



Relationship of Interdisciplinary Collaboration on Employee Engagement at a Private Tertiary Hospital in the Philippines

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Abstract

Interdisciplinary collaboration is vital in healthcare organizations for enhancing service delivery and employee outcomes. This study, conducted among 190 regular employees of a private tertiary hospital in the Philippines, examined the relationship between key dimensions of interdisciplinary collaboration—communication, mutual respect, role clarity, conflict resolution, and leadership—and employee engagement aspects such as organizational commitment, recognition, growth opportunities, job satisfaction, and affective commitment. Using a descriptive-quantitative design, data were collected through a validated questionnaire distributed via Google Forms and analyzed using frequency distribution, weighted mean, and Spearman's rank-order correlation. Findings indicated generally strong collaboration, with highest ratings in mutual respect, and role clarity, and moderate performance in communication, leadership support, and conflict resolution. Employee engagement was similarly positive, with strengths in organizational commitment and growth opportunities, while affective commitment, job satisfaction, and recognition were moderate. Significant positive relationships were found between all collaboration and engagement dimensions, highlighting that effective collaboration fosters greater motivation, satisfaction, and organizational attachment. The results align with Social Exchange Theory, suggesting that positive interpersonal interactions cultivate reciprocal commitment and engagement. Despite the positive ratings, employees reported challenges including the need for stronger interdepartmental support, communication breakdowns, conflicting departmental priorities, and hierarchical role dominance hindering effective collaboration. Building on these insights, the study proposes organizational initiatives to strengthen leadership effectiveness, improve conflict management, and create structured pathways for professional advancement. Embedding these initiatives into daily practice can sustain a motivated workforce, foster cohesive teamwork, and advance patient-centered care.

Keywords *Employee Engagement; Healthcare Professionals; Interdisciplinary Collaboration; Organizational Commitment; Private Tertiary Hospital in the Philippines; Social Exchange Theory*

INTRODUCTION

Interdisciplinary collaboration is a key driver of organizational effectiveness in private tertiary hospitals, enhancing coordination while boosting employee engagement and job satisfaction (Labrague et al., 2022). The complexity of healthcare requires coordinated efforts among doctors, nurses, allied health professionals, and administrative staff; however, weak collaboration often leads to fragmented care and low morale (Moncatar et al., 2021). In contrast, Kaiser et al. (2018) emphasized that collaborative practices are associated with higher engagement and job satisfaction. Understanding this connection is vital for sustaining workforce motivation and strengthening hospital performance.

Global studies further reinforce the significance of interdisciplinary collaboration in shaping employee engagement and organizational outcomes. For instance, Schwarzkopf et al. (2024) demonstrated that higher levels of collaboration are linked to improved staff well-being and more positive perceptions of care quality. Similarly, Ishii et al. (2024) found that collaboration mediates the relationship between organizational learning and safety climate, thereby contributing to stronger institutional performance. Meanwhile, Ambrose et al. (2024) highlighted that shared

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responsibility and collaborative approaches during high-stress situations enhance organizational adaptability. Complementing these findings, [Janes et al. \(2021\)](#) found that engaged staff, fostered through effective collaboration, are associated with better patient safety outcomes and a stronger safety culture. Collectively, these findings illustrate that fostering collaboration not only supports employee engagement but also drives better patient outcomes and overall hospital success.

Local non-hospital studies highlight the positive impact of collaboration on employee outcomes. [Palmiano \(2019\)](#) linked collaboration to organizational commitment among university staff, while [Asio \(2021\)](#) found that team diversity boosted job satisfaction in higher education. In the corporate sector, [Centeno \(2022\)](#) showed that collaboration-focused interventions enhanced engagement, and [Pacquing \(2023\)](#) found that engagement mediated the link between organizational alignment and commitment. Although outside healthcare, these studies consistently connect collaboration and engagement—insights notably absent in Philippine hospital research.

In Philippine hospitals, studies have addressed related but separate elements. For instance, [Nakamura et al. \(2022\)](#) examined interprofessional training in primary care, which enhanced collaboration skills but did not explore its link to employee engagement. Similarly, [Falguera et al. \(2023\)](#) investigated nurse engagement in relation to job satisfaction and burnout, but without considering interdisciplinary collaboration. Based on the researchers' knowledge and considering the scarcity of local literature on this topic, these remain among the few that link collaboration and engagement in Philippine healthcare. However, both treated these dimensions in isolation, whereas the present research integrates them by examining their relationship within the hospital setting. This study extends prior efforts and offers a fuller view of fostering an engaged workforce in high-pressure contexts.

The subject of this study was a private tertiary hospital in the Philippines that provides specialized healthcare services. The hospital plays a vital role in delivering quality care to its surrounding communities. However, like many healthcare institutions, it faces internal challenges such as limited competencies in innovation, stakeholder alignment, and business acumen, which affected employee engagement and collaboration. These reflect a rigid culture and gaps in operational and strategic capacity. In the country's high-pressure healthcare environment, strong interdisciplinary collaboration and continuous innovation are essential. Understanding how collaboration and engagement interact within this context provides valuable insights for improving hospital performance and workforce satisfaction. Addressing these challenges offers practical guidance for leaders seeking to foster a more collaborative, engaged workforce.

This study aimed to examine the relationship between interdisciplinary collaboration and employee engagement within the subject institution. Specifically, it sought to assess the level of interdisciplinary collaboration in terms of communication, mutual respect, clarity of role, conflict resolution, and leadership. It also evaluated employee engagement based on organizational commitment, recognition, opportunity for growth, job satisfaction, and affective commitment. In addition, it explored the extent to which interdisciplinary collaboration was related to employee engagement. Furthermore, the study explored the problems that could hinder collaboration and how these barriers may have impacted employee engagement. Ultimately, the study sought to propose strategies to enhance interdisciplinary collaboration within the hospital based on its findings. Anchored in Social Exchange Theory, which highlights how reciprocal workplace relationships strengthen motivation and engagement ([Sulistiyan et al., 2022](#)), this study aims to provide actionable insights for fostering a more engaged and collaborative hospital workforce.

LITERATURE REVIEW

Aligned with the study's objectives, the researchers conducted a comprehensive review of related literature from credible sources to provide a deeper understanding of the study variables.

This section discusses the concepts and relationships between interdisciplinary collaboration and employee engagement, including their respective dimensions.

Social Exchange Theory

This study is guided by Social Exchange Theory, which serves as the theoretical framework for examining the relationship between interdisciplinary collaboration and employee engagement in a hospital setting. The theory conceptualizes workplace relationships as reciprocal exchanges in which individuals invest resources, such as time, effort, and support, with the expectation of receiving valued outcomes, including recognition, trust, and organizational support (Ergun et al., 2025). When employees perceive fairness and support, they are more likely to reciprocate through higher levels of commitment, satisfaction, and engagement.

In hospital settings, interdisciplinary collaboration represents a form of social exchange wherein healthcare professionals from different disciplines exchange knowledge, coordination, and support to achieve shared clinical and organizational goals. Effective collaboration characterized by open communication, mutual respect, role clarity, constructive conflict resolution, and supportive leadership fosters perceptions of being valued and supported, thereby strengthening employees' willingness to reciprocate with greater engagement (Nakamura et al., 2022).

