

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY: APPLIED BUSINESS AND EDUCATION RESEARCH

2025, Vol. 6, No. 10, 5032 – 5050

<http://dx.doi.org/10.11594/ijmaber.06.10.15>

Research Article

Service Quality and Student Satisfaction in High School Registrar Operations

Maria Beylen I. Inforon*, Antoniette M. Almaden

Center for Advanced Studies, College of Management, Business, and Accountancy, Cebu Institute of Technology University, Cebu, Philippines

Article history:

Submission 16 September 2025

Revised 30 September 2025

Accepted 23 October 2025

*Corresponding author:

E-mail:

mariabeylen.inforon@cit.edu

ABSTRACT

This study examined the relationship between registrar general services, physical setup, and staff familiarity in shaping student satisfaction in a high school setting. Using a quantitative descriptive-correlational design, responses from 264 students were analyzed through mean scores and Pearson's correlation coefficients. Physical setup received the highest mean score (3.35), followed by staff familiarity (3.09) and general services (2.91). Significant positive correlations were found between general services and physical setup ($r = 0.56$), general services and staff familiarity ($r = 0.34$), and physical setup and staff familiarity ($r = 0.41$). Based on these results, the study recommends infrastructure improvements, empathy-based staff training, and digital service enhancements to foster a more student-centered registrar experience.

Keywords: *Correlational Study, General Services, High School Education, Physical Setup, Registrar Services, Staff Familiarity, Student Satisfaction*

Introduction

In today's increasingly competitive educational landscape, universities and colleges are expected to operate not only as academic institutions but also as service providers committed to delivering efficient, student-centered administrative services. One of the most critical yet often underexplored units in this regard is the Registrar's Office, which plays a vital role in managing academic records, enrollment procedures, and student documentation. At the high school level within a university setting, this office becomes a central hub for students

transitioning through critical academic stages. Understanding student satisfaction in this context is essential to enhancing service quality and institutional reputation. While much of the existing literature on student satisfaction centers on academic instruction, clinical training, and university-level operations, several studies offer transferable insights that apply directly to high school registrar services. Research by Mohammadi et al. (2021) and Xiem et al. (2021) underscores that student satisfaction is shaped not only by educational content but also by institutional support services. Factors such as

How to cite:

Inforon, M. B. I. & Almaden, A. M. (2025). Service Quality and Student Satisfaction in High School Registrar Operations. *International Journal of Multidisciplinary: Applied Business and Education Research*. 6(10), 5032 – 5050. doi: 10.11594/ijmaber.06.10.15

accessibility, clarity of information, responsiveness, and the quality of interpersonal interactions consistently emerge as key determinants of satisfaction. These dimensions are especially important in registrar services, where clear communication and efficient processes can significantly influence student perceptions. At the same time, the fields of service delivery and customer experience (CX) offer valuable frameworks that can be applied to academic administration. Rahimian et al. (2021) and Jaakkola and Terho (2021) emphasize the importance of service journey quality (SJQ) and touchpoint management highlighting that each interaction a customer has with an institution shapes their overall experience. In the registrar's office, these touchpoints include form processing, inquiry responses, digital portals, and in-person transactions. A seamless, empathetic, and proactive service journey not only enhances satisfaction but builds long-term trust and loyalty. Technological advancements also play a pivotal role in shaping student satisfaction and service quality. Studies by Chen et al. (2021) and Burns et al. (2021) show that contactless and online service models when user-friendly and well-managed can meet evolving customer expectations. For registrar offices, this means adopting digital solutions like online registration platforms, virtual assistance, and automated scheduling systems to minimize delays and improve convenience. Operational efficiency, as discussed by Ye et al. (2024), is also a core factor in boosting satisfaction through streamlined administrative processes. Beyond functional-

ity, emotional and psychological aspects of service delivery are equally important. Positive interpersonal interactions, empathy, and consistent support foster a sense of being valued critical to student engagement and satisfaction (Calamia et al., 2022; Levy, 2022). This is particularly relevant in a high school context, where students may still rely heavily on administrative guidance. Anwar Zainuddin et al. (2017) further assert that clarity, approachability, and perceived support significantly influence satisfaction levels even if the focus was on academic instructors, the principles hold for administrative staff. Finally, student satisfaction is not just an outcome it is a predictor of loyalty and institutional success. As Ong et al. (2019) demonstrate, satisfied students are more likely to remain engaged, speak positively about the institution, and maintain long-term relationships. In the high school registrar's office, prioritizing service quality can have wide-reaching effects on institutional image and student retention. This study aims to identify and examine the key factors influencing student satisfaction with customer service delivery in a university's high school registrar's office. By applying interdisciplinary insights from customer experience management, service journey optimization, and student satisfaction research, this investigation seeks to inform strategies for improving administrative services, fostering positive perceptions, and ultimately enhancing the overall student experience in academic administration.

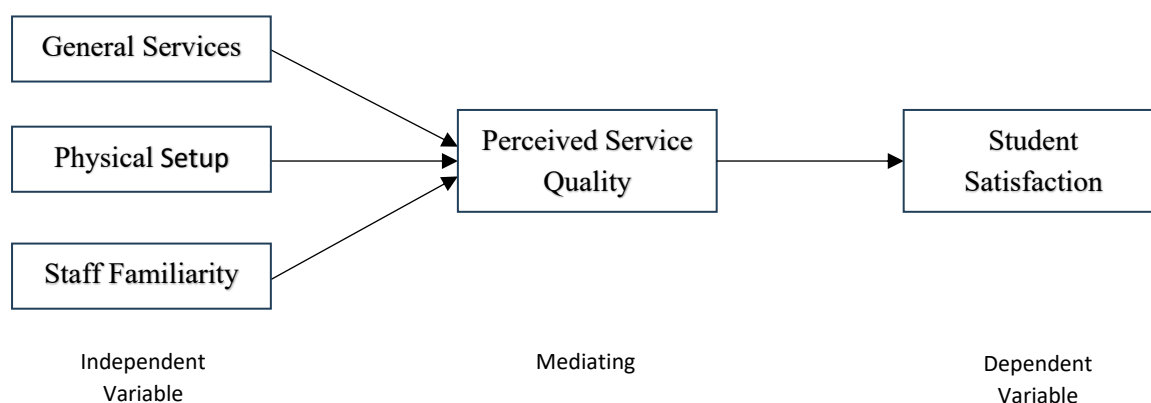


Figure 1. Conceptual Framework (Source: Author)

This study is grounded in the understanding that student satisfaction in academic administration is influenced by multiple interrelated factors, particularly within the context of registrar services. In the case of the High School Registrar's Office, student satisfaction is shaped not only by the efficiency of service transactions but also by the environment in which services are delivered and the quality of interpersonal interactions with administrative personnel. The conceptual framework for this study identifies three primary independent variables: General Services, Physical Setup, and Staff Familiarity. General services refers to the students' perception of how well registrar transactions are processed. This includes timeliness, responsiveness to queries, and the clarity of communication provided by the office. Efficient and dependable service is expected to directly contribute to a positive student experience. Physical Setup encompasses environmental factors such as the office's location, cleanliness, ventilation, and general accessibility. A conducive physical environment contributes to comfort, reduces stress during service interactions, and reinforces perceptions of professionalism and institutional care. Staff Familiarity involves the extent to which students know registrar personnel by name, position, or function. Familiarity with staff often contributes to approachability, trust, and improved communication, which are essential components in fostering a student-friendly administrative environment. These three factors collectively influence Perceived Service Quality, which acts as a mediating variable in the framework. Perceived service quality refers to the student's overall evaluation of registrar services based on their actual experiences and expectations. It synthesizes operational performance and relational attributes into a single judgment of how well services meet student needs. The dependent variable in the framework is Student Satisfaction, which denotes the degree to which students feel content with their interactions and experiences within the High School Registrar's Office. A high level of perceived service quality is hypothesized to lead to greater student satisfaction, which has further implications for institutional loyalty, trust, and overall student engagement. This

conceptual framework provides the foundation for examining how specific service elements influence student satisfaction within academic administrative settings. It supports the development of evidence-based strategies to improve service delivery, enhance the student experience, and strengthen institutional support systems through a student-centered approach.

