on student perspectives. Incorporating the viewpoints of faculty and other relevant stakeholders, such as administrators or alumni, could provide a more holistic understanding of the impact of student-faculty relationships on educational outcomes. Additionally, examining the effectiveness of specific interventions or programs aimed at enhancing student-faculty interactions and their subsequent outcomes could yield practical implications for educational institutions. In summary, while this study contributes significant knowledge, it is crucial to recognize its limitations. Scholars can further expand our comprehension of the intricate dynamics between student-faculty partnerships, student engagement, academic performance, a sense

---

of belonging, and satisfaction in higher education by addressing these limitations and pursuing future research directions. This ongoing research will ultimately lead to more effective strategies and practices in supporting student success and well-being.

## REFERENCES

- Alam, A. (2022). Mapping a sustainable future through conceptualization of transformative learning framework, education for sustainable development, critical reflection, and responsible citizenship: An exploration of pedagogies for twenty-first century learning. *ECS Transactions*, 107(1), 9827.
- Albeta, S. W., Islami, N., Copriady, J., & Alimin, M. (2023). Blended learning: Learning outcomes, class dynamics, and perceptions of students and teachers-a systematic literature review. *Educational Administration: Theory and Practice*, 29(1), 43-57.
- Anistranski, J. A., & Brown, B. B. (2023). A little help from their friends? How social factors relate to students' sense of belonging at a large public university. *Journal of College Student Retention: Research, Theory & Practice*, 25(2), 305-325.
- Athanasiadis, A., Papadopoulou, V., & Kasimatis, K. (2023). Measuring service quality in teacher training programs: The eppequal scale. *Educational Administration: Theory and Practice*, 29(2), 48-68.
- Barbu, A., Popescu, M. A. M., & Moiceanu, G. (2022). Perspective of teachers and students towards the education process during COVID-19 in Romanian universities. *International journal of environmental research and public health*, 19(6), 3409.
- Beasley, S. T. (2021). Student–faculty interactions and psychosociocultural influences as predictors of engagement among Black college students. *Journal of Diversity in Higher Education*, 14(2), 240.
- Bertolani, J., Mortari, L., & Carey, J. (2014). Formative evaluation of *eccomi pronto* ['Here I Am Ready']: A school counselor-led, research-based, preventative curriculum For Italian primary schools. *International Journal for the Advancement of Counselling*, 36, 317-331.