From the perspective of Social Exchange Theory, employee engagement is viewed as a reciprocal response to positive collaborative experiences within the organization. When hospitals promote consistent and equitable collaborative practices, employees are more likely to demonstrate affective commitment, job satisfaction, and sustained involvement in their work (Sulistiyani et al., 2022). Thus, the theory provides a strong explanatory basis for hypothesizing a significant relationship between interdisciplinary collaboration and employee engagement in this study.

Interdisciplinary Collaboration in Hospital Teams

Interdisciplinary collaboration in hospitals refers to the coordinated efforts of healthcare professionals from diverse disciplines who work together to deliver integrated patient care and achieve organizational objectives. Across healthcare studies, collaboration is consistently associated with improved care coordination, reduced clinical errors, and more efficient use of resources, particularly in complex tertiary hospital environments (Al Dosari et al., 2022; Nakamura et al., 2022). Rather than operating in professional silos, collaborative teams rely on shared understanding, coordinated decision-making, and supportive leadership to function effectively. In tertiary hospitals managing complex clinical cases, interdisciplinary collaboration is critical for safe, efficient, and comprehensive care. Beyond improving patient outcomes, it fosters healthier work environments, enhances staff satisfaction, and supports workforce sustainability. Without it, healthcare risks fragmentation, burnout, and inefficiencies (Falguera et al., 2023).

These collaborative dynamics are not just operational necessities but strategic imperatives, integrating clinical expertise with organizational cohesion to deliver quality care while maintaining staff engagement and retention.

Employee Engagement in Hospital Practice

Employee engagement refers to the emotional and psychological connection an employee has with their work and organization. Among hospital personnel, it plays a critical role in promoting motivation, resilience, and performance. Engaged employees demonstrate higher organizational commitment, reflecting loyalty and willingness to contribute to institutional goals. This commitment often leads to a stronger inclination to stay and go beyond basic job responsibilities. Recognition, where employees feel valued by peers, supervisors, or the organization, enhances

morale, improves job satisfaction, and motivates consistent performance ([Almendras et al., 2025](#); [Bregenzer et al., 2022](#)). Opportunities for growth, including training and career advancement, contribute to professional fulfillment and clearer career trajectories. [AbdElhay et al. \(2025\)](#) focused on clinical skill development as a driver of engagement, whereas [Saludes et al. \(2025\)](#) emphasized structured career pathways in strengthening long-term organizational commitment. Job satisfaction stems from meaningful tasks, manageable workloads, and supportive environments. When hospital workers are satisfied, they are more likely to remain committed and contribute positively to patient care. Affective commitment, or emotional attachment to one's team and organization, also enhances collaboration and willingness to exert extra effort ([Pacquing, 2023](#)).

High engagement in hospital settings is linked to lower burnout, better psychological well-being, and improved patient outcomes. Many institutions sustain workforce morale and performance through feedback systems, shared decision-making, and recognition programs ([Wei et al., 2018](#)).

In hospital practice, engagement is a strategic driver of care quality. By cultivating commitment, recognition, growth, and satisfaction, organizations build a resilient, collaborative workforce capable of delivering safe, high-quality care.

Relationship Between Interdisciplinary Collaboration and Employee Engagement

Existing literature increasingly demonstrates that interdisciplinary collaboration plays a critical role in enhancing employee engagement in hospital environments. Studies consistently show that collaborative work climates foster trust, shared accountability, and psychological safety, which in turn strengthen motivation, commitment, and job satisfaction among healthcare professionals ([Wang et al., 2021](#); [Cajachagua Castro & Huancahuire-Vega, 2025](#)). These findings suggest that collaboration serves not only as an operational strategy for patient care but also as a key organizational resource that supports workforce engagement.

While prior studies have linked collaboration to improved service delivery and team performance, its impact on specific dimensions of employee engagement remains underexplored. Broader organizational factors beyond collaboration also influence employee engagement. [Safariningsih et al. \(2025\)](#) emphasized work-life balance and reward systems as primary drivers of commitment, while [Aungsuroch et al. \(2024\)](#) highlighted job resources, such as autonomy, leadership support, and role clarity, in hospital settings. However, these studies examined engagement determinants independently, leaving the specific role of interdisciplinary collaboration underexplored. Overall, the reviewed literature demonstrates a strong consensus on the importance of interdisciplinary collaboration and employee engagement in healthcare settings. However, much of the existing research treats these constructs independently or focuses primarily on public hospitals and Western contexts. Limited empirical studies examine how interdisciplinary collaboration directly relates to employee engagement within private tertiary hospitals in developing countries. Addressing this gap, the present study synthesizes existing evidence and empirically examines this relationship within the Philippine hospital setting.

To address this gap, the present study examined whether the dimensions of interdisciplinary collaboration affect employee engagement. In this regard, the researchers formulated the following null hypothesis:

H₀: There is no significant relationship between interdisciplinary collaboration and employee engagement.

To test this hypothesis, the study employed a nonparametric correlation analysis, where interdisciplinary collaboration (measured through communication, mutual respect, role clarity, conflict resolution, and leadership) serves as the independent variable, and employee engagement (measured through organizational commitment, recognition, growth opportunities, job

satisfaction, and affective commitment) is the dependent variable.

Problems Affecting Interdisciplinary Collaboration

Despite its recognized benefits, interdisciplinary collaboration in hospital teams is frequently challenged by systemic and relational barriers that limit team effectiveness and employee engagement. Common barriers include poor communication, unclear roles, unresolved conflicts, and insufficient leadership support. Communication breakdowns and unclear responsibilities cause inefficiencies and tension among professionals, while hierarchical dynamics and power imbalances compromise mutual respect (Al Dosari et al., 2022). These factors diminish psychological safety, shared accountability, and trust—key components needed to foster collaborative work environments.

Leadership plays a critical role in fostering collaboration. When leaders fail to provide guidance, address conflicts, or cultivate a supportive culture, dysfunctional leadership behaviors may emerge (Farghaly Abdelaliem & Abou Zeid, 2023). Additionally, time constraints, limited interprofessional training, and a lack of structured processes contribute to missed opportunities for teamwork and shared learning (Grant et al., 2024). Left unaddressed, these challenges undermine morale, raise turnover risk, and compromise care quality, underscoring the urgency of strengthening collaborative systems to sustain engagement and improve healthcare delivery.

RESEARCH METHOD

This study employed a descriptive quantitative research design to examine the relationship between interdisciplinary collaboration and employee engagement in a private tertiary hospital in the Philippines. A descriptive quantitative approach is appropriate when the objective is to measure and analyze relationships among variables without manipulation, allowing for objective statistical examination of naturally occurring phenomena (Navales et al., 2021). The study population consisted of 368 regular hospital employees across clinical and non-clinical departments. Using the Raosoft sample size calculator with a 5 percent margin of error and a 95 percent confidence level, the required sample size was determined to be 190 respondents, which meets accepted standards for statistical reliability and generalizability (Mukti, 2025). A stratified random sampling technique was applied to ensure proportional representation of key hospital divisions, namely nursing, ancillary services, finance, and shared services. Each division constituted a stratum, and respondents were randomly selected within each stratum in proportion to their share of the total employee population. This approach enhances sample representativeness, reduces sampling bias, and allows for meaningful subgroup comparisons across professional categories (Hossan et al., 2023). Table 1 presents the proportional distribution of respondents by hospital division. All participants were regular employees with sufficient tenure and exposure to hospital operations, interdepartmental workflows, and organizational culture, ensuring the relevance and credibility of their responses.