Registrar General Services

While the SERVQUAL model is widely recognized for assessing service quality through dimensions such as reliability, responsiveness, assurance, empathy, and tangibles, this study does not directly apply the SERVQUAL framework. Instead, it draws on its theoretical insights to frame the importance of quality service delivery in academic settings, particularly within registrar offices. Sari et al. (2022) demonstrated how SERVQUAL and the Kano model can identify service gaps in academic and administrative systems, underscoring the importance of improving aspects that significantly affect student satisfaction. Similarly, studies conducted in university and digital administrative contexts Bayan (2024) validated the relevance of service quality frameworks in enhancing student perceptions. In the Philippine context, Escarda and Halun (2024) examined the evolution of frontline services in Cebu Normal University's registrar office, highlighting how responsiveness and service efficiency shape student satisfaction. Research has also shown that aspects such as timeliness, helpfulness, and clarity in registrar services, key concerns in this study are often reflected in broader service quality outcomes (Stankovska et al., 2024; Sharifi et al., 2021).

Physical Setup

The physical environment of educational service spaces influences satisfaction, comfort, and emotional well-being. Costa et al. (2020) showed that relocating to a modern campus with enhanced facilities led to increased student satisfaction, highlighting the value of infrastructure quality in educational contexts. In professional environments, Pehlivanoglu et al. (2020) revealed that institutional physical conditions impact job satisfaction, suggesting parallels with student satisfaction in registrar

environments. Liu et al. (2021) connected quality physical environments to psychological well-being and life satisfaction among students, especially when facilities support physical activity and self-efficacy. Studies by Beresford et al. (2022) and Liu et al. (2022) confirmed that even digital and neighborhood physical setups affect satisfaction. Beresford emphasized the role of digital interfaces in remote service quality, while Liu showed that well-maintained environments contribute to life satisfaction through health behaviors. Drawanizai et al. (2022) found that the cleanliness, comfort, and accessibility of hospital environments significantly influence satisfaction. These results parallel registrar office contexts, where physical layout and comfort levels affect service perception. Yu et al. (2022) and Li et al. (2024) further demonstrated that satisfaction with physical facilities directly impacts student engagement and well-being, particularly in relation to physical education and participation in activities. These findings suggest that improving the physical environment of registrar offices can directly influence how students perceive the quality of administrative services.

Staff Familiarity

The quality of staff-student relationships is essential for shaping educational experiences. Strong, positive relationships correlate with improved academic achievement, behavior, and mental health (Schroder, 2024). These outcomes affirm the importance of interpersonal connection and support in non-instructional contexts such as registrar services. A review on the Teacher-Student Relationship (TSR) emphasized its influence on student motivation and performance (Cook McLaurin, 2024). These relational dynamics, though focused on instructional roles, also apply to administrative staff who interact frequently with students and guide them through essential processes. Another study linked staff-student familiarity to improved school climate and attendance, confirming that relational quality enhances overall satisfaction. However, some educators still prioritize content delivery over relationship-building, potentially limiting the relational benefits in academic settings (Kennedy, 2022). Strategies to foster strong staff-student

relationships include promoting small learning communities, encouraging empathy-building, and personalizing service delivery (Hernandez et al., 2024). During periods of disruption, such as the COVID-19 pandemic, relational continuity becomes even more critical, with studies noting that strong staff-student ties offer emotional stability and institutional trust (EdTrust MDRC, 2021). Finally, in post-secondary settings, relationships with advisors and staff influence students' confidence and aspiration development. These bonds also contribute to students' sense of belonging and increase their engagement with institutional processes.

Perceived Service Quality and Student Satisfaction

Perceived Service Quality functions as a mediating variable that encapsulates students' overall evaluations of service performance. Studies consistently show that students do not merely respond to the functional delivery of services but assess their quality based on personal perceptions and expectations. When service delivery, environment, and interpersonal interactions align with student expectations, perceived quality increases, leading to higher satisfaction. Student satisfaction, the dependent variable in this framework, is influenced by operational efficiency, clear communication, and supportive interactions. Mohammadi et al. (2021) identified accessibility, responsiveness, and interpersonal quality as key contributors to student satisfaction in Iranian universities. Xiem et al. (2021) highlighted that student-centered administrative support significantly shapes satisfaction in Vietnamese institutions. Ong et al. (2023) emphasized that student satisfaction not only improves immediate academic experiences but also affects long-term loyalty and institutional reputation. Therefore, improvements in registrar services have cascading benefits for both students and the university. The reviewed literature confirms the theoretical and empirical foundations of the proposed conceptual framework.

Research Objectives

This study aims to examine the factors that influence student satisfaction in the high school registrar's office of a private academic

institution in Cebu City, Philippines. Specifically, it investigates how registrar general services, the physical setup of the registrar's office, and the level of staff familiarity contribute to students' perceptions of service quality and their overall satisfaction with administrative services. Specifically, it addresses the following:

1. To determine the level of student satisfaction with the services provided by the high school registrar's office.
2. To assess the level of student satisfaction with the physical setup and location of the registrar's office.
3. To evaluate the level of familiarity and interaction between students and registrar staff.
4. To examine the strength and direction of associations among key dimensions of registrar general services, specifically overall service, physical setup, and staff familiarity.
5. To propose evidence-informed recommendations for enhancing registrar general services based on the observed patterns in student responses.

Research Methodology

Research Design

This study utilized a quantitative descriptive-correlational research design. The study used a descriptive approach to measure students' satisfaction with registrar services, the physical setup, and staff familiarity. It also employed a correlational method to explore how these factors relate to overall student satisfaction. Descriptive research is widely used to assess student satisfaction across educational contexts. Hong et al. (2022) demonstrated how environmental factors like lighting and furniture influenced student satisfaction in a learning commons. Similarly, Gouda et al. (2021) used a descriptive correlational design to link nursing students' satisfaction with their perceptions of students' rights. These studies show that descriptive approaches effectively capture trends and perceptions, making them valuable in evaluating administrative services and learning environments. This design was chosen because it allows for the systematic collection of numerical data to describe the current state of student satisfaction and to explore

possible statistical associations between multiple independent and dependent variables without manipulating them. More specifically, the study employed a predictive correlational design, a subtype of correlational research. This approach was appropriate since the study aimed not only to determine whether a relationship exists but also to examine the extent to which registrar general services, physical setup, and staff familiarity predict student satisfaction. Predictive correlational designs are ideal for identifying which factors among a set of variables best explain or forecast outcomes of interest, in this case, student satisfaction. Predictive correlational research is widely used in educational studies to explore how specific variables relate to outcomes like academic performance, motivation, and organizational effectiveness. Ugwuanyi et al. (2020) and Chatzinikolaou and Tsirides (2020) demonstrated how psychological factors predict academic outcomes, while Marley and Wilcox (2022) highlighted the role of social support in academic success. In organizational contexts, Nwanzu and Babalola (2021) and Suleman et al. (2021) used predictive designs to show how spirituality and leadership behaviors influence workplace outcomes. These studies affirm the appropriateness of using predictive correlational design to examine how registrar general services, physical setup, and staff familiarity influence student satisfaction in academic settings.

Research Participants

The respondents of the study consisted of 264 Grade 10 students enrolled during the academic year 2024–2025 at a private academic institution in Cebu City, Philippines. These students were distributed across six designated sections: Respect, Peace, Love, Happiness, Cooperation, and Freedom. Grade 10 was purposefully selected as the target level, as students in this cohort are considered completers of Junior High School and are required to process essential academic documents such as report cards, certificates, and clearance forms before transitioning to Senior High School. This transition necessitates direct interaction with the registrar's office, thereby making Grade 10 students more familiar with institutional

administrative procedures and services compared to those in lower grade levels. While this purposive sampling ensures relevance to the study's objectives, it may limit the generalizability of findings to other grade levels or school types. Students in Senior High School or other institutions may have different experiences or expectations regarding registrar services. Future studies may consider broader sampling to capture a more diverse range of student perspectives.

