Examining the Relationship Between Teacher Interaction and Satisfaction Among College Students

¹ Ismael W. Baog, ² Ada Leshem Marie, ³ Marirose Dani, ⁴ Krystal Claire Taga-amo ⁵ Jincky Vizconde

¹Faculty, City College of Davao ^{2,3,4,5}Student, City College of Davao

*Corresponding Author: dodonggo16@gmail.com

Abstract

Student satisfaction in higher education is influenced by multiple factors, with teacher interaction often considered a key determinant. This study examined the relationship between teacher interaction and college students' satisfaction using a non-experimental quantitative correlational design. A sample of 100 students was selected through stratified random sampling. Results indicated a weak and statistically insignificant relationship between teacher interaction and student satisfaction (r = 0.164, p = 0.104), suggesting that teacher interaction alone is not a primary predictor of student satisfaction. These findings align with Self-Determination Theory (Deci & Ryan, 1985), which highlights autonomy, competence, and relatedness as more influential factors in academic fulfillment. While teacher interaction contributes to the learning environment, student satisfaction may depend more on experiences that foster independence, confidence, and meaningful connections. The study challenges traditional assumptions about the impact of teacher interaction and highlights the importance of self-directed learning, institutional resources, and peer collaboration in shaping student satisfaction. Future research may explore other mediating variables affecting student satisfaction, while higher education institutions should implement broader engagement strategies to enhance students' overall academic experiences.

Keywords: Teacher interaction, student satisfaction, Self-Determination Theory, higher education

1. INTRODUCTION

College students' satisfaction remains a critical concern in higher education, as various factors influence their academic experiences and overall well-being. One significant yet often overlooked factor is the quality of teacher-student interaction, which has been shown to directly impact students' satisfaction with their learning environment (Bilal et al., 2020). Studies suggest that ineffective or limited teacher-student interaction can lead to decreased engagement, lower academic motivation, and dissatisfaction with college education (Luo, 2024). Teaching presence and instructional communication are critical in shaping students' learning experiences, with weak facilitation and guidance contributing to dissatisfaction in the classroom (Jeong, 2023). Additionally, a lack of strong teacher leadership has been identified as a factor that limits meaningful teacher-student interactions, ultimately affecting students'

academic satisfaction (Liu et al., 2021). Given these concerns, understanding the role of teacher interaction to college students' satisfaction is crucial in addressing this ongoing issue in higher education.

Student satisfaction remains a persistent challenge in higher education institutions worldwide, with various factors affecting students' learning experiences and overall academic fulfillment. In China, research highlights that weak teacher-student interaction, influenced by rigid academic structures, contributes to dissatisfaction among college students (Liu et al., 2021). Similarly, in Pakistan, studies indicate that students report lower satisfaction levels when teachers lack engagement and fail to foster meaningful interactions (Haris et al., 2023). In South Korea, inadequate instructional support and ineffective communication between educators and students have been identified as key contributors to dissatisfaction in classroom experiences (Liu et al, 2023). Meanwhile, in the United States, weak faculty-student interactions have been directly linked to lower student satisfaction and retention rates, particularly among Generation Z college students (Jarecke, 2020). These studies emphasize the widespread issue of inadequate teacher-student interaction as a significant predictor of dissatisfaction among college students in diverse educational contexts.

Challenges in student satisfaction are not unique to a single institution but are evident across various higher education institutions in the Philippines. In Metro Manila, many students experience dissatisfaction due to inconsistency in instructional quality and limited engagement with faculty. The absence of interactive and student-centered teaching methods has led to complaints about inadequate academic support and unfulfilled learning expectations (Caleja & Averion, 2020). In Southern Negros Occidental, students express dissatisfaction with the level of faculty engagement and the quality of teaching strategies, as many feel that instructors do not effectively cater to their academic needs (Rosas & Madrigal, 2024). In Western Leyte, research shows that student satisfaction remains at a moderate level, with poor teacher-student interaction identified as a major factor. Students report feeling disengaged due to the lack of meaningful communication and feedback from their instructors (Muertigue, 2017). These issues emphasize the ongoing struggle of higher education institutions in the Philippines to enhance student satisfaction by improving teacher-student engagement and instructional effectiveness.