- Cavallone, M., Ciasullo, M. V., Manna, R., & Palumbo, R. (2022). A tale of two stakeholders: achieving excellence by merging quality expectations in Higher Education institutions. *Studies in Higher Education*, 47(2), 244-258.
- Chen, C. M., Chen, L. C., & Horng, W. J. (2021). A collaborative reading annotation system with formative assessment and feedback mechanisms to promote digital reading performance. *Interactive Learning Environments*, 29(5), 848-865.
- Chen, W., Wei, L., & Wu, Y. (2021). Western educational historiography and the institutionalization of normal schools in modern China (1901–1944). *History of Education Review*, 50(1), 5-23.
- Chhetri, S. B., & Baniya, R. (2022). Influence of student-faculty interaction on graduate outcomes of undergraduate management students: The mediating role of behavioral, emotional and cognitive engagement. *The International Journal of Management Education*, 20(2), 100640.
- Choi, J. J., Robb, C. A., Mifli, M., & Zainuddin, Z. (2021). University students' perception to online class delivery methods during the COVID-19 pandemic: A focus on hospitality education in Korea and Malaysia. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 29, 100336.
- Cox, C., Stepovich, N., Bennion, A., Fauconier, J., & Izquierdo, N. (2021). Motivation and sense of belonging in the large enrollment introductory general and organic chemistry remote courses. *Education Sciences*, 11, 549.
- Curtis, N. A., & Anderson, R. D. (2021). Moving toward student-faculty partnership in systems-level assessment: A qualitative analysis. *International Journal for Students as Partners*, 5(1), 57-75.
- Curtis, N., & Anderson, R. (2021). A framework for developing student-faculty partnerships in program-level student learning outcomes assessment (Occasional Paper No. 53). Retrieved from National Institute for Learning Outcomes Assessment (NILOA) website: <http://files.eric.ed.gov/fulltext/ED615257.pdf>
- Derakhshan, A., Doliński, D., Zhaleh, K., Enayat, M. J., & Fathi, J. (2022). A mixed-methods cross-cultural study of teacher care and teacher-student rapport in Iranian and Polish University students' engagement in pursuing academic goals in an L2 context. *System*, 106, 102790.
- Dingel, M., & Punti, G. (2023). Building faculty-student relationships in higher education. *Mentoring & Tutoring: Partnership in Learning*, 31(1), 61-82.
- Edenfield, C., & McBrayer, J. S. (2021). Institutional conditions that matter to community college students' success. *Community College Journal of Research and Practice*, 45(10), 718-734.
- Eli, T. (2021). Students perspectives on the use of innovative and interactive teaching methods at the university of Nouakchott Al Aasriya, Mauritania: English department as a case study. *International Journal of Technology, Innovation and Management (IJTIM)*, 1(2), 90-104.