Research Instrument

The primary data-gathering tool used in this study was a structured survey questionnaire thoughtfully crafted by the High School Guidance Office. This collaboration ensured that the instrument was developmentally appropriate and addressed the specific context and needs of high school students. The items were designed to assess the following key constructs: Satisfaction with registrar services, Satisfaction with the physical setup of the registrar's office, Familiarity with registrar staff, and Overall student satisfaction. Each item was rated on a 4-point Likert scale. The use of a 4-point Likert scale, which omits a neutral midpoint, was intentional. This forced-choice format was selected to prompt students to take a definitive stance on each item, thereby enhancing the interpretability of the data. It also helps mitigate tendencies toward social desirability bias and indecisiveness, which are common in adolescent populations. The instrument's structure is particularly suited to school-based assessments, where actionable and clear feedback is essential for service improvement. To ensure the instrument's reliability, a pilot test was conducted with a sample of 30 students from a comparable grade level. The resulting

Cronbach's alpha coefficient was 0.87, indicating high internal consistency across the survey items. Content validity was established through expert review by guidance counselors and academic coordinators, who assessed item relevance, clarity, and alignment with the study's objectives.

Data Analysis and Statistical Tools

To ensure a rigorous and focused examination of the research data, appropriate statistical techniques were employed based on the nature of the variables and the aims of the study. First, descriptive statistics, including measures of central tendency (mean) and variability (standard deviation), were computed to summarize student perceptions of registrar general services, physical setup, and staff familiarity. These metrics provided an overview of how students rated these institutional features. Prior to applying Pearson's *r* Correlation Coefficient, the assumptions of linearity and normality were tested. Linearity was assessed through scatterplot visualization, confirming that the relationships among variables were approximately linear. Normality of the data distribution was evaluated using the Shapiro-Wilk test, which indicated that the data met the threshold for parametric analysis. With the assumptions of linearity and normality confirmed through scatterplot visualization and the Shapiro-Wilk test, Pearson's *r* was applied to explore the relationships among the study's key variables. Table 1 presents an overview of the variable pairings and the interpretive focus guiding the correlation analysis, highlighting how each relationship contributes to understanding student satisfaction in registrar services.

Table 1. Overview of Variable Pairings and Interpretive Focus on Correlation Analysis

Variable Pair	What it Explores
General Services < > Physical Set-up	Do students who perceive better services also value the facilities?
General Services < > Familiarity	Does positive service experience increase familiarity with processes?
Physical Set-up < > Familiarity	Are better facilities linked to students' comfort and procedural awareness?

(Source: Author)

By assessing inter-variable correlations, the study identified potential linkages and patterns within students' service-related experiences. All statistical analyses were conducted using licensed software such as the Statistical Package for the Social Sciences (SPSS). Interpretation of results followed conventional significance criteria, with p-values less than 0.05 considered statistically significant. This ensured that inferences drawn from the data were grounded in objective evidence and statistical integrity.

Ethical Considerations

Given that the respondents of this study were Grade 10 students, strict ethical protocols were observed to ensure the protection and well-being of all participants. Prior to data collection, permission was obtained from the school administration, and informed consent was sought from the parents or legal guardians of the students. Assent was also obtained from the students themselves, ensuring that participation was voluntary and based on a clear understanding of the study's purpose. Confidentiality and anonymity were maintained

throughout the research process. Students were assured that their responses would be kept strictly confidential and would not affect their academic standing. No identifying information was collected, and data were reported in aggregate form only. Participants were informed that they could withdraw from the study at any point without any negative consequences. The survey was designed to be non-intrusive and respectful of students' time and comfort. Ethical approval for the study was secured from the institution's research ethics committee to ensure adherence to established research guidelines involving minors.

Results and Discussion

The study sought to assess the level of satisfaction among students regarding the services provided by the High School Registrar's Office. The analysis was based on three key variables: general services, physical set-up/location, and familiarity with office staff. The following discussion interprets the findings based on the computed mean scores and observed frequency distributions.

Table 2. Descriptive Statistics for Registrar General Services, Physical Setup, and Staff Familiarity

Variable	Rating	Frequency	Weighted Score
Level of Satisfaction for General Services of High School Registrar	Very Satisfied (4)	82	328
	Satisfied (3)	101	303
	Moderately Satisfied (2)	56	112
	Not Satisfied (1)	25	25
	Total	264	768
	Mean Score		2.91
	Std. Dev.		0.9457
Level of Satisfaction for Physical Set-up/Location of High School Registrar	Very Satisfied (4)	126	504
	Satisfied (3)	108	324
	Moderately Satisfied (2)	27	54
	Not Satisfied (1)	3	3
	Total	264	885
	Mean Score		3.35
	Std. Dev.		0.7084
Level of Familiarity with Office Staff of High School Registrar`	Very Satisfied (4)	108	432
	Satisfied (3)	92	276
	Moderately Satisfied (2)	43	86
	Not Satisfied (1)	21	21
	Total	264	815
	Mean Score		3.09
	Std. Dev.		0.9394

Note: This table presents descriptive statistics only; no inferential tests were applied, hence, p-values are not applicable.
(Source: Author)

Level of Satisfaction with the Services Provided by the High School Registrar's Office

The mean satisfaction score of 2.91 suggested that students generally perceived registrar services positively, though not exceptionally. Nearly one-third of respondents reported moderate or low satisfaction, indicating that some students may have encountered delays in releasing academic records, lack of updates on request status, limited staff availability during peak periods, or inconsistent guidance on registrar procedures. The standard deviation of 0.9457 reflected a wide range of experiences, pointing to variability in how registrar services were delivered and perceived. This inconsistency highlighted the need for targeted improvements in registrar operations. Institutions were advised to prioritize streamlining document processing, enhancing communication protocols, and ensuring consistent staff responsiveness. These findings aligned with Escarda and Halun (2024), who emphasized that responsiveness and frontline engagement in registrar services significantly influence student satisfaction in Philippine academic settings. The results also echoed broader patterns in educational service quality. Fuchs and Fangpong (2021) demonstrated the utility of the SERVQUAL model in Thai higher education, showing how student perceptions of reliability and empathy could guide actionable improvements. Although this study did not directly apply SERVQUAL, the observed gaps in clarity and responsiveness reflected similar dimensions, reinforcing the importance of institutional attentiveness to student feedback. Moreover, student satisfaction was not merely a measure of operational success—it was closely tied to educational outcomes. As Dinh et al. (2021) and Wahyoedi et al. (2021) affirmed, service quality and perceived value strongly influence student engagement, retention, and academic performance. The findings supported this connection, underscoring the need for registrar offices to adopt student-centered service enhancements that went beyond transactional efficiency. The data revealed that registrar general services

was shaped by both procedural reliability and relational consistency. Addressing these dimensions could improve student trust, institutional loyalty, and overall satisfaction as key outcomes for any academic institution committed to excellence in service delivery.