The persistent issue of low student satisfaction in higher education institutions has serious implications, leading to disengagement, poor academic performance, and high dropout rates. Research highlights that ineffective teacher-student interaction significantly reduces students' academic satisfaction, as a lack of meaningful engagement with instructors weakens motivation and learning outcomes (Um & Jang, 2024). Additionally, insufficient faculty leadership and poor interaction strategies have been linked to diminished student satisfaction, further reinforcing the need for institutional reforms (Liu et al., 2021). Inadequate teacher engagement also negatively impacts students' classroom experience, leading to frustration and dissatisfaction with their academic journey (Sultana et al., 2023). Despite growing recognition of the role of teacher-student relationships in fostering student success, there remains a gap in understanding how teacher interaction directly predicts student satisfaction across different educational contexts (Muzammil et al., 2020). Addressing this gap is crucial, as unresolved student dissatisfaction can lead to declining institutional reputation, poor retention rates, and weakened academic performance. Investigating the role of teacher interaction in student satisfaction is essential for formulating effective strategies to enhance student engagement and improve overall educational experiences.

2. METHOD

This study employed a non-experimental quantitative correlational research design to examine the relationship between teacher interaction and student satisfaction without manipulating variables. Non-experimental research allows for the collection and analysis of numerical data to describe relationships as they naturally occur (Babbie, 2016). A correlational design, as described by Creswell & Creswell (2017), determines statistical associations between two variables without researcher intervention. The study was conducted at a newly established educational institution in the Philippines, offering three academic programs.

A sample of 100 students was selected from a population of 320 using stratified random sampling to ensure proportional representation across the three academic programs. Stratified random sampling was chosen over simple random sampling to address potential disparities in student distribution and provide a more balanced and representative sample (Cochran, 1977). The population was divided into strata based on academic programs, and participants were randomly selected from each stratum according to its proportion in the total population. The sample size was determined using Cochran's formula, maintaining a 95% confidence level and a 5% margin of error, ensuring statistical reliability.

Two adapted and validated survey instruments were used. The teacher interaction questionnaire, developed by Fisher, Fraser, and Cresswell (1995), contained 48 items across eight indicators, including leadership, helping, and understanding. The student satisfaction questionnaire, adapted from Han et al. (2023), comprised 19 items assessing teaching, assessment, and learning experience. Both employed a 5-point Likert scale (1 = very low, 5 = very high). Reliability testing confirmed strong internal consistency, with Cronbach's alpha scores of 0.915 for teacher interaction and 0.934 for student satisfaction (Vetter, 2017). The data collection process followed standard research protocols, including institutional approval, expert validation, informed consent, and secure data handling.

For data analysis, descriptive statistics (mean) assessed levels of teacher interaction and student satisfaction, while Pearson's Product-Moment Correlation Coefficient determined the strength and direction of their relationship (Sultana et al., 2023). Ethical guidelines were strictly followed in accordance with the Data Privacy Act of 2012 (Republic Act No. 10173, 2012), ensuring confidentiality, voluntary participation, and informed consent. Participants were fully informed of their rights and could withdraw at any time. Research findings were shared with participants and the academic community, and acknowledgment of participation was provided in compliance with institutional policies.

3. RESULTS AND DISCUSSION

Table 1 presents the descriptive statistics for Teacher Interaction and Student Satisfaction, including standard deviation (SD), mean scores, and corresponding descriptive levels. The overall mean score for Teacher Interaction is 3.13 (SD = 0.339), which falls under the moderate level, indicating that while teacher interaction is present, it is not consistently strong across all dimensions. Among the subcategories, Leadership (M = 4.14, SD = 0.546), Helping (M = 3.71, SD = 0.584), and Understanding (M = 3.85, SD = 0.506) are rated as high, suggesting that students perceive their teachers as supportive and helpful. However, Freedom (M = 3.06, SD = 0.711) is at a moderate level, indicating that students feel only a moderate sense of autonomy in the classroom. Meanwhile, Uncertain (M = 2.38, SD = 0.593), Dissatisfied (M = 2.28, SD = 0.754), and Admonishing (M = 2.35, SD = 0.769) are rated as low, which implies that students rarely experience uncertainty, dissatisfaction, or strict disciplinary actions from their teachers.