- Gerdes, J., Goei, S. L., Huizinga, M., & De Ruyter, D. J. (2022). True partners? Exploring family-school partnership in secondary education from a collaboration perspective. *Educational review*, 74(4), 805-823.
- Gokpınar-Shelton, E., & Pike, G. R. (2021). Strategies to boost international student success in US higher education: an analysis of direct and indirect effects of learning communities. *Higher Education*, 84, 279-297.
- Guo, J. P., Yang, L. Y., Zhang, J., & Gan, Y. J. (2022). Academic self-concept, perceptions of the learning environment, engagement, and learning outcomes of university students: relationships and causal ordering. *Higher Education*, 83, 809-828.
- Guo, P., Saab, N., Wu, L., & Admiraal, W. (2021). The community of inquiry perspective on students' social presence, cognitive presence, and academic performance in online project-based learning. *Journal of Computer Assisted Learning*, 37(5), 1479-1493.
- Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107-123.
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management & Data Systems*, 117(3), 442-458.
- Hegazy, A. Z., & Elballah, K. A. (2023). The relative contribution of self-regulation skills in motivational styles according to the ARCS model for students with learning disabilities. *Educational Administration: Theory and Practice*, 29(1), 147-157.
- Ho, I. M. K., Cheong, K. Y., & Weldon, A. (2021). Predicting student satisfaction of emergency remote learning in higher education during COVID-19 using machine learning techniques. *Plos one*, 16(4), e0249423.
- Huang, Y., & Swanto, S. B. (2023). Research on college students' classroom learning based on informatization to promote English education system in China. *Educational Administration: Theory and Practice*, 29(1), 91-106.
- Humaira, M. A., Rachmadtullah, R., Samsudin, A., & Nurtanto, M. (2022). Exploring lecturers' perspectives on inclusive elementary school mentoring programs based on university-school collaborative partnerships in Indonesia. *Journal of Education and e-Learning Research*, 9(4), 233-239.
- Kahu, E. R., Ashley, N., & Picton, C. (2022). Exploring the complexity of first-year student belonging in higher education: Familiarity, interpersonal, and academic belonging. *Student Success*, 13(2), 10-20.
- Kalkbrenner, M. T., Jolley, A. L., & Hays, D. G. (2021). Faculty views on college student mental health: Implications for retention and student success. *Journal of College Student Retention: Research, Theory & Practice*, 23(3), 636-658.
- Khan, M. I., Azeem, M., Ahmed, M., Yasin, M. A., Ali, R. (2021). Impacts of social media on student's academic achievement: A case of higher educational institutions of southern punjab of Pakistan. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*, 12(3). Retrieved from <https://tuengr.com/V12/12A3S.pdf>
- Khryk, V., Ponomarenko, S., Verhun, A., Morhulets, O., Nikonenko, T., & Koval, L. (2021). Digitization of education as a key characteristic of modernity. *IJCSNS International Journal of Computer Science and Network Security*, 21(10), 191-195.
- Kim, D., Woo, Y., Song, J., & Son, S. (2023). The relationship between faculty interactions, sense of belonging, and academic stress: A comparative study of the post-COVID-19 college life of Korean and international graduate students in South Korea. *Frontiers in Psychiatry*, 14, 1169826.
- Kimaro, A. R., & Machumu, H. J. (2015). Impacts of parental involvement in school activities on academic achievement of primary school children. *International Journal of Education and Research*, 3(8), 483-494.
- Liu, X., Zhu, W., & Seong, D. S. (2023). exploring the influence of art teachers' core quality improvement on students' learning motivation and educational policy: Empirical evidence based on Chinese universities. *Educational Administration: Theory and Practice*, 29(3), 48-68.
- Liu, Z., & Cui, D. (2023). Permeable educational learning environments: The impact of the space environment fosters student learning and engagement. *Educational Administration: Theory and Practice*, 29(1), 221-237.
- Llamas, J. D., Nguyen, K., & Tran, A. G. T. T. (2021). The case for greater faculty diversity: Examining the educational impacts of student-faculty racial/ethnic match. *Race Ethnicity and Education*, 24(3), 375-391.
- Longobardi, C., Settanni, M., Lin, S., & Fabris, M. A. (2021). Student-teacher relationship quality and prosocial behaviour: The mediating role of academic achievement and a positive attitude towards school. *British Journal of Educational Psychology*, 91(2), 547-562.