Table 1. Proportional Sample Distribution of Regular Employees per Hospital Division

Division	No. of Regular Employees	Proportion (%)	Sample Size
Nursing	182	49.46%	94
Ancillary	73	19.84%	38
Finance	54	14.67%	28
Shared Services	59	16.03%	30
Total	368	100%	190

Data were collected using a researcher-structured questionnaire composed of 60 items, adapted from validated instruments used in previous healthcare and organizational studies. The

questionnaire measured two major variables: interdisciplinary collaboration and employee engagement. For clarity and replicability, the key variables in this study were operationally defined based on their measurement in the research instrument. Interdisciplinary collaboration was operationally defined as the perceived effectiveness of teamwork across professional roles and hospital departments. On the other hand, employee engagement refers to the degree of employees' emotional, cognitive, and behavioral involvement in their work in the organization.

Interdisciplinary collaboration was operationalized across five dimensions: communication, mutual respect, clarity of role, conflict resolution, and leadership, drawing from established frameworks in healthcare collaboration research (Oyelakin et al., 2021; Khadpe et al., 2021; Shin et al., 2025; Adham, 2023; van Diggele et al., 2022). Employee engagement was operationalized through five dimensions: organizational commitment, recognition, opportunity for growth, job satisfaction, and affective commitment, based on prior empirical studies in organizational and healthcare contexts (Lee & Kim, 2021; Moreira et al., 2020; De Vos et al., 2020; Lenberg & Feldt, 2018; Yasin et al., 2023). Responses were measured using a 4-point Likert scale: Strongly Disagree (1.00–1.74), Disagree (1.75–2.49), Agree (2.50–3.24), and Strongly Agree (3.25–4.00). The absence of a neutral option was intended to encourage respondents to express a clear position regarding each statement.

To establish content validity, the questionnaire was reviewed by three experts in organizational behavior, healthcare management, and human resource management. Their feedback on clarity, relevance, and consistency was incorporated into the final instrument. A pilot test was conducted among 15 hospital employees who were excluded from the main study. Internal consistency reliability was assessed using Cronbach's alpha, with coefficients exceeding the acceptable threshold of 0.70 for all dimensions, indicating good to excellent reliability (Ali & Al Hatef, 2024), as shown in Table 2.

Table 2. Reliability Statistics

Indicator	No. of Items	Cronbach's Alpha
<i>Dimensions of Interdisciplinary Collaboration</i>		
Communication	5	0.879
Mutual respect	5	0.896
Clarity of role	5	0.902
Conflict resolution	5	0.900
Leadership	5	0.908
Average	5	0.897
<i>Dimensions of Employee Engagement</i>		
Organizational Commitment	5	0.929
Recognition	5	0.846
Opportunity of Growth	5	0.912
Job Satisfaction	5	0.868
Affective Commitment	5	0.920
Average	5	0.895
<i>Problems Affecting Interdisciplinary Collaboration</i>	10	0.885

Data collection was conducted from August 4 to August 6, 2025, using a web-based Google Forms survey distributed via Messenger and Viber applications. Participation was voluntary. Ethical approval was secured from the hospital administration prior to data collection. The researchers obtained informed consent from all participants and assured them of anonymity, confidentiality, and the right to withdraw at any time without penalty.

Data were analyzed using SPSS. Descriptive statistics, including frequency and percentage, were used to summarize respondents' demographic profiles. Weighted means were computed to

assess the extent of interdisciplinary collaboration, employee engagement, and problems affecting collaboration. To test the study's hypothesis, Spearman's rank-order correlation coefficient (ρ) was employed to examine the strength and direction of the relationship between interdisciplinary collaboration and employee engagement. This nonparametric test was selected due to the ordinal nature of Likert-scale data and the absence of assumptions regarding normal distribution. Spearman's ρ evaluates monotonic relationships by ranking responses, making it appropriate for hospital-based survey data and ensuring robustness against outliers and nonlinearity (Monge & Puth, 2020). Statistical significance was evaluated at the 0.05 level.

FINDINGS AND DISCUSSION

This section presents the study's findings on the relationship between interdisciplinary collaboration and employee engagement among healthcare professionals in a private tertiary hospital in the Philippines. The presentation is organized through relevant tables, offering a clear and detailed account of respondents' perceptions across the measured dimensions of collaboration and engagement.

Demographic Profile

The respondents of the study were healthcare professionals working in various departments of a private tertiary hospital. Their demographic profile is summarized in Table 3.

Table 3. Demographic Profile of Respondents

Indicator	Frequency	Percentage
Age		
18-25 years old	38	20.00
26-44 years old	105	55.26
45-59 years old	47	24.74
60 years old and above	0	0.00
Total	190	100.00
Gender		
Male	53	27.89
Female	137	72.11
Total	190	100.00
Years of Service		
5 years or less	105	55.26
6-10 years	48	25.26
11-15 years	11	5.79
16-20 years	6	3.16
More than 20 years	20	10.53
Total	190	100.00
Role		
Managerial Role (e.g. division/department heads)	29	15.26
Clinical Staff (e.g., nurses, allied health professionals)	103	54.21
Administrative Staff (e.g. HR, billing, records, secretaries/assistants, compliance staff)	34	17.89
Support Staff (e.g., maintenance, IT, transport aides, drivers)	24	12.63
Total	190	100.00

The majority of respondents were aged 26–44 years old, predominantly female, with service tenure of five years or less. Most held clinical roles, followed by administrative, managerial, and support positions. This suggests the hospital's workforce is largely composed of early-career professionals who may be more receptive to growth opportunities. This distribution reflects

common workforce patterns in Philippine private hospitals, where younger, female-dominated teams prevail, and clinical staff comprise the largest segment of employees (Dayrit et al., 2018). Such demographics may influence workplace dynamics, with shorter tenure potentially linked to higher turnover intentions and a greater need for engagement initiatives.

Interdisciplinary Collaboration

Interdisciplinary collaboration encompasses dimensions such as communication, mutual respect, clarity of role, conflict resolution, and leadership. Table 4 presents respondents' perceptions of these dimensions.

Table 4. Interdisciplinary Collaboration

Dimension	Mean	Descriptive Rating
Communication	3.2453	Agree
Mutual Respect	3.2768	Strongly Agree
Clarity of Role	3.2558	Strongly Agree
Conflict Resolution	3.1684	Agree
Leadership	3.2042	Agree
Mean of Means	3.2301	Agree

As shown in Table 4, mutual respect and role clarity received the highest mean scores. This indicates that employees perceive a collaborative environment in which colleagues respect one another and understand their roles and responsibilities. Such perceptions form a strong basis for effective interdisciplinary collaboration, supporting patient safety, streamlined workflows, and fewer conflicts. This interpretation is supported by House et al. (2021), who found that mutual respect improves job satisfaction and engagement and reduces burnout, and by Ly et al. (2018), who reported that role clarification enhances coordination and lowers ambiguity in quality-improvement initiatives.

The overall mean for interdisciplinary collaboration suggests that while the environment is generally collaborative, there remains untapped growth potential. The strong presence of mutual respect and clear role definitions sets a solid foundation, but further improvements are needed in communication practices, leadership development, and conflict resolution strategies. Research shows that communication reduces errors and strengthens collaboration (Klocko, 2024), that constructive conflict resolution minimizes disputes (Mohseni et al., 2024), and that transformational leadership promotes teamwork, engagement, and safer care (Boamah et al., 2018).