	SD	Mean	Descriptive Level
Teacher Interaction	.339	3.13	Moderate
Leadership	.546	4.14	High
Helping	.584	3.71	High
Understanding	.506	3.85	High
Freedom	.711	3.06	Moderate
Uncertain	.593	2.38	Low
Dissatisfied	.754	2.28	Low
Admonishing	.769	2.35	Low
Student Satisfaction	.403	3.98	High
Strict	.698	3.26	Moderate
Teacher Interaction	.339	3.13	Moderate
Teaching	.546	4.06	High
Assessment	.503	3.83	High
Learning Experience	.555	4.06	High

For Student Satisfaction, the overall mean score is 3.98 (SD = 0.403), categorized as high, suggesting that students generally feel satisfied with their educational experience. Among the subcategories, Teaching (M = 4.06, SD = 0.546), Assessment (M = 3.83, SD = 0.503), and Learning Experience (M = 4.06, SD = 0.555) are all rated high, signifying that students are content with their instructors' teaching methods, evaluation processes, and overall learning experience. However, Strict (M = 3.26, SD = 0.698) and Teacher Interaction (M = 3.13, SD = 0.339) are at a moderate level, suggesting that while students generally find their teachers approachable, there is still room for improvement in interaction and instructional flexibility.

In general, the data indicates that while student satisfaction is high, teacher interaction remains moderate, pointing to a potential area for improvement. Strengthening aspects such as engagement and classroom communication may further enhance student satisfaction and the overall learning environment. These results align with studies emphasizing the positive impact of teacher-student engagement on academic experiences. Research suggests that teacher leadership and engagement play a significant role in shaping student satisfaction, as effective interaction fosters motivation, confidence, and learning success (Liu et al., 2021). Similarly, findings from Makarova (2021) highlight that student value respectful and supportive teacher interactions, which contribute to a harmonious classroom environment and positively impact their satisfaction with higher education. Additionally, Bilal et al. (2020) emphasize that engaged teachers who invest in student interactions create meaningful learning experiences, increasing overall student satisfaction.

However, contrary perspectives suggest that student satisfaction is not solely dependent on teacher interaction. Zhang & Lin (2020) argue that learner-content interaction is often more critical to student satisfaction than teacher engagement, particularly in digital learning settings. Similarly, Leach (2019) challenges the assumption that student satisfaction is purely linked to teacher engagement, emphasizing that institutional policies, learning environments, and curriculum design significantly influence students' perceptions of satisfaction. While teacher interaction remains a key factor in fostering a positive academic experience, these findings suggest that broader educational strategies should also be considered in improving student satisfaction.

Table 2. Relationship Between Variables

Student Satisfaction						
	r	p-value	Interpretation	Decision on H _o		
Teachers Interaction	0.164	0.104	Accepted	No Significant		

Table 2 presents the relationship between teacher interaction and student satisfaction, showing a correlation coefficient (r) of 0.164 and a p-value of 0.104. The correlation coefficient indicates a weak positive relationship between teacher interaction and student satisfaction, suggesting that while teacher interaction may have some influence on student satisfaction, the relationship is not strong. Additionally, the p-value (0.104) is greater than the standard significance level of 0.05, leading to the acceptance of the null hypothesis (H₀), which states that there is no significant relationship between teacher interaction and student satisfaction. This implies that variations in teacher interaction do not statistically predict student satisfaction in this study.

These findings suggest that while teacher interaction is an important aspect of the learning experience, other factors such as curriculum design, institutional policies, learning environment, and student engagement with course content may play a more significant role in shaping student satisfaction. The lack of statistical significance aligns with research indicating that teacher interaction alone is not always a decisive factor in student satisfaction (Zhang & Lin, 2020). Furthermore, studies have found that student autonomy, peer collaboration, and digital learning environments can sometimes have a more significant impact on satisfaction than direct teacher engagement (Leach, 2019). Additionally, student satisfaction is influenced by multiple factors beyond teacher interaction, such as institutional policies, course content, and administrative support (Zeng et al., 2023). Moreover, verbal interaction alone was not a significant predictor of student satisfaction, reinforcing the idea that structured curriculum and self-directed learning also contribute to positive academic experiences (Field et al., 2018). These results suggest that future research should consider a broader range of factors influencing student satisfaction, as improving teacher interaction alone may not lead to substantial increases in student contentment.

However, other studies challenge these findings by emphasizing that teacher engagement plays a crucial role in shaping student satisfaction. Liu et al. (2021) found that teacher-student interaction acts as a mediating factor between teacher leadership and student learning satisfaction, suggesting that improving teacher engagement could enhance student outcomes. Similarly, Haris et al. (2023) argue that teacher engagement significantly impacts students' learning experiences, and that increased faculty involvement leads to higher satisfaction levels. Given these mixed results, future research should explore other potential

moderating variables, such as student autonomy, digital learning environments, and institutional support systems, to better understand the complex relationship between teacher interaction and student satisfaction.