Level of Student Satisfaction with the Physical Setup and Location of the Registrar's Office

The results of the descriptive analysis revealed that a large majority of students were either satisfied or very satisfied with the physical setup and location of the high school registrar's office. The mean score of 3.35 and a standard deviation of 0.7084 reflected a generally positive impression, with about 88.6% of respondents expressing some level of satisfaction. This indicates that, overall, the registrar's physical environment met student expectations in terms of comfort, organization, and accessibility. However, 11.3% of respondents were only moderately satisfied or not satisfied at all—suggesting that some aspects of the setup may not have worked equally well for everyone. This variation in feedback aligns with findings in environmental psychology, which stress that the way people experience a space can affect their emotions, comfort levels, and behavior (Larsson et al., 2022; Stemasov et al., 2023). A clean, well-ventilated, and thoughtfully arranged office can make a real difference, especially in settings like registrar offices, where students often seek assistance with academic concerns. Tangible features such as furniture layout, lighting, signage, and spatial flow often influence how welcoming or efficient a service space feels (Gozaly & Talar, 2021; Rizos et al., 2022; Sari et al., 2022). The overall level of satisfaction found in this study is consistent with the tangibles dimension of the SERVQUAL model, which highlights the importance of the physical environment in shaping perceptions of service quality. Earlier studies have pointed out that even seemingly simple elements like the cleanliness of the space or the visibility of service counters can significantly shape how

people assess a service encounter (Mu'ti et al., 2022; Sari et al., 2022; Rizos et al., 2022). Still, the feedback from less satisfied respondents draws attention to a common issue in service delivery, the expectation-perception gap. This gap, often discussed in educational and public service research, refers to the disconnect that happens when users expect a certain level or kind of experience and encounter something different (Luong et al., 2024; Teeluckdharry et al., 2024). In this case, dissatisfaction may have stemmed from things like unclear directions, crowded spaces, or difficulties navigating the office, all of which can leave a negative impression despite otherwise adequate service (Fioretto et al., 2024). Literature across multiple fields also highlights the importance of continuous improvement when it comes to service spaces. High satisfaction levels should not be a reason to pause development efforts. Instead, regular evaluation and openness to user feedback help ensure that facilities remain responsive to changing needs (Iqbal, 2024; Lu et al., 2025; Nurjulizar & Irwani, 2024). Models like PDCA (Plan-Do-Check-Act) and tools such as IPMA (Importance-Performance Map Analysis) are often recommended to guide decision-making in these areas (Teeluckdharry et al., 2024; Lu et al., 2025).

The impact of physical environments goes beyond user satisfaction. Studies have shown that the layout and material design of office spaces can affect staff performance, leadership, and the quality of public interaction (Larsson et al., 2022; Nisar & Masood, 2024; Ciot, 2021). For example, poorly designed workspaces may unintentionally increase bureaucratic burden or delay services, while thoughtful design can make processes smoother for both users and staff. While the results suggested that the registrar's physical environment was generally effective and well-received, even a small percentage of unsatisfied responses highlighted areas worth revisiting. The literature consistently supports the idea that service spaces should evolve through user-informed changes and thoughtful design. Simple physical improvements, whether in layout, comfort, or signage, can go a long way in creating a more inclusive, efficient, and student-friendly environment.

Level Of Familiarity and Interaction Between Students and Registrar Staff

The descriptive analysis showed that students generally held a favorable impression of their familiarity with the high school registrar's staff, reflected in a mean score of 3.09. However, the relatively high standard deviation of 0.9394 pointed to inconsistencies in how students experienced these interactions. While the majority expressed satisfaction, a considerable number indicated only moderate or low satisfaction, suggesting that visibility, accessibility, or rapport with staff was not uniform across the student body. These findings reinforced what literature had long emphasized: staff-student interactions played a vital role in shaping the overall quality of educational experiences, institutional trust, and student well-being. Previous studies had demonstrated that staff perceptions of their roles and professional identities often influenced how they engaged with students (Caldwell, 2022; McCloskey et al., 2020). Inconsistent levels of student satisfaction could therefore be attributed to varying interaction styles and levels of staff commitment. Research also highlighted that empathetic, approachable, and communicative staff tended to foster greater trust and engagement, which contributed to more positive institutional perceptions (Cheng & Adekola, 2022; Gachago et al., 2024). Moreover, literature stressed that strong staff-student interactions served as a protective factor, especially during moments of academic difficulty or transition. Students who felt known and supported by staff were more likely to persist and succeed (Ye et al., 2022; Cokley et al., 2023). In the context of the registrar's office, this meant that familiar, responsive, and present staff could have improved students' satisfaction with administrative processes. The varied responses in the statistical data aligned with the idea that not all students had received the same level of engagement or support. Pedagogical models and institutional culture were also found to shape staff-student relationships. For instance, staff who adapted their interaction styles in response to blended learning or online modalities often reported increased engagement (Teixeira Antunes et al., 2021; Nyoni, 2022). These insights supported the need for staff training and development

aimed at strengthening interpersonal skills and student-facing communication, especially in administrative units where interaction often shaped first impressions. This analysis echoed key themes in the literature, while many students were satisfied with their familiarity with registrar staff, the variability in responses

indicated a need for more consistent and deliberate efforts to enhance student-staff rapport. Literature suggested that investing in structured interaction frameworks, staff development programs, and inclusive communication practices could lead to improved relational service quality and overall student satisfaction.

Relationship Between Overall Registrar Service, Physical Setup, and Staff Familiarity with Student Satisfaction

Table 3. Pearson's Correlation Coefficients Among Independent Variables: Registrar General Services, Physical Setup, and Staff Familiarity

Variable Pair	Coefficient (r)	T-Statistics	DF	p-value	Interpretation
General Services - Physical Set-up	0.557539382	10.87099676	262	5.77583E-23	Moderate to Strong Positive Correlation
General Services - Familiarity	0.336584032	5.785662023	262	2.05449E-08	Moderate to Positive Correlation
Physical Set-up - Familiarity	0.409601512	7.267606418	262	4.20582E-12	Moderate to Positive Correlation

(Source: Author)

The registrar's office played a vital role in shaping students' academic journeys, as it managed records, enrollment, and certification processes that directly affected their university experience. Because these functions were highly visible and frequently accessed, the quality of registrar services aligns with the statistical finding of a moderate to strong correlation between registrar services and student satisfaction. Studies consistently emphasize that leadership, staff motivation, technological integration, and process efficiency are critical drivers of service quality—factors that directly shape students' perceptions and experiences. These perspectives, when aligned with the findings from the Cebu Normal University (CNU) Registrar's Office (Escarda & Halun, 2024), demonstrated how registrar services evolved to meet student needs and institutional challenges. Leadership behavior and employee motivation were shown to directly influence service quality in public institutions (Marzuk et al., 2021). Similarly, Romadhoni et al. (2021) argued that motivated agents built trust, which in the registrar context translated into staff fostering student trust and satisfaction. Escarda and Halun (2024) confirmed this in their case study of CNU, where proactive leadership and staff

strategies converted operational weaknesses into opportunities, resulting in more efficient services and improved student experiences. Systematic evaluation and consistent improvement in academic services were crucial in ensuring quality (Almeyali & Mousawi, 2021). Compliance with service standards also played a key role in public service delivery (Prissando et al., 2022; Cindy & Trimurni, 2024). At CNU, adherence to the Anti-Red Tape Authority (ARTA) guidelines and the Citizens' Charter earned "Very Satisfactory" ratings from multiple student groups (Escarda & Halun, 2024). This demonstrated that standardization and transparency built credibility and positively influenced satisfaction. Automation and digital competence were increasingly essential in administrative service delivery. Robotic Process Automation (RPA) enhanced efficiency in government operations (Oluçoğlu et al., 2023), while digital competence was key for effective frontline staff performance (Nangameka et al., 2023). Lean office concepts also showed that eliminating waste and streamlining processes improved stakeholder satisfaction (Lima, 2021). At CNU, the Registrar's Office shifted away from outdated practices and implemented faster service strategies to address

increasing student populations, aligning with these efficiency-driven models (Escarda & Halun, 2024). The physical setup and infrastructure of registrar offices influenced how students perceived service quality. Poor facilities often led to lower satisfaction ratings (Nurjullizar & Irwani, 2024; Idris & Salju, 2023). At CNU, alumni and new undergraduate students expressed very high satisfaction with facilities, while graduate and old undergraduate students were only “satisfied,” suggesting that infrastructure improvements remained necessary to meet all clientele expectations (Escarda & Halun, 2024). Staff competence and interaction significantly affected service satisfaction (Tadin et al., 2022). CNU’s findings revealed that while service-providing personnel were generally rated as satisfactory, this was also identified as an area for further improvement (Escarda & Halun, 2024). The literature highlighted the role of standardization, transparency, and infrastructure in building trust and credibility, which were essential components of satisfaction. These converging insights validated the correlation result, confirming that as registrar general services improved, student satisfaction tended to rise in parallel - especially when services were visible, accessible, and responsive to evolving academic needs.