Employee Engagement

The level of employee engagement, as perceived by hospital staff, was assessed across five key dimensions: organizational commitment, recognition, opportunity for growth, job satisfaction, and affective commitment, as presented in Table 5.

Table 5. Employee Engagement

Dimension	Mean	Descriptive Rating
Organizational Commitment	3.2642	Strongly Agree
Recognition	3.1389	Agree
Opportunity for Growth	3.2053	Agree
Job Satisfaction	3.1768	Agree
Affective Commitment	3.1789	Agree
Mean of Means	3.1928	Agree

Table 5 shows that hospital employees generally view their engagement positively, with agreement ratings across all dimensions. The highest score was in organizational commitment, reflecting loyalty and identification with the hospital. This suggests an emotionally invested workforce willing to exert extra effort toward shared goals. These findings align with those of [Ahmad et al. \(2022\)](#) and [Baes et al. \(2025\)](#), who found that perceived organizational support positively influences organizational commitment, thereby enhancing employee retention and performance.

The overall mean for employee engagement suggested a favorable perception of the hospital's efforts to engage employees through strong organizational commitment, developmental opportunities, and a satisfying work environment. However, recognition received the lowest score, highlighting a need for improvement. Strengthening recognition practices can boost motivation, morale, and retention, as prior studies ([Hermoso et al., 2025](#); [Molina et al., 2025](#); [Rathore & Chouhan, 2021](#)) emphasize its positive effect on motivation and job satisfaction.

Relationship between Interdisciplinary Collaboration and Employee Engagement

The relationship between the dimensions of interdisciplinary collaboration and employee engagement was analyzed using Spearman's rank-order correlation. In reference to the researchers' null hypothesis stating that there is no significant relationship between interdisciplinary collaboration and employee engagement, Table 6 presents the statistical results.

Table 6. Relationship between Interdisciplinary Collaboration and Employee Engagement

Interdisciplinary Collaboration Dimensions	Employee Engagement Dimensions	Correlation Coefficient (r_s)	p -value
Communication	Organizational Commitment	.527	.000
	Recognition	.499	.000
	Growth Opportunities	.397	.000
	Job Satisfaction	.551	.000
	Affective Commitment	.414	.000
Mutual Respect	Organizational Commitment	.414	.000
	Recognition	.537	.000
	Growth Opportunities	.567	.000
	Job Satisfaction	.578	.000
	Affective Commitment	.502	.000
Clarity of Role	Organizational Commitment	.508	.000
	Recognition	.501	.000
	Growth Opportunities	.517	.000
	Job Satisfaction	.539	.000
	Affective Commitment	.445	.000
Conflict Resolution	Organizational Commitment	.562	.000
	Recognition	.692	.000
	Growth Opportunities	.631	.000
	Job Satisfaction	.619	.000
	Affective Commitment	.602	.000
Leadership	Organizational Commitment	.519	.000
	Recognition	.646	.000
	Growth Opportunities	.638	.000
	Job Satisfaction	.554	.000
	Affective Commitment	.585	.000

Note. All correlations were statistically significant and positive at $p < .001$.

Spearman's rank correlation coefficients (r_s) and p-values were computed to determine the strength and significance of the relationships between interdisciplinary collaboration and employee engagement dimensions. Spearman's rank-order correlation analysis revealed moderate to strong positive relationships between interdisciplinary collaboration and employee engagement dimensions, with correlation coefficients ranging from $r_s = .397$ to $r_s = .692$, all of which were statistically significant at $p < .001$. All correlations were positive and statistically significant at $p < .001$, showing that stronger collaboration dimensions consistently align with higher engagement. Communication correlated with all engagement measures, reflecting its role in accurate information flow and teamwork, consistent with [Eva et al. \(2024\)](#) and [Larroza et al. \(2024\)](#), who highlighted the role of open communication in reducing errors and strengthening collaboration. Mutual respect also demonstrated positive associations, indicating that valuing colleagues fosters a supportive, cohesive work environment, consistent with [Obodozie and Nwabufu \(2025\)](#), who emphasized that respect improves team cohesion and morale. Role clarity correlated with engagement, reducing ambiguity, preventing task duplication, and aligning work with organizational goals, echoing [Benavides et al. \(2024\)](#) and [Scott et al. \(2022\)](#), who found that defined responsibilities increase accountability and efficiency. Conflict resolution exhibited the strongest associations, especially with recognition and job satisfaction. This indicates that effectively addressing disagreements preserves relationships, promotes psychological safety, and strengthens collaborative trust. This aligns with [Nguyen Dinh \(2020\)](#), who stressed that constructive conflict management enhances trust and job satisfaction. Leadership also showed strong correlations across all dimensions, highlighting how transformational leaders empower staff, support professional growth, and reinforce other aspects of collaboration. [Zhang et al. \(2025\)](#) similarly found that supportive leadership directly enhances engagement and drives innovation.

Overall, all dimensions showed significant positive correlations between interdisciplinary collaboration and employee engagement, leading to the rejection of the null hypothesis. Based on [Cheng et al. \(2024\)](#), from the perspective of Social Exchange Theory, when healthcare professionals perceive mutual support and value in leader-member and team-member exchanges, they reciprocate with greater engagement, innovation, and collaborative behaviors. Similarly, a supportive safety climate, reinforced by managerial and coworker backing, nurtures psychological safety and collective commitment to safety, fostering trust, teamwork, and lasting organizational benefits, as noted by [Alshamsi et al. \(2025\)](#). Moreover, the study presents empirical evidence on the importance of collaboration in building highly engaged employees in the workplace. This aligns with the concept of [Mulyaningsih \(2021\)](#) on the relevance of collaboration for effective social development while anyone involved are also focusing on their roles and responsibilities. In the same context, [Obodozie and Nwabufu \(2025\)](#) confirmed that workplace collaboration has become an effective, sustainable practice for achieving organizational success.

Problems Affecting Interdisciplinary Collaboration

Understanding the factors that hinder effective interdisciplinary collaboration is essential for strengthening teamwork and achieving optimal organizational outcomes in healthcare settings. Table 7 presents researcher-developed indicators assessing common challenges in collaboration. The weighted mean scores and descriptive ratings show respondents' agreement levels, highlighting areas needing improvement to enhance hospital team cooperation.