- Luo, H., Zuo, M., & Wang, J. (2022). Promise and reality: Using ICTs to bridge China's rural-urban divide in education. *Educational Technology Research and Development*, 70(3), 1125-1147.
- Luo, N., Li, H., Zhao, L., Wu, Z., & Zhang, J. (2022). Promoting student engagement in online learning through harmonious classroom environment. *The Asia-Pacific Education Researcher*, 31(5), 541-551.
- Lynn, V., & Chase, A. T. (2022). Circle pedagogy in criminal justice education at a PWI: A student/faculty collaborative autoethnography. *Journal of Criminal Justice Education*, 34(4), 553-572.
- Mahmood, W., Mohamad Ridhuan, M., Mat Dangi, T. M. R., Anuar, K., & Ali, M. (2014). Investigating students' satisfaction level on implicit services of Malaysian public higher education institutions. *Gading Business and Management Journal*, 18, 41-59.
- Mari, T., Gunasagaran, S., Srirangam, S., Kuppusamy, S., & Lee, X. S. (2021). Student-faculty partnership: Student's experience from the architecture course. In *Transforming Curriculum Through Teacher-Learner Partnerships* (pp. 159-178). Hershey, PA: IGI Global.
- Miller, A. L., Fassett, K. T., & Palmer, D. L. (2021). Achievement goal orientation: A predictor of student engagement in higher education. *Motivation and Emotion*, 45, 327-344.
- Mohamed Mohamed Bayoumy, H., & Alsayed, S. (2021). Investigating relationship of perceived learning engagement, motivation, and academic performance among nursing students: A multisite study. *Advances in Medical Education and Practice*, 12, 351-369.
- Mok, K. H. (2021). Education market with the Chinese characteristics: The rise of minban and transnational higher education in China. *Higher Education Quarterly*, 75(3), 398-417.
- Moriña, A. (2022). Faculty members who engage in inclusive pedagogy: Methodological and affective strategies for teaching. *Teaching in Higher Education*, 27(3), 371-386.
- Moussa, N. M., & Ali, W. F. (2022). Exploring the relationship between students' academic success and happiness levels in the higher education settings during the lockdown period of COVID-19. *Psychological Reports*, 125(2), 986-1010.
- Namboodiri, S. (2022). Zoom-ing past "the new normal"? Understanding students' engagement with online learning in higher education during the covid-19 pandemic. In *Re-imagining Educational Futures in Developing Countries: Lessons from Global Health Crises* (pp. 139-158). Boston, MA: Springer.
- Obaid, A. J., Mahdawi, R. S. A., & Khalaf, H. A. (2022). Adoption social media-movie based learning project (SMMBL) to engage students' online environment. *Educational Administration: Theory and Practice*, 28(01), 22-36.
- Oluwajana, D., Adeshola, I., & Clement, S. (2021). Does the use of a web-based collaborative platform reduce cognitive load and influence project-based student engagement?. *Current Psychology*, 42, 8265-8278.
- Park, J. J., Kim, Y. K., Salazar, C., & Eagan, M. K. (2022). Racial discrimination and student-faculty interaction in STEM: Probing the mechanisms influencing inequality. *Journal of Diversity in Higher Education*, 15(2), 218.
- Pedler, M. L., Willis, R., & Nieuwoudt, J. E. (2022). A sense of belonging at university: Student retention, motivation and enjoyment. *Journal of Further and Higher Education*, 46(3), 397-408.
- Peña, C., Ruedas-Gracia, N., Cohen, J. R., Tran, N., & Stratton, M. B. (2022). Ten simple rules for successfully supporting first-generation/low-income (FLI) students in STEM. *PLoS Computational Biology*, 18(10), e1010499.
- Pichainarongk, S., & Bidaisee, S. (2022). An assessment of high-performance work system theory towards academic development, work environment and promotion in higher education: A Thailand and international comparison. *Educational Administration: Theory and Practice*, 28(03), 13-28.
- Quinchiguango Alvear, K. S. (2019). *Analysis of the affective teacher-student relationship and its influence in the academic performance of students at tenth year "C" in the unidad educativa "vicente anda aguirre" from the city of Riobamba, Chimborazo province, during the first quimester in the academic year 2018-2019* (Bachelor's thesis, Universidad Nacional de Chimborazo, Riobamba, Ecuador). Retrieved from <http://dspace.unach.edu.ec/handle/51000/5391>
- Rickert, N. P., & Skinner, E. A. (2022). Parent and teacher warm involvement and student's academic engagement: The mediating role of self-system processes. *British Journal of Educational Psychology*, 92(2), 667-687.
- Rowe, A. D., Jackson, D., & Fleming, J. (2023). Exploring university student engagement and sense of belonging during work-integrated learning. *Journal of Vocational Education & Training*, 75(3), 564-585.
- Samala, A. D., Marta, R., Anori, S., & Indarta, Y. (2022). Online learning applications for students: Opportunities