The moderate positive correlation between general registrar services and staff familiarity was further supported by literature that emphasized the role of empathy and relational values in student-staff interactions. Empathetic communication fostered trust, respect, and emotional safety - key relational components that enhanced service quality and student satisfaction. Hagen et al. (2022) highlighted that relational values such as mutual understanding and trust were deeply intertwined with empathetic engagement, suggesting that staff who embodied these traits were more likely to build meaningful connections with students. Jabour (2024) reinforced this by showing that empathy remained essential across both in-person and remote service contexts, underscoring the need for consistent emotional responsiveness in registrar interactions. Cocuz et al. (2025) extended this view by linking emotional intelligence and empathy to effective support in sen-

sitive situations, a parallel to registrar staff assisting students during high-stakes academic processes. Institutional guides and initiatives (e.g., Helping Students in Distress, Year of Compassion) advocated for empathy-based training and service culture, demonstrating that empathy could be cultivated and embedded into daily practices. These findings affirmed that staff familiarity was not merely a function of procedural knowledge but of emotional competence and relational engagement - factors that contributed meaningfully to student satisfaction and aligned with the observed correlation. The moderate positive link between the physical environment and staff familiarity was well-documented in literature that highlighted the influence of the physical setting on staff approachability and interactions with students. Studies consistently showed that safety infrastructure, spatial layout, and health-promoting facilities contributed to a welcoming and responsive atmosphere. Mahran et al. (2021) and Heidelberg et al. (2022) highlighted that environments designed with safety and inclusivity in mind fostered trust and encouraged students to engage openly with staff. During the COVID-19 pandemic, Herrmann et al. (2021) and Pattison et al. (2021) observed that physical modifications - such as distancing protocols and altered layouts - either facilitated or hindered staff-student interactions, demonstrating the environment’s direct impact on relational dynamics. Creaser et al. (2022) and Temam et al. (2022) further emphasized that well-equipped, health-conscious spaces improved staff well-being and visibility, making them more approachable and responsive. Accessibility and infrastructural quality, as discussed by Deng et al. (2025) and Liu et al. (2025), were also critical in enabling staff to support diverse student needs, especially in activity-based or high-engagement settings. These findings affirmed that the physical setup was not merely a backdrop to service delivery - it actively shaped how familiar, available, and responsive staff could be, thereby influencing student satisfaction and reinforcing the observed correlation.

Evidence-Informed Recommendations for Enhancing Registrar General Services based

on the Observed Patterns in Student Responses

Building on the statistical relationships and thematic insights uncovered in this study, we translated these findings into practical strategies to improve registrar service delivery. The observed correlations particularly the strong link between general services and physical setup, and the moderate associations involving staff familiarity highlighted key leverage points for institutional enhancement. Literature on empathy, infrastructure, and service protocols reinforced the idea that student satisfaction

was shaped not only by operational efficiency but also by relational dynamics and environmental design. The Cebu Normal University case further illustrated how targeted improvements in registrar operations yielded measurable gains in student experience. In response to these patterns, the following table outlined a set of strategic, evidence-informed recommendations. Each item was grounded in empirical data and supported by relevant literature, with suggested timelines to guide implementation and planning.

Table 4. Evidence-Informed Strategic Recommendations for Enhancing Registrar General Services

Focus Area	Recommendation	Supporting Evidence	Observed Pattern	Implementation Timeline
Physical Set-up	Upgrade layout, signage, and comfort features in registrar spaces	Nurjulizar & Irwani (2024); Idris & Salju (2023); Escarda & Halun (2024)	Strong correlation with general services ($r = 0.56$)	Short-Term: Facility audit and minor upgrades Medium-Term: Redesign service counters and waiting areas
Staff Familiarity	Conduct empathy-based training and role clarification workshops	Hagen et al. (2021); Jabour (2021); Cocuz et al. (2021)	Moderate correlation with general services ($r = 0.34$)	Short-Term: Launch training modules Long-Term: Embed empathy into performance metrics
Service Standards	Institutionalize ARTA-aligned protocols and feedback dashboards	Prissando et al. (2022); Cindy & Trimurni (2024); Escarda & Halun (2024)	High satisfaction linked to standardization	Short-Term: Review existing protocols Medium-Term: Publish service commitments and metrics
Technology Integration	Expand online services and automate routine registrar tasks	Oluçoğlu et al. (2023); Nangameka et al. (2023)	Efficiency improvements noted in CNU	Short-Term: Digitize common forms Medium-Term: Implement queueing and notification systems
Segment-Specific Support	Customize services for alumni, graduate, and undergraduate students	Escarda & Halun (2024)	Satisfaction varies by student group	Short-Term: Conduct needs assessments Long-Term: Develop tailored service protocols

(Source: Author)

Conclusion

This study explored the relationship between registrar general services, physical setup, and staff familiarity in shaping student satisfaction within the High School Registrar's Office. Using a quantitative descriptive-correlational design, the research revealed generally

favorable perceptions across all three service dimensions, with physical setup receiving the highest mean satisfaction score (3.35), followed by staff familiarity (3.09) and general services (2.91). However, variability in responses, particularly in general services and staff interaction, highlighted areas where

service delivery was inconsistent and in need of refinement. The correlational analysis confirmed statistically significant relationships among the variables, with the strongest correlation observed between general services and physical setup ($r = 0.56$), followed by moderate positive correlations between general services and staff familiarity ($r = 0.34$) and between physical setup and staff familiarity ($r = 0.41$). These results affirm that student satisfaction was shaped by the integrated experience of operational efficiency, environmental design, and relational engagement rather than by isolated service components. Informed by these findings, the study recommended a set of strategic actions grouped under three themes: Infrastructure and Environment, Staff Development and Empathy Training, and Digital Service Enhancement and Standardization. Priority levels were assigned based on the strength of correlations and the urgency of student concerns, with improvements in physical layout and staff responsiveness highlighted as top priorities due to their strong influence on both general services and student comfort. Ultimately, this research underscored the importance of registrar services that are not only efficient and accessible, but also relational, inclusive, and responsive to evolving student needs. By aligning operational systems with student-centered values and evidence-informed strategies, registrar offices can strengthen student trust, institutional loyalty, and overall satisfaction, becoming pivotal contributors to institutional excellence and long-term student success.

Acknowledgement

The authors acknowledge the use of AI-assisted platforms such as Grammarly, Quillbot, and Elicit for grammar refinement, literature organization, and initial plagiarism checks. Reference management was supported by Mendeley and Zotero. All content, analysis, and interpretations remain the sole responsibility of the authors.