4. CONCLUSION

Based on the findings of this study, it is concluded that teacher interaction has a weak and statistically insignificant relationship with student satisfaction in higher education. While teacher interaction remains an important element of the learning experience, its direct influence on student satisfaction appears to be limited. This aligns with Self-Determination Theory (Deci & Ryan, 1985), which emphasizes that student satisfaction is primarily driven by autonomy, competence, and relatedness, rather than teacher interaction alone. The results suggest that students may fulfill these psychological needs through self-directed learning, institutional resources, and peer collaboration, thereby reducing their reliance on teacher interaction as the primary source of academic fulfillment. However, the moderate level of teacher interaction observed indicates that strategic engagement efforts such as fostering more meaningful and autonomy-supportive interactions could still enhance aspects of student satisfaction. This challenges the assumption that increasing teacher interaction alone is sufficient to improve student contentment, highlighting the need for broader interventions that empower student autonomy, enrich learning experiences, and strengthen institutional support in higher education.

ACKNOWLEDGMENTS

The authors extend their heartfelt gratitude to the Panel of Examiners, thesis advisers, expert validators, and statisticians for their invaluable insights, guidance, and expertise. They also express appreciation to the College President, college administrators, and respondents for their unwavering support throughout the study. Lastly, sincere thanks are given to their families and God Almighty for their steadfast encouragement and guidance.

NOVELTY

This study contributes to existing literature by offering new insights into the weak and statistically insignificant relationship between teacher interaction and student satisfaction in higher education. While prior research has emphasized the importance of teacher engagement, these findings suggest that student satisfaction is influenced by broader educational factors such as self-directed learning, institutional resources, and peer collaboration. By highlighting the limited direct impact of teacher interaction, this study challenges traditional assumptions and encourages the exploration of new problem-solving concepts in higher education such as enhancing student autonomy, developing more adaptive teaching strategies, and integrating institutional support systems to improve overall student satisfaction.

References

Babbie, E., (2016). The Basics of Social Research (7th ed.). Cengage Learning.

Bhandari, P., (2021). Descriptive Statistics. Scribbr. https://www.scribbr.com/methodology/descriptive-statistics/.

Bilal, A., Fatima, T., Dost, K., and Imran, M., (2020). I am Engaged, Therefore my Students are Satisfied! Unleashing the Role of Teachers' Interaction and Sensitivity Based on Self-Determination Perspective. *International Journal of Educational Management*. https://doi.org/10.1108/ijem-05-2020-0258.

Caleja, H., & Averion, R., (2020). Does Work Commitment and Job Satisfaction Matter to Junior High School Teachers in the Philippines? *International Journal of Learning and Teaching. https://doi.org/10.18844/ijlt.v12i4.4575*.