& challenges. *Educational Administration: Theory and Practice*, 28(03), 1-12.

Saucier, D. A., Miller, S. S., Jones, T. L., & Martens, A. L. (2022). Trickle down Engagement: Effects of perceived teacher and student engagement on learning outcomes. *International Journal of Teaching and Learning in Higher Education*, 33(2), 168-179.

Shafait, Z., Khan, M. A., Sahibzada, U. F., Dacko-Pikiewicz, Z., & Popp, J. (2021). An assessment of students' emotional intelligence, learning outcomes, and academic efficacy: A correlational study in higher education. *Plos one*, 16(8), e0255428.

Shaikh, F., Afshan, G., Anwar, R. S., Abbas, Z., & Chana, K. A. (2023). Analyzing the impact of artificial intelligence on employee productivity: the mediating effect of knowledge sharing and well-being. *Asia Pacific Journal of Human Resources*. <https://doi.org/10.1111/1744-7941.12385>

Singh, S., & Jasial, S. S. (2021). Moderating effect of perceived trust on service quality–student satisfaction relationship: evidence from Indian higher management education institutions. *Journal of Marketing for Higher Education*, 31(2), 280-304.

Snijders, I., Wijnia, L., Dekker, H. J. J., Rikers, R. M. J. P., & Loyens, S. M. M. (2022). What is in a student-faculty relationship? A template analysis of students' positive and negative critical incidents with faculty and staff in higher education. *European Journal of Psychology of Education*, 37(4), 1115-1139.

Su, X., & Huang, J. (2021). Social media use and college students' academic performance: Student engagement as a mediator. *Social Behavior and Personality: an international journal*, 49(10), 1-8.

Swain, C. (2022). *International students and sense of belonging: Transitioning cultures and finding a fit in higher education* (Doctoral dissertation, The University of Utah, Salt Lake City, USA). Retrieved from <https://search.proquest.com/openview/814f0cc8532b0cbb435e68c8070f3da8/1?pq-origsite=gscholar&cbl=18750&diss=y>

Tao, Y., Meng, Y., Gao, Z., & Yang, X. (2022). Perceived teacher support, student engagement, and academic achievement: a meta-analysis. *Educational Psychology*, 42(4), 401-420.

Teng, Y., & Wang, X. (2021). The effect of two educational technology tools on student engagement in Chinese EFL courses. *International Journal of Educational Technology in Higher Education*, 18(1), 1-15.

Tholen, R., Wouters, E., Ponnet, K., de Bruyn, S., & Van Hal, G. (2022). Academic stress, anxiety, and depression among Flemish first-year students: the mediating role of sense of belonging. *Journal of College Student Development*, 63(2), 200-217.

Toropova, A., Myrberg, E., & Johansson, S. (2021). Teacher job satisfaction: The importance of school working conditions and teacher characteristics. *Educational review*, 73(1), 71-97.

Trolan, T. L., Archibald, G. C., & Jach, E. A. (2022). Well-being and student–faculty interactions in higher education. *Higher Education Research & Development*, 41(2), 562-576.

Vikhnevich, S., Gao, Y., Jiang, L., Chen, X., & Li, C. (2022). Attitudes and Intentions that made it work: students-faculty partnership in China. *The Journal of Educational Innovation, Partnership and Change*, 8(2). Retrieved from <https://journals.studentengagement.org.uk/index.php/studentchangeagents/article/view/1132>

Wallace, S. (2022). *The impact of student-teacher interactions on academic achievement: a phenomenological study examining the perceptions of first-year university student-athletes with online education* (Doctoral dissertation, Liberty University, Lynchburg, USA). Retrieved from <https://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=4967&context=doctoral>

Wang, C., & Kim, M. H. (2023). Impact of education and its importance on e-commerce platforms influencing college students' abilities and performance-based results. *Educational Administration: Theory and Practice*, 29(3), 93-110.

Wong, W. H., & Chapman, E. (2022). Student satisfaction and interaction in higher education. *Higher Education*, 85(5), 957-978.

Xiong, S. (2022). The role of faculty in faculty–student engagement: Disaggregated analyses by ethnicity for Southeast Asian American college students. *Journal of College Student Development*, 63(4), 461-466.

Yoon, S. H. (2023). Educational outcomes of after-school programs in Korea: A meta-analysis. *Educational Administration: Theory and Practice*, 29(1), 29-42.

Zhang, Y., & bin Mohamad Haris, M. F. (2023). Practical application and educational role of chen gang's violin works in music classrooms in primary and secondary schools. *Educational Administration: Theory and Practice*,

29(1), 158-177.

Zheng, Q., & Zheng, G. (2023). Folk sports and physical education: Beyond the classroom'-an exploration of the relationship between folk sports participation and physical education in rural schools. *Educational Administration: Theory and Practice*, 29(3), 69-92.

Zhu, W., Liu, X., & Seong, D. (2023). Educational innovation in higher education: Role of innovative competencies, learning environment, student readiness and ideological and political education. *Educational Administration: Theory and Practice*, 29(1), 178-197.