References

Adnan Marzuk, Arifin Tahir, & William I. S. Mooduto. (2021). The influence of leadership behavior and work motivation on service quality at the population and civil

registration office of boalemo regency. *Journal of Economic, Business, and Administration (JEBA)*, 2(1), 13–22. <https://doi.org/10.47918/jeba.v2i1.205>

Almeyali, N.M., Mousawi, A.M. (2021). Service quality assessment of higher education by gray approach(The case of kerbala university). *Medico-Legal Update*. <https://doi.org/10.37506/mlu.v21i1.2388>

Anwar Zainuddin, M., Jun, J. L., Bakar, M. Z., Palanisamy, K., & Md Yusof, Z. (2021). Evaluation of students' satisfaction towards instructor using factor analysis. *Journal of Science and Mathematics Letters*, 9(1), 36–45. <https://doi.org/10.37134/jsml.vol9.1.4.2021>

Bayan, N. (2024). Measuring service quality in academic libraries: Enhancing customer satisfaction. *Library Philosophy and Practice (e-Journal)*. <https://digitalcommons.unl.edu/libphilprac/8201>

Beresford, L., & Norwood, T. (2022). The effect of mobile care delivery on clinically meaningful outcomes, satisfaction, and engagement among physical therapy patients: Observational retrospective study. *JMIR Rehabilitation and Assistive Technologies*, 9(1), e31349. <https://doi.org/10.2196/31349>

Burns, L. E., Pezzullo, C., Dief, S., Conde, G., & Mejia, E. E. (2021). Reimagining the pipeline: Saturday academy at new york university college of dentistry goes virtual. *Journal of Dental Education*, 85(9), 1543–1553. <https://doi.org/10.1002/jdd.12624>

Calamia, D. K., Prude, S. B., Pecoraro, R. K., & Creel, E. L. (2022). Nursing faculty perceptions of student faculty interactions. *Journal of Nursing Education and Practice*, 13(1), 45. <https://doi.org/10.5430/jnep.v13n1p45>

Caldwell, J. (2022). Professional identity and professional services staff: Understanding and impact. *Perspectives: Policy and Practice in Higher Education*, 26(4), 140–147. <https://doi.org/10.1080/13603108.2022.2073288>

- Cheng, M., & Adekola, O. (2022). Promoting acts of kindness on campus: Views of Chinese international students in the UK. *Intercultural Communication Education*, 5(1), 17–32.
<https://doi.org/10.29140/ice.v5n1.495>
- Cindy, C., & Trimurni, F. (2024). Implementasi program siap akta kelahiran dan kartu identitas anak (Program si adik) pada tingkat sekolah dasar di dinas kependudukan dan pencatatan sipil kota binjai. *PUBLIKA : Jurnal Ilmu Administrasi Publik*, 10(1), 87–101.
<https://doi.org/10.25299/jiap.2024.16400>
- Ciot, M.-G. (2021). On european green deal and sustainable development policy(The case of romania). *Sustainability*, 13(21), 12233.
<https://doi.org/10.3390/su132112233>
- Chatzinikolaou, M. D., & Tsirides, A. (2020). Academic self-concept and critical thinking dispositions: Devising a predictive model of college students' degree commitment. *Journal of Advanced Research in Social Sciences*, 3(3), 1–13.
<https://doi.org/10.33422/jarss.v3i3.516>
- Chen, S.-H. (Ava), Tzeng, S.-Y., Tham, A., & Chu, P.-X. (2021). Hospitality services in the post COVID-19 era: Are we ready for high-tech and no touch service delivery in smart hotels? *Journal of Hospitality Marketing & Management*, 30(8), 905–928.
<https://doi.org/10.1080/19368623.2021.1916669>
- Cocuz, I. G., Niculescu, R., Popelea, M. C., Sabău, A.-H., Cocuz, M.-E., Manole, M., Ioniță, A.-C., Altarozzi, G., Tătar-Dan, M., Cotoi, O. S., & Pașca, D. M. (2025). The emotional anatomy of diagnosis: A medical humanities approach to empathy in pathology. *Diagnostics*, 15(15), 1842.
<https://doi.org/10.3390/diagnostics15151842>
- Cokley, K., Garba, R., Harris, K., Krueger, N., Bailey, M., & Hall, S. (2023). Student-faculty interactions, university environment, and academic attitudes among black college students: The role of school racial composition. *The Journal of Higher Education*, 94(4), 444–472.
<https://doi.org/10.1080/00220597.2023.2203628>
- Cook McLaurin, K. (2024). Do relationships matter? An examination of the effects of teacher-student relationships on performance and progress in an alternative high school. *Theses and Dissertations*.
https://scholar.stjohns.edu/theses_dissertations/779
- Costa, A. P., & Steffgen, G. (2020). After the move to a new campus—Effects on students' satisfaction with the physical and learning environment. *Education Sciences*, 10(12), 370.
<https://doi.org/10.3390/educsci10120370>
- Creaser, A. V., Frazer, M. T., Costa, S., Bingham, D. D., & Cledes, S. A. (2022). The use of wearable activity trackers in schools to promote child and adolescent physical activity: A descriptive content analysis of school staff's perspectives. *International Journal of Environmental Research and Public Health*, 19(21), 14067.
<https://doi.org/10.3390/ijerph192114067>
- Deng, Y., Li, X., Huang, J., Haegele, J. A., Smith, B., Williams, T. L., & Li, C. (2025). School-based factors influencing physical activity participation in children and adolescents with disabilities: A qualitative systematic review and meta-synthesis. *Disability and Health Journal*, 18(1), 101707.
<https://doi.org/10.1016/j.dhjo.2024.101707>
- Dinh, H.-V. T., Nguyen, Q. A. T., Phan, M.-H. T., Pham, K. T., Nguyen, T., & Nguyen, H. T. (2021). Vietnamese students' satisfaction toward higher education service: The relationship between education service quality and educational outcomes. *European Journal of Educational Research*, volume-10-2021(volume-10-issue-3-july-2021), 1397–1410.
<https://doi.org/10.12973/eu-er.10.3.1397>
- Drawanizai, O., & Nyorong, M. (2022). Analysis of nurse services quality on patient satisfaction class ii hospital. *Jurnal Perilaku Kesehatan Terpadu*, 1(1), 72–83.
<https://doi.org/10.61963/jpkt.v1i1.17>

- EdTrust MDRC. (2021). The importance of strong relationships between teachers & students. *EdTrust*. Retrieved July 15, 2025, from <https://edtrust.org/rti/the-importance-of-strong-relationships/>
- E. Escarda, F., & B. Halun, Z. (2024). Frontline services of cebu normal university (Cnu) registrar's office: Then and now. *International Journal of Science and Management Studies* (IJSMS), 99–108. <https://doi.org/10.51386/25815946/ijsms-v7i5p107>
- Faculty of Economics National Economics University, Hanoi, Vietnam", Xiem, C. T., The, T. D., & "Faculty of Business Administration National Economics University, Hanoi, Vietnam." (2021). Quality in higher education: The case of national economics university. *International Journal of Higher Education Management*, 08(01). <https://doi.org/10.24052/IJHEM/V08N01/ART-2>
- Fathy Mohamed Mahran, E., Sadek Abd El-Hameed, H., Abd Elrazek Mahmuod, A., & Fathy Mohy E-Deen, H. (2021). Safety measures and first aid educational program among sports school students and their staff regarding sports injuries. *Journal of Nursing Science Benha University*, 2(2), 29–42. <https://doi.org/10.21608/jnsbu.2021.186179>
- Fioretto, S., Masciari, E., & Napolitano, E. V. (2024). A brief discussion on kpi development in public administration. *arXiv*. <https://doi.org/10.48550/ARXIV.2412.09142>
- Fuchs, K., Fangpong, K. (2021). Ubon Ratchathani University (Thailand) Prince of Songkla University (Thailand). Using the servqual framework to examine the service quality in higher education in thailand. *Education Quarterly Reviews*, 4(2). <https://doi.org/10.31014/aior.1993.04.02.286>
- Gachago, D., Van Zyl, I., Morkel, J., & Ivala, E. (2024). Nurturing creative confidence and learner empathy: Designing for academic staff development. Proceedings of the *International Conference on Networked Learning*, 12, 100–107. <https://doi.org/10.54337/nlc.v12.8642>
- Gouda, N., Abo Gad, R., & Ahmed, E. (2021). Nursing students' and educators' perception toward nursing students' rights and its relation to nursing students' satisfaction. *Journal of Nursing Science Benha University*, 2(1), 172–184. <https://doi.org/10.21608/jnsbu.2021.159655>
- Gozaly, J., & Talar, Y. (2021). Analisis kualitas layanan administrasi bagi masyarakat(Studi kasus: Kantor kecamatan di bandung utara). *J@ti Undip: Jurnal Teknik Industri*, 16(2), 93–101. <https://doi.org/10.14710/jati.16.2.93-101>
- Hagen, E. J., & Gould, R. K. (2022). Relational values and empathy are closely connected: A study of residents of Vermont's Winooski River watershed. *Ecology and Society*, 27(3), art19. <https://doi.org/10.5751/ES-13406-270319>
- Heidelberg, K., Phelps, C., & Collins, T. A. (2022). Reconceptualizing school safety for Black students. *School Psychology International*, 43(6), 591–612. <https://doi.org/10.1177/01430343221074708>
- Herrmann, L., Nielsen, B. L., & Aguilar-Raab, C. (2021). The impact of covid-19 on interpersonal aspects in elementary school. *Frontiers in Education*, 6, 635180. <https://doi.org/10.3389/feduc.2021.635180>
- Hernández, L., & Darling-Hammond, L. (with Nielsen, N.). (2024). Cultivating relationships in secondary schools: Structures that matter. *Learning Policy Institute*. <https://learningpolicyinstitute.org/product/cultivating-relationships-secondary-schools-brief>
- Hong, S., Kim, Y., & Yang, E. (2022). Indoor environment and student productivity for individual and collaborative work in learning commons: A case study. *Library Management*, 43(1/2), 15–34. <https://doi.org/10.1108/LM-06-2021-0055>