Table 7. Problems Affecting Interdisciplinary Collaboration

Indicators	Weighted Mean	Descriptive Rating
Experiences communication breakdowns among teams	2.7632	Agree

Indicators	Weighted Mean	Descriptive Rating
Finds it difficult to raise concerns across teams	2.6158	Agree
Notices hierarchy or role superiority hindering collaboration	2.7000	Agree
Needs improvement in interdepartmental support	2.9579	Agree
Encounters unclear roles during teamwork	2.6316	Agree
Lacks structured processes for collaboration	2.6526	Agree
Faces unresolved disagreements that affect team function	2.6579	Agree
Faces conflicting departmental priorities	2.7105	Agree
Receives limited guidance from leaders during collaboration	2.5632	Agree
Lacks leadership support in resolving collaboration issues	2.5421	Agree
General Weighted Mean	2.6795	Agree

The results indicate that hospital employees generally agree on several factors hindering interdisciplinary collaboration. The most pressing issue was the need for improved interdepartmental support, consistent with [Sheehan et al. \(2021\)](#), who emphasized its role in enhancing teamwork and performance. Role dominance and conflicting goals reflect how hierarchies suppress communication and limit willingness to raise concerns, as [Vehvilainen et al. \(2024\)](#) found that rigid hierarchical structures reduce psychological safety and discourage open dialogue among healthcare teams. Communication breakdowns highlight the importance of clear information exchange. [Buljac-Samardzic et al. \(2020\)](#) stressed that poor communication weakens team cohesion and performance. Leadership gaps, such as limited guidance and inadequate conflict resolution, remain critical concerns, with [McGuier et al. \(2024\)](#) emphasizing the need for active leadership to foster collaboration. These challenges reflect patterns in developing countries, where resource constraints, hierarchy, and communication gaps often hinder teamwork ([Jayathissa & Hewapathirana, 2023](#)). Without a strong organizational structure, leadership, communication, and support, teams risk workflow disruptions, delayed care, and diminished trust.

The findings reveal that inadequate support, conflicting goals, and poor communication hinder interdisciplinary collaboration. Enhancing role clarity, structured processes, and conflict resolution are needed ([Atinga et al., 2024](#); [Estreller et al., 2025](#)). Though leadership had less impact, stronger support can still improve teamwork. Overall, clear communication, defined roles, and aligned objectives remain essential, with targeted interventions vital for strengthening hospital collaboration and engagement.

Proposed Strategies for Enhancing Interdisciplinary Collaboration in the Hospital

Table 8 outlines strategic responses to address the key collaboration challenges identified in the mass survey of hospital employees. Findings revealed gaps in collaborative practices and employee engagement, highlighting the need for strengthened communication, clearer role alignment, effective conflict management, and proactive leadership support. In hospital environments, these gaps can lead to delayed patient care from miscommunication, duplicated work from unclear roles, and increased burnout ([Zhang & Liu, 2024](#)). To mitigate these risks, proposed strategies include structured communication protocols, regular interdepartmental huddles, role clarification workshops, and active leadership involvement to ensure coordinated, safe, and timely care.

These strategies align with existing evidence showing that leadership engagement, consistent role definition, and structured team processes foster a collaborative climate that enhances hospital performance and care quality. This suggests that the mechanisms identified in the present study—such as open communication, role clarity, and conflict management—are not only theoretical considerations but are supported by practice-based research. For instance, leaders

modeling collaborative behaviors during ward rounds or multidisciplinary meetings can set the tone for effective teamwork (Carstensen et al., 2024). Conflict resolution training and recognition systems can reduce friction among clinical and support staff while boosting morale (Mohseni et al., 2024). Such measures directly address barriers common in high-pressure hospital settings, where multiple departments must coordinate seamlessly to manage patient flow and complex treatment plans (Al Dosari et al., 2022).

Table 8. Proposed Strategies for Enhancing Interdisciplinary Collaboration and Employee Engagement

Dimension	Strategic Response	Expected Outcome
Communication	Conduct structured interdepartmental huddles and standardized communication protocols (e.g., SBAR—Situation, Background, Assessment, Recommendation) at least twice weekly	Enhances clarity, reduces miscommunication, and improves patient safety and teamwork efficiency (Anggreini et al., 2023)
Mutual Respect	Facilitate quarterly interprofessional team-building workshops	Builds mutual trust and respect, leading to better interdepartmental cooperation (Abu-Rish Blakeney et al., 2019)
Clarity of Role	Implement role clarification workshops and job responsibility mapping for all departments biannually	Improves efficiency by reducing role ambiguity and preventing task duplication (Tseng et al., 2021)
Conflict Resolution	Provide semi-annual leadership training on mediation and negotiation skills	Strengthens leaders' ability to resolve disputes impartially and maintain team cohesion (Mohseni et al., 2024)
Leadership	Encourage leaders to actively participate in monthly cross-department projects	Strengthens a culture of collaboration by example, fostering engagement and trust (Wong et al., 2021)
Organizational Commitment	Develop and communicate a clear organizational mission and values program, reviewed annually	Strengthens alignment and commitment across staff (Suharto & Suprpto, 2023)
Recognition	Launch peer-to-peer recognition platform, with monthly acknowledgments	Encourages a culture of mutual appreciation and morale boosting (Ho & Nguyen, 2021)
Opportunity for Growth	Provide funded training programs and certification support for all staff annually	Increases engagement, skills development, and career satisfaction (Zhu & Song, 2022)
Job Satisfaction	Develop incentive programs linked to performance and teamwork, reviewed annually	Boosts motivation, productivity, and job satisfaction (Falguera et al., 2022)
Affective Commitment	Offer retention bonuses and career progression plans for high-performing staff	Strengthens retention, emotional attachment, and reduces turnover (Al-Suraihi et al., 2021)

Beyond resolving collaboration issues, the study also incorporates initiatives that strengthen workforce engagement, which is essential for retaining skilled healthcare professionals in a competitive market. Providing career development opportunities, supporting clinical upskilling, improving working conditions, and aligning staff values with the hospital's mission have been linked to higher motivation, stronger organizational commitment, and lower turnover rates (Pacquing, 2023). In hospitals, an engaged workforce leads to better continuity of care, fewer errors, and higher patient satisfaction (Falguera et al., 2022). Collectively, these evidence-based approaches offer

hospital management a roadmap to strengthen collaboration and engagement, ultimately enhancing sustainability practices in improving patient outcomes and organizational performance.

CONCLUSIONS

This study found that interdisciplinary collaboration in the subject hospital is generally strong, especially in mutual respect and role clarity, but moderate in communication, conflict resolution, and leadership. Similarly, employee engagement was rated positively, with strengths in organizational commitment and opportunities for growth, while affective commitment, job satisfaction, and recognition were moderate. The findings also confirm a strong positive association between interdisciplinary collaboration and employee engagement across multiple dimensions. This suggests that when collaborative practices are well established, staff are more likely to demonstrate higher commitment, satisfaction, recognition, and a sense of belonging. These results show that the process is not merely functional but also a social collaboration, a form of professional relationship-building that fosters shared accountability, mutual obligation, and collective purpose.

Implications

From a theoretical perspective, the findings reinforce Social Exchange Theory, demonstrating that reciprocal exchanges of respect, information, and support strengthen workplace commitment. This contributes to the literature by highlighting how social collaboration can extend the theory's application in healthcare settings and by emphasizing the relational dimension of teamwork as a driver of engagement. Practically, the results provide clear guidance for improving hospital operations: interventions such as structured communication workshops, leadership development programs, and conflict-resolution training can target the collaboration dimensions identified as moderate. By addressing these areas, the hospital can enhance employee engagement, improve staff retention, foster a stronger culture of shared accountability, and ultimately deliver higher-quality, patient-centered care. Embedding social collaboration into daily practice not only sustains a highly engaged workforce but also positions the hospital as a model of integrated and socially responsible healthcare.

LIMITATION & FURTHER RESEARCH

There are several limitations that should be acknowledged in this study. First, the research was conducted in a single private tertiary hospital, which may limit the generalizability of the findings to other healthcare institutions or settings with different organizational cultures and structures. Second, while the quantitative research design allowed the study to identify statistical relationships between interdisciplinary collaboration and employee engagement, it also limited the ability to explore the underlying contextual and personal experiences that may influence these variables in greater depth. Third, the study focused only on selected dimensions of these variables. Excluding other potentially relevant factors, such as psychological safety, workload, or organizational resilience, may have limited a comprehensive understanding of the collaboration–engagement dynamic.