- Cochran, W., G., (1977). Sampling Techniques (3rd ed.). Wiley.
- Creswell, J., W., and Creswell, J. D. (2017). Research Design: Qualitative, Quantitative, and *Mixed Methods Approaches* (5th ed.). SAGE Publications.
- Deci, E. L., and Ryan, R., M., (1985). Intrinsic Motivation and Self-Determination in Human Behavior. Springer Science and Business Media. https://doi.org/10.1007/978-1-4899-2271-7.
- Field, J., Zhang, E., Milke, V., McCance, S., Worts, C., Stone, S., and Edwards, D., (2018). Patterns of Verbal Interaction and Student Satisfaction Within a Clinical Setting: A Video-Enhanced Observational Study. *European Journal of Dental Education*, Vol. 23 e45–e52. https://doi.org/10.1111/eje.12399.
- Fisher, D., Fraser, B., and Cresswell, J., (1995). Using the "Questionnaire on Teacher Interaction" in the Professional Development of Teachers. *Australian Journal of Teacher Education*, Vol. 20. https://ro.ecu.edu.au/ajte/vol20/iss1/2/.
- Han, Z., Bhattacharyya, E., Alias, N., Yin, Y., and Liu, X., (2023). Measuring the Determinants of Student Satisfaction In Practical Teacher Training Education Programs in China. Environment-Behaviour Proceedings Journal. https://doi.org/10.21834/e-bpj.v8i26.519.7
- Haris, S., Shah, B., Naqvi, S., Haris, M., Deeba, F., and Khan, M. (2023). Role of Teachers' Engagement in Student's Satisfaction With Medical College: A Comparison of Private and Public Sector Colleges. *Pakistan Journal of Health Sciences*. https://doi.org/10.54393/pjhs.v4i12.1245.
- Jarecke, S., (2020). Student-faculty Interactions as Predictors of Retention and Satisfaction Among Generation Z College Students. *Doctoral dissertation*. South Dakota State University. *URL*: https://openprairie.sdstate.edu/etd/3956/.
- Jeong, S., (2023). The Relationship Among Teaching Presence, Interaction, and Class Satisfaction: Experience of Interaction-Based Class in Online College English. Korean Association for Learner-Centered Curriculum and Instruction. https://doi.org/10.22251/jlcci.2023.23.24.825.
- Leach, T., (2019). Satisfied with what? Contested Assumptions about Student Expectations and Satisfaction in Higher Education. *Research in Post-Compulsory Education*, Vol. 24 pp. 155–172. https://doi.org/10.1080/13596748.2019.1596410.
- Liu, S., Zu, Y., and Li, G. (2023). What Factors Affect College Students' Learning Satisfaction? A Research on Online Learning During COVID-19 in Zhumadian Vocational and Technical College. *Journal of Technology and Humanities*. https://doi.org/10.53797/jthkkss.v4i2.4.2023.
- Liu, X., Li, X., Chen, W., & Qiu, Y. (2021). The Influence of University Teacher Leadership on Student Learning Satisfaction: The Mediating Role of Teacher-Student Interaction. *Proceedings of the 6th International Conference on Information and Education Innovations. https://doi.org/10.1145/3470716.3470723*.
- Luo, R., (2024). The impact of teacher-student relationships on teachers' job satisfaction in a vocational college in Hubei, China. *Pacific International Journal*. https://doi.org/10.55014/pij.v6i4.712
- Makarova, E., (2021). Teacher-Student Interaction in the Context of Higher Education. SHS Web of Conferences. https://doi.org/10.1051/SHSCONF/20219901041.
- Muertigue, R. (2017). Motivation, Satisfaction, and Performance of College Teachers and Administrators of Western Leyte College: A Development Plan. *Journal of Research in Business and Management*, Vol. 5 No. 2 pp. 24-39. *URL: https://www.researchgate.net/publication/363799479_Motivation_Satisfaction_and_Performance_of_College_Teachers_and_Administrators_of_Western_Leyte_College_A Development Plan.*

- Muzammil, M., Sutawijaya, A., and Harsasi, M., (2020). Investigating Student Satisfaction in Online Learning: The Role of Student Interaction and Engagement in Distance Learning University. *Turkish Online Journal of Distance Education*. https://doi.org/10.17718/tojde.770928.
- Republic Act No. 10173. (2012). Data Privacy Act of 2012. Official Gazette of the Republic of the Philippines. *URL: https://www.officialgazette.gov.ph/2012/08/15/republic-act-no-10173/*.
- Rosas, J., and Madrigal, D, (2024). Assessing Student Satisfaction With Selected Schools Services Through The 7Ps Marketing Mix: A Study of a Catholic Higher Education Institution in the Philippines. *Technium Social Sciences Journal*. https://doi.org/10.47577/tssj.v60i1.11527.
- Sultana, N., Chaudhry, A., and Idrees, N., (2023). The Influence of Tacher-Student Interaction on Student Motivation and Achievement at Secondary School Level. *Global Sociological Review. https://doi.org/10.31703/gsr.2023(viii-ii).45*.
- Um, N., and Jang, A., (2021). Antecedents and Consequences of College Students' Satisfaction with Online Learning. *Social Behavior and Personality: an International Journal*. https://doi.org/10.2224/sbp.10397.
- Vetter, T., R., (2017). Descriptive Statistics: Reporting the Answers to the 5 Basic Questions of Who, What, Why, When, Where, and a Sixth, so What? *Anesthesia & Analgesia*, Vol. 125 No. 5 pp. 1797-1802. https://pubmed.ncbi.nlm.nih.gov/28891910/.
- Zhang, Y., and Lin, C., (2020). Student Interaction and the Role of the Teacher in a State Virtual High School: What Predicts Online Learning Satisfaction?. *Jurnal of Technology, Pedagogy, and Education,* Vol. 29 pp. 57–71. https://doi.org/10.1080/1475939X.2019.1694061.