- Idris, F., & Salju, S. (2023). Pengaruh budaya kerja, kualitas pelayanan, sarana dan prasarana terhadap kepuasan masyarakat. *Kelola: Journal of Islamic Education Management*, 8(1), 71–78. <https://doi.org/10.24256/kel-ola.v8i1.3731>
- Iqbal, S. (2024). ISO 9001 as a catalyst: Linking staff training to university performance. *The TQM Journal*. <https://doi.org/10.1108/TQM-06-2024-0216>
- Jaakkola, E., & Terho, H. (2021). Service journey quality: Conceptualization, measurement and customer outcomes. *Journal of Service Management*, 32(6), 1–27. <https://doi.org/10.1108/JOSM-06-2020-0233>
- Jabour, A. M. (2024). A comparative study of patient–physician empathy in telehealth and traditional in-person visits. *DIGITAL HEALTH*, 10, 20552076241305284. <https://doi.org/10.1177/20552076241305284>
- Kennedy, J. (2022). Why positive student relationships matter and why it's on us. *Teachers on Fire Magazine*. <https://medium.com/teachers-on-fire/why-positive-student-relationships-matter-and-why-its-on-us-7ddb9a90b2>
- Larsson, J., Vinberg, S., & Jahncke, H. (2022). Changing the office design to activity-based flexible offices: A longitudinal study of how managers' leadership behaviours are perceived. *International Journal of Environmental Research and Public Health*, 19(20), 13557. <https://doi.org/10.3390/ijerph192013557>
- Levy, S. (2022). Brand bank attachment to loyalty in digital banking services: Mediated by psychological engagement with service platforms and moderated by platform types. *International Journal of Bank Marketing*, 40(4), 679–700. <https://doi.org/10.1108/IJBM-08-2021-0383>
- Li, Q., Li, L., He, X., & Wang, H. (2024). Exploring Adolescent Moderate-to-Vigorous Physical Activity in China: Mediating Roles of School Climate, Perceived Barriers, and Physical Education Satisfaction. *Risk management and healthcare policy*, 17, 3125–3136. <https://doi.org/10.2147/RMHP.S497472>
- Lima, E. de S. (2021). Lean Office: Avaliação da sua aplicabilidade em uma universidade pública federal brasileira. <https://doi.org/10.22409/PPGA.2021.m.p.11503922740>
- Liu, F., Zhu, Z., & Jiang, B. (2021). The influence of chinese college students' physical exercise on life satisfaction: The chain mediation effect of core self-evaluation and positive emotion. *Frontiers in Psychology*, 12, 763046. <https://doi.org/10.3389/fpsyg.2021.763046>
- Liu, J., Yang, L., Xiao, L., & Tao, Z. (2022). Perceived neighborhood environment impacts on health behavior, multi-dimensional health, and life satisfaction. *Frontiers in Public Health*, 10, 850923. <https://doi.org/10.3389/fpubh.2022.850923>
- Liu, X., Han, H., Li, Z., Huang, S., Zhao, Y., Xiao, Q., & Sun, J. (2025). Barriers and facilitators to participation in physical activity for students with disabilities in an integrated school setting: A meta-synthesis of qualitative research evidence. *Frontiers in Public Health*, 13, 1496631. <https://doi.org/10.3389/fpubh.2025.1496631>
- Lu, R., Zhang, Y., Luo, L., Yuan, Q., Chen, S., Lv, N., Zheng, F., Deng, G., Ma, Y., Xu, J., Chen, Z., & Zhang, F. (2025). Increasing hospital administrative efficiency via optimized office automation systems: A PDCA cycle approach. *PLOS One*, 20(4), e0321475. <https://doi.org/10.1371/journal.pone.0321475>
- Luong, N. V., Thuy, L. T. N., Tinh, T. T., Yen, N. T. H., & Thuy, D. T. (2024). Integrating open knowledge and administrative management in the digital transformation model of education institutions: An effective approach. *International Journal of Religion*, 5(7), 290–302. <https://doi.org/10.61707/2vywv49>
- Marley, S. C., & Wilcox, M. J. (2022). Do family and peer academic social supports predict

- academic motivations and achievement of first-year college students? *Journal of Applied Research in Higher Education*, 14(3), 958–973.
<https://doi.org/10.1108/JARHE-06-2020-0158>
- McCloskey, R., Keeping-Burke, L., Witherspoon, R., Cook, J., & Morris, P. (2020). Faculty and nursing staff experiences and perceptions of nursing students' clinical placements in residential aged care facilities: A qualitative systematic review protocol. *JBI Evidence Synthesis*, 18(9), 2082–2089.
<https://doi.org/10.11124/JBISRIR-D-19-00403>
- Mohammadi, B., Jamshidi, L., Jamshidi, K., Amiri, S. M., & Poursaberi, R. (2021). The influential factors in students' satisfaction with kermanshah university of medical sciences, iran(2015—2016). *Educational Research in Medical Sciences*, 10(1).
<https://doi.org/10.5812/erms.115893>
- Mu'ti, A., Bernardianto, R. B., & Sion, H. (2022). Analisis kualitas pelayanan publik pada kantor kelurahan kuala jelai kecamatan jelai kabupaten sukamara. *Pencerah Publik*, 9(1), 23–29.
<https://doi.org/10.33084/pencerah.v9i1.3506>
- Nangameka, T. I., M P, H. R., & Rahman, A. (2023). Village officials' competence in digital-based services using e-office in mekarwangi village, sumedang regency. *Jurnal MSDA (Manajemen Sumber Daya Aparatur)*, 11(2), 51–64.
<https://doi.org/10.33701/jmsda.v11i2.3806>
- Nisar, M. A., & Masood, A. (2024). Governance by artifacts: Theory and evidence on materiality of administrative burdens. *Public Administration Review*, 84(6), 1052–1066.
<https://doi.org/10.1111/puar.13821>
- Nurjulizar, M., & Irwani, I. (2024). Quality of e-ktip services in the office bintaro district district administrative city reservation south jakarta dki jakarta province. *Journal of Public Administration Science: Policy Dynamics Public Services and Bureaucracy Transformation*, 1(1), 7–11.
<https://doi.org/10.70074/jaspdt.v1i1.3>
- Nwanzu, C. L., & Babalola, S. S. (2021). Effect of workplace spirituality on perceived organizational support and job performance among university administrative employees. *Contemporary Management Research*, 17(2), 127–155.
<https://doi.org/10.7903/cmr.20349>
- Nyoni, P. (2022). Pedagogies of access and success among South African university students in the extended curriculum programmes amidst COVID-19 disruptions. *South African Journal of Higher Education*, 36(4), 137–153.
<https://doi.org/10.20853/36-4-5206>
- Oluçoğlu, M., Doğan, O., Akkol, E., & Keskin, B. (2023). Digitized and automated a university process with robotic process automation. *Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi*, 16(1), 58–66.
<https://doi.org/10.18185/erzif-bed.1139494>
- Ong, A. K. S., Prasetyo, Y. T., Dangan, V. C. C., Gudez, M. A. D., Juanier, J. I. M., Paulite, G. A. D., Yambot, R. X. R., Persada, S. F., Nadlifatin, R., & Ayuwati, I. D. (2023). Determination of loyalty among high school students to retain in the same university for higher education: An integration of Self-Determination Theory and Extended Theory of Planned Behavior. *PLOS ONE*, 18(11), e0286185.
<https://doi.org/10.1371/journal.pone.0286185>
- Pattison, K. L., Hoke, A. M., Schaefer, E. W., Alter, J., & Sekhar, D. L. (2021). National Survey of School Employees: COVID -19, School Reopening, and Student Wellness. *Journal of School Health*, 91(5), 376–383.
<https://doi.org/10.1111/josh.13010>
- Pehlivanoglu, B., Hassoy, H., Gul, G., Aykutlu, U., & Doganavsargil, B. (2020). How does it feel to be a pathologist in turkey? Results of a survey on job satisfaction and perception of pathology. *Turkish Journal of Pathology*.
<https://doi.org/10.5146/tjpath.2020.01513>
- Prissando, F. A., Fachruddin, I., Susanto, D., & Mashuri, M. (2022). Implementasi standar pelayanan program sakti di kelurahan bu-