Future studies could address these limitations by expanding the research scope to include multiple hospitals across different regions and healthcare systems. Employing a mixed-methods approach could enrich the data, allowing for both statistical analysis and deeper qualitative insights into how healthcare professionals perceive and experience collaboration and engagement in practice. Future research could also investigate possible mediating or moderating variables, such as leadership style, perceived organizational support, or team climate, that may influence the collaboration–engagement relationship. Additionally, longitudinal designs, which involve collecting data from the same group of participants at multiple points over an extended period, could track how initiatives to improve interdisciplinary collaboration affect employee engagement and patient care outcomes.

The researchers suggest that future studies should examine the specific mechanisms through

which collaboration influences engagement in healthcare settings—for example, how effective communication, shared decision-making, or role clarity affect employees' motivation, commitment, and job satisfaction. Understanding these processes can clarify how collaborative work environments enhance employee well-being, organizational performance, and the quality of patient care.

REFERENCES

- AbdElhay, E. S., Taha, S. M., El-Sayed, M. M., Helaly, S. H., & AbdElhay, I. S. (2025). Nurses' retention: The impact of transformational leadership, career growth, work well-being, and work-life balance. *BMC Nursing*, 24, 148. <https://doi.org/10.1186/s12912-025-02762-1>
- Abu-Rish Blakeney, E., Lavalley, D. C., Baik, D., Pambianco, S., O'Brien, K. D., & Zierler, B. K. (2019). Purposeful interprofessional team intervention improves relational coordination among advanced heart failure care teams. *Journal of Interprofessional Care*, 33(5), 481–489. <https://doi.org/10.1080/13561820.2018.1560248>
- Adham, T. K. I. (2023). Conflict resolution in team: Analyzing the types of conflicts and best skills for resolution. *Scholars Journal of Engineering and Technology*, 11(8), 152–162. <https://doi.org/10.36347/sjet.2023.v11i08.001>
- Ahmad, N. A., Ismail, A., & Md Sham, F. (2022). The impact of perceived organizational support on organizational commitment. *International Journal of Recent Technology and Engineering (IJRTE)*, 9(4), 421–429. <https://doi.org/10.35940/ijrte.D5038.119420>
- Al Dosari, S. F. S., Al-Qahtani, M. A., & Al-Shehri, F. M. (2022). Exploring the benefits and challenges of interdisciplinary collaboration in healthcare. *Journal of Survey in Fisheries Sciences*, 9(4), 132–134. <https://doi.org/10.53555/sfs.v9i4.2571>
- Ali, M. D., & Al Hatef, E. A. J. (2024). Types of sampling and sample size determination in health and social science research. *Journal of Young Pharmacists*, 16(2), 204–215. <https://doi.org/10.5530/jyp.2024.16.27>
- Almendras, A. C., Briones, J. P., Baldovino, F. P., & Manalo, L. V. (2025). Relationship of workplace culture on employee performance: The case of a higher education institution in the Philippines. *People and Behavior Analysis*, 3(1), 17–34. <https://doi.org/10.31098/pba.v3i1.2817>
- Alshamsi, F., Almazrouei, S., & Alnuaimi, A. (2025). Examining the impact of psychosocial safety climate on working conditions, well-being, and performance in healthcare settings: A scoping review. *BMC Health Services Research*, 25(1), 122. <https://doi.org/10.1186/s12913-025-12254-2>
- Al-Suraihi, W. A., Samikon, S. A., Al-Suraihi, A. A., & Ibrahim, I. (2021). Employee turnover: Causes, importance, and retention strategies. *European Journal of Business and Management Research*, 6(3), 10–18. <https://doi.org/10.24018/ejbmr.2021.6.3.893>
- Ambrose, J. W., Catchpole, K., Evans, H. L., Nemeth, L. S., Layne, D. M., & Nichols, M. (2024). Healthcare team resilience during COVID-19: A qualitative study. *BMC Health Services Research*, 24, 459. <https://doi.org/10.1186/s12913-024-10895-3>
- Anggreini, Y. D., Kirana, W., Yousriatin, F., & Safitri, D. (2023). Implementing SBAR (Situation-Background-Assessment-Recommendation) communication among nurses for patient safety in a Pontianak city hospital. *Malahayati Nursing Journal*, 5(11), 3715–3723. <https://doi.org/10.33024/minh.v7i5.190>
- Asio, J. M. R. (2021). Working environment, teamwork and diversity: Perspectives and relationship to organizational satisfaction. *Global Journal of Business, Economics and Management: Current Issues*, 11(2), 109–118. <https://doi.org/10.18844/gjbem.v11i2.4850>
- Atinga, R. A., Gmaligan, M. N., Ayawine, A., & Yambah, J. K. (2024). "It's the patient that suffers from poor communication": Analyzing communication gaps and associated consequences in handover events from nurses' experiences. *SSM - Qualitative Research in Health*, 6, 100482. <https://doi.org/10.1016/j.ssmqr.2024.100482>
- Aungsuroch, Y., Gunawan, J., Juanamasta, I. G., & Montayre, J. (2024). Updating factors influencing work engagement in hospital settings: A systematic review. *Journal of Healthcare Leadership*, 16, 157–176. <https://doi.org/10.2147/JHL.S451056>
- Baes, M. Q., Dinglasan, R. L. C., Patal, N. F. A., Rellama, C., Briones, J., & Verano, J. P. E. (2025). Work overload and its impact on staff retention among non-teaching personnel of public

- elementary schools in the Philippines. *People and Behavior Analysis*, 3(1), 39–65. <https://doi.org/10.31098/pba.v3i1.3030>
- Benavides, C. M. A., Jubahib, M. J. G., Encarguis, A. B. B., Briones, J. P., & Abante, M. V. (2024). Remote accountants' role in advancing United Nations Sustainable Development Goals: The case of a Philippine fund services company. *Journal of Social Entrepreneurship Theory and Practice*, 3(2), 44–58. <https://doi.org/10.31098/jsetp.v3i2.2755>
- Boamah, S. A., Laschinger, H., Wong, C., & Clarke, S. (2018). Effect of transformational leadership on job satisfaction and patient safety outcomes. *Nursing Outlook*, 66(2), 180–189. <https://doi.org/10.1016/j.outlook.2017.10.004>
- Bregenzer, A., Jiménez, P., & Milfelner, B. (2022). Appreciation at work and the effect on employees' presenteeism. *Work*, 73(1), 109–120. <https://doi.org/10.3233/WOR-210766>
- Buljac-Samardzic, M., Doekhie, K. D., & van Wijngaarden, J. D. H. (2020). Interventions to improve team effectiveness within health care: A systematic review of the past decade. *Human Resources for Health*, 18(1), 2. <https://doi.org/10.1186/s12960-019-0411-3>
- Cajachagua Castro, L. A., & Huancahuire-Vega, S. (2025). Attitude toward teamwork and work engagement in nursing professionals in a public hospital: A cross-sectional study. *BMC Nursing*, 24(1), 74. <https://doi.org/10.1186/s12912-025-03366-5>
- Carstensen, K., Kjeldsen, A. M., & Palmhøj Nielsen, C. (2024). Distributed leadership in health quality improvement collaboratives. *Health Care Management Review*, 49(1), 46–58. <https://doi.org/10.1097/HMR.0000000000000385>
- Centeno, D. D. G. (2022). *Promoting employee engagement through organizational culture: An integrative action research in a finance company in the new normal*. De La Salle University Institutional Repository. https://animorepository.dlsu.edu.ph/etdm_manorg/120/
- Cheng, L., Wei, W., Zhang, J., Yao, Y., Zhang, Y., & Zhu, W. (2024). The association of leader–member exchange and team–member exchange with nurses' innovative behaviours: A cross-sectional study. *Journal of Advanced Nursing*, 80(7), 2813–2821. <https://doi.org/10.1111/jan.16121>
- Dayrit, M. M., Lagrada, L. P., Picazo, O. F., Pons, M. C., & Villaverde, M. C. (2018). The Philippines health system review. Health Systems in Transition, 8, 2. *World Health Organization, Regional Office for South-East Asia*. <https://apps.who.int/iris/handle/10665/274579>
- De Vos, A., Van der Heijden, B. I. J. M., & Akkermans, J. (2020). Sustainable careers: Towards a conceptual model. *Journal of Vocational Behavior*, 117, 103196. <https://doi.org/10.1016/j.jvb.2018.06.011>
- Ergun, E., Tunca, S., Cetinkaya, G., & Balcioğlu, Y. S. (2025). Exploring the roles of work engagement, psychological empowerment, and perceived organizational support in innovative work behavior: A latent class analysis for sustainable organizational practices. *Sustainability*, 17(4), 1663. <https://doi.org/10.3390/su17041663>
- Estreller, J. A. N., Fontanilla, J. M. N., Fakhri, M. S., Briones, J. P., & Abante, M. V. (2025). A Phenomenological study on nurse productivity challenges in a resource-limited primary hospital in the Philippines. *Advanced Qualitative Research*, 3(1), 31–48. <https://doi.org/10.31098/aqr.v3i1.2777>
- Eva, T. P., Afroze, R., & Sarker, M. A. R. (2024). The impact of leadership, communication, and teamwork practices on employee trust in the workplace. *Management Dynamics in the Knowledge Economy*, 12(3), 241–261. <https://doi.org/10.2478/mdke-2024-0015>
- Falguera, C. C., de Los Santos, J. A. A., & Labrague, L. J. (2022). Predictive roles of organizational factors in work engagement among nurses. *International Journal of Nursing Practice*, 9(4), 379–387. <https://doi.org/10.2478/fon-2022-0048>
- Falguera, C. C., Labrague, L. J., Firmo, C. N., De los Santos, J. A. A., & Tsaras, K. (2023). Relationship of work engagement with nurse work and patient outcomes among nurses in Central Philippines. *Acta Medica Philippina*, 57(4), 24–31. <https://doi.org/10.47895/amp.vi0.4426>
- Farghaly Abdelaliam, S. M., & Abou Zeid, M. A. G. (2023). The relationship between toxic leadership and organizational performance: The mediating effect of nurses' silence. *BMC Nursing*, 22, Article 4. <https://doi.org/10.1186/s12912-022-01167-8>
- Grant, A., Kontak, J., Jeffers, E., Lawson, B., MacKenzie, A., Burge, F., Boulos, L., Lackie, K., Marshall, E. G., Mireault, A., Philpott, S., Sampalli, T., Sheppard-LeMoine, D., & Martin-Misener, R. (2024). Barriers and enablers to implementing interprofessional primary care teams: A

- narrative review of the literature using the consolidated framework for implementation research. *BMC Primary Care*, 25(1), 25. <https://doi.org/10.1186/s12875-023-02240-0>
- Hermoso, J. R. V., Laguartilla, S. A., Salapare, V. R., Briones, J. P., & Verano, J. P. E. (2025). Impact of corporate social responsibility on job satisfaction of teaching personnel in a private educational institution in the Philippines. *Inclusive Society and Sustainability Studies*, 5(1), 57–76. <https://doi.org/10.31098/issues.v5i1.3350>
- Ho, N. S., & Nguyen, L. T. M. (2021). Challenges in the implementation of peer-to-peer recognition. *SHS Web of Conferences*, 124, 08007. <https://doi.org/10.1051/shsconf/202112408007>
- House, S., Wilmoth, M., & Kitzmiller, R. (2021). Relational coordination and staff outcomes among healthcare professionals: A scoping review. *Journal of Interprofessional Care*, 36(6), 891–899. <https://doi.org/10.1080/13561820.2021.1965101>
- Hossan, D., Dato' Mansor, Z., & Jaharuddin, N. S. (2023). Research population and sampling in quantitative study. *International Journal of Business and Technopreneurship*, 13(3), 209–222. <https://doi.org/10.58915/ijbt.v13i3.263>
- Ishii, N., Nagai, Y., Akiyama, T., & Kitamura, T. (2024). Interprofessional collaboration mediates the relationship between perceived organizational learning and safety climate in hospitals: A cross-sectional study. *International Journal of Risk & Safety in Medicine*, 35(6-7), 211–220. <https://doi.org/10.3233/JRS-230026>
- Janes, G., Mills, T., Budworth, L., Johnson, J., & Lawton, R. (2021). The association between health care staff engagement and patient safety outcomes: A systematic review and meta-analysis. *Journal of Patient Safety*, 17(3), 207–216. <https://doi.org/10.1097/PTS.0000000000000807>
- Jayathissa, P. T., & Hewapathirana, R. (2023). Enhancing interoperability among health information systems in low- and middle-income countries: A review of challenges and strategies. *European Modern Studies Journal*, 7(3), 334–340. [https://doi.org/10.59573/emsj.7\(3\).2023.31](https://doi.org/10.59573/emsj.7(3).2023.31)
- Kaiser, S., Patras, J., & Martinussen, M. (2018). Linking interprofessional work to outcomes for employees: A meta-analysis. *Research in Nursing & Health*, 41(3), 265–280. <https://doi.org/10.1002/nur.21858>
- Khadpe, P., Kulkarni, C., & Kaufman, G. (2021). Empathosphere: Promoting constructive communication in ad-hoc virtual teams through perspective-taking spaces. *arXiv*. <https://doi.org/10.48550/arXiv.2111.13782>
- Klocko, D. J. (2024). Using structured communication to improve patient handoffs and reduce medical errors. *JAAPA*, 37(6), 42–44. <https://doi.org/10.1097/01.JAA.0000000000000024>
- Labrague, L. J., Al Sabei, S., Al-Rawajfah, O. M., AbuAlRub, R., & Burney, I. (2022). Interprofessional collaboration as a mediator in the relationship between nurse work environment, patient safety outcomes and job satisfaction among nurses. *Journal of Nursing Management*, 30(1), 268–278. <https://doi.org/10.1111/jonm.13491>
- Larroza, E. R. F., Basilla, S. A. G., Casano, M. A. C., Briones, J. P., & Abante, M. V. (2024). Relationship of open communication to employee motivation in a government agency in the Philippines. *Humanities, Society and Community*, 2(1), 36–51. <https://doi.org/10.31098/hsc.v2i1.2747>
- Lee, Y., & Kim, J. (2021). Cultivating employee creativity through strategic internal communication: The role of leadership, symmetry, and feedback-seeking behaviors. *Public Relations Review*, 47(1), 101998. <https://doi.org/10.1016/j.pubrev.2020.101998>
- Lenberg, P., & Feldt, R. (2018). Psychological safety and norm clarity in software engineering teams. *arXiv*. <https://doi.org/10.48550/arXiv.1802.01378>
- Ly, O., Sibbald, S., Verma, J. Y., & Rocker, G. M. (2018). Exploring role clarity in interorganizational spread and scale-up initiatives: The 'INSPIRED' COPD collaborative. *BMC Health Services Research*, 18(1), 3474. <https://doi.org/10.1186/s12913-018-3474-2>
- McGuier, E. A., Kolko, D. J., Aarons, G. A., Schachter, A., Klem, M. L., Diabes, M. A., Weingart, L. R., Salas, E., & Wolk, C. B. (2024). Teamwork and implementation of innovations in healthcare and human service settings: A systematic review. *Implementation Science*, 19(1), 49. <https://doi.org/10.1186/s13012-024-01381-9>
- Mohseni, F., Mohammadi, A., Khabaz Mafinejad, M., Khajavirad, N., Basiri, K., & Koohpayehzadeh, J. (2024). Teaching conflict management to medical students: A randomized controlled trial. *BMC Medical Education*, 24, 1507. <https://doi.org/10.1186/s12909-024-06514-8>

- Molina, A. F. R. M., Sangil, P. C., Villas, L. A. J. G., dela Cruz, R. M., Macariola, L. P., Crisostomo, H. A., Lleno, C. D., & Briones, J. P. (2025). Relationship between job satisfaction and employee retention: Evidence from an information technology company in the Philippines. *Humanities, Society, and Community*, 2(2), 1-22. <https://doi.org/10.31098/hsc.v2i2.3191>
- Moncatar, T. R. T., Nakamura, K., Siongco, K. L. L., Seino, K., Carlson, R., Canila, C. C., Javier, R. S., & Lorenzo, F. M. E. (2021). Interprofessional collaboration and barriers among health and social workers caring for older adults: A Philippine case study. *Human Resources for Health*, 19(1), 52. <https://doi.org/10.1186/s12960-021-00568-1>
- Monge, J. F., & Puth, M. T. (2020). A new correlation coefficient between categorical, ordinal and interval variables with Pearson characteristics. *Computational Statistics & Data Analysis*, 152, 107043. <https://doi.org/10.1016/j.csda.2020.107043>
- Moreira, H., Gouveia, M. J., & Canavarro, M. C. (2020). A bifactor analysis of the Difficulties in Emotion Regulation Scale – Short Form (DERS-SF) in a sample of adolescents and adults. *Current Psychology*, 41, 757-782. <https://doi.org/10.1007/s12144-019-00602-5>
- Mukti, B. H. (2025). Sample size determination: Principles and applications for health research. *Health Sciences International Journal*, 3(1), 127–143. <https://doi.org/10.71357/hsij.v3i1.63>
- Mulyaningsih, H. D. (2021). Social entrepreneurship model based on quadruple helix collaboration: Economic empowerment in disabilities community: (Editorial Article). *Journal of Social Entrepreneurship Theory and Practice*, 1(1), 1–11. <https://doi.org/10.31098/jsetp.v1i1.647>
- Nakamura, K., Siongco, K. L. L., Moncatar, T. R. T., Tejero, L. M. S., De La Vega, S. A. F., Bonito, S. R., Javier, R., Tsutsui, T., Tri Han, T. D., Hue Vo., M. T., Tashiro, Y., Al-Sobaihi, S., Seino, K., Van Vo, T., Lorenzo, F. M. E., & Canila, C. C. (2022). In-service training programme for health and social care workers in the Philippines to strengthen interprofessional collaboration in caring for older adults: A mixed methods study. *Health Research Policy and Systems*, 20, 111. <https://doi.org/10.1186/s12961-022-00914-2>
- Navales, J. V., Jallow, A. W., Lai, C. Y., Liu, C. Y., & Chen, S. W. (2021). Relationship between quality of nursing work life and uniformed nurses' attitudes and practices related to COVID-19 in the Philippines: A cross-sectional study. *International Journal of Environmental Research and Public Health*, 18(19), 9953. <https://doi.org/10.3390/ijerph18199953>
- Nguyen Dinh, L. (2020). Determinants of employee engagement mediated by work-life balance and work stress. *Management Science Letters*, 10(4), 923–928. <https://doi.org/10.5267/j.msl.2019.10.003>
- Obodozie, N. M., & Nwabufu, I. J. (2025). Promoting collaboration in the modern workplace: A path to productivity and resilience. *World Journal of Advanced Research and Reviews*, 25(2), 524–533. <https://doi.org/10.30574/wjarr.2025.25.2.0343>
- Oyelakin, O., Shodeinde, A. D., & Arandong, I. J. (2021). Value congruence and organizational commitment: Does work happiness matter?. *Business Perspective Review*, 3(2), 14–26. <https://doi.org/10.38157/businessperspectivereview.v3i2.348>
- Pacquing, M. T. (2023). Employee engagement is the key: Its mediating role between person-environment fit and organizational commitment among Filipino employees. *Makara Human Behavior Studies in Asia*, 27(1), 1–7. <https://doi.org/10.7454/hubs.asia.1290722>
- Palmiano, D. A. (2019). Teamwork atmosphere and employees' organizational commitment. In *Proceedings of the 2017 Cebu International Conference on Studies in Arts, Social Sciences and Humanities*. <https://www.researchgate.net/publication/333666834>
- Rathore, J., & Chouhan, V. S. (2021). Study of influence of rewards and recognition on employee's job satisfaction and motivation in private industries in Rajasthan. *i-manager's Journal on Management*, 15(4), 41-49. <https://doi.org/10.26634/jmgt.15.4.18289>
- Safariningsih, R. T. H., Supardi, S., Kamsariaty, K., Sari, O. H., & Setiawan, A. (2025). The implementation of work-life balance, organizational culture, rewards, and career development on employee engagement. *Greenation International Journal of Law and Social Sciences*, 3(1), 76–83. <https://doi.org/10.38035/gijtm.v3i1>
- Saludes, K. C. Z., Lagustan, M. S. C. V., Magtibay, M. U., Pagapulan, M. F. B., Briones, J., & Verano, J. P. E. (2025). Relationship of employee value proposition on job satisfaction and loyalty in a manufacturing company in the Philippines. *Organization and Human Capital Development*, 4(1), 36–53. <https://doi.org/10.31098/orcadev.v4i1.3035>

- Schwarzkopf, D., Bloos, F., Meißner, W., Rüddel, H., Thomas-Rüddel, D. O., & Wedding, U. (2024). Perceptions of quality of interprofessional collaboration, staff well-being, and nonbeneficial treatment: A comparison between nurses and physicians in intensive and palliative care. *Healthcare*, 12(6), 602. <https://doi.org/10.3390/healthcare12060602>
- Scott, G., Hogden, A., Taylor, R., & Mauldon, E. (2022). Exploring the impact of employee engagement and patient safety. *International Journal for Quality in Health Care*, 34(3). <https://doi.org/10.1093/intqhc/mzac059>
- Sheehan, J., Laver, K., Bhojti, A