- jel kota kediri. *Governance, JKMP (Governance, Jurnal Kebijakan & Manajemen Publik)*, 12(2), 115–123. <https://doi.org/10.38156/gjkmp.v12i2.110>
- Rahimian, S., ShamiZanjani, M., Manian, A., & Esfidani, M. R. (2021). A framework of customer experience management for hotel industry. *International Journal of Contemporary Hospitality Management*, 33(5), 1413–1436. <https://doi.org/10.1108/IJCHM-06-2020-0522>
- Rizos, S., Sfakianaki, E., & Kakouris, A. (2022). Quality of administrative services in higher education. *European Journal of Educational Management*, volume–5–2022(volume–5–issue–2–december–2022), 115–128. <https://doi.org/10.12973/eujem.5.2.115>
- Romadhoni, N., Wolor, C. W., Jakarta State University, Jakarta, Indonesia, Suhud, U., & Jakarta State University, Jakarta, Indonesia. (2021). The impact of agent motivation on customer trust in improving the performance of government bank agents in the administrative city of north jakarta: Qualitative research. *Oblik i Finans*, 3(93), 78–89. [https://doi.org/10.33146/2307-9878-2021-3\(93\)-78-89](https://doi.org/10.33146/2307-9878-2021-3(93)-78-89)
- Sari, C. M., Hamzah, M. L., Angraini, A., Saputra, E., & Fronita, M. (2022). Analysis of academic and administration information systems using servqual and kano methods. *Building of Informatics, Technology and Science (BITS)*, 4(3). <https://doi.org/10.47065/bits.v4i3.2713>
- Sari, N. T. P., Rochmah, S., & Ulum, M. C. (2022). Influence of the administrative services quality on the public satisfaction in the land certificate program at the national land agency (Bpn) of tangerang city: *Second International Conference on Public Policy, Social Computing and Development (ICOPOSDEV 2021)*, Medan, Indonesia. <https://doi.org/10.2991/as-sehr.k.220204.058>
- Schroder, Jay. (2024). Relationships matter in education, so why aren't we better at prioritizing them? | *K-12 Dive*. (n.d.). Retrieved July 15, 2025, from <https://www.k12dive.com/news/relationships-matter-in-education-so-why-arent-we-better-at-prioritizing/704200/>
- Sharifi, T., Hosseini, S.-E., Mohammadpour, S., Javan-Noughabi, J., Ebrahimipour, H., & Hooshmand, E. (2021). Quality assessment of services provided by health centers in Mashhad, Iran: SERVQUAL versus HEALTHQUAL scales. *BMC Health Services Research*, 21(1), 397. <https://doi.org/10.1186/s12913-021-06405-4>
- Stankovska, G., Ziberi, F. & Dimitrovski, D. (2024): Service Quality and Student Satisfaction in Higher Education. In *Education in Developing, Emerging, and Developed Countries: Different Worlds, Common Challenges* (pp. 153-160). *BCES Conference Books, Vol. 22. Sofia: Bulgarian Comparative Education Society*.
- Stemasov, E., Hohn, J., Cordts, M., Schikorr, A., Rukzio, E., & Gugenheimer, J. (2023). Brickstart: Enabling in-situ design and tangible exploration for personal fabrication using mixed reality. <https://doi.org/10.48550/ARXIV.2310.03700>
- Suleman, Q., Syed, M. A., Shehzad, S., Hussain, I., Khattak, A. Z., Khan, I. U., Amjid, M., & Khan, I. (2021). Leadership empowering behaviour as a predictor of employees' psychological well-being: Evidence from a cross-sectional study among secondary school teachers in Kohat Division, Pakistan. *PLOS ONE*, 16(7), e0254576. <https://doi.org/10.1371/journal.pone.0254576>
- Tadin, A., Dadic, M., & Gavic, L. (2022). University students' satisfaction with the quality of primary dental healthcare services and dentists in croatia: A cross-sectional study. *Clinics and Practice*, 13(1), 52–64. <https://doi.org/10.3390/clinpract13010005>
- Teeluckdharry, N. B., Teeroovengadum, V., & Seebaluck, A. K. (2024). A roadmap for the application of PLS-SEM and IPMA for effective service quality improvements. *The TQM Journal*, 36(5), 1300–1345. <https://doi.org/10.1108/TQM-11-2021-0340>

- Teixeira Antunes, V., Armellini, A., & Howe, R. (2021). Academic staff perspectives on an institution-wide shift to active blended learning. *Italian Journal of Educational Technology, IJET-ONLINE FIRST*. <https://doi.org/10.17471/2499-4324/1248>
- Temam, S., Billaudeau, N., Kab, S., Zins, M., Alexander, S., & Vercambre, M.-N. (2022). Health behaviours of teachers and other education professionals in France: Can we do better? *Health Promotion International*, 37(2), daab151. <https://doi.org/10.1093/heapro/daab151>
- Ugwuanyi, C. S., Okeke, C. I. O., & Ageda, T. A. (2020). Psychological predictors of physics learners' achievement: The moderating influence of gender. *Cypriot Journal of Educational Sciences*, 15(4), 834–842. <https://doi.org/10.18844/cjes.v15i4.4635>
- Wahyoedi, S., Saporso, S., Tecoalu, M., & Winoto Tj, H. (2021). The effect of service quality, learning quality, and promotion strategy on parents' decisions in choosing abc primary schools. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(1), 999–1005. <https://doi.org/10.33258/birci.v4i1.1701>
- Ye, T., Jovine, A., van Osselaer, W., Zhu, Q., & Shmoys, D. (2024). Cornell university uses integer programming to optimize final exam scheduling. *arXiv*. <https://doi.org/10.48550/ARXIV.2409.04959>
- Ye, Y., Wang, C., Zhu, Q., He, M., Havawala, M., Bai, X., & Wang, T. (2022). Parenting and teacher–student relationship as protective factors for chinese adolescent adjustment during covid-19. *School Psychology Review*, 51(2), 187–205. <https://doi.org/10.1080/2372966X.2021.1897478>
- Yu, G., & Song, Y. (2022). What affects sports participation and life satisfaction among urban residents? The role of self-efficacy and motivation. *Frontiers in Psychology*, 13, 884953. <https://doi.org/10.3389/fpsyg.2022.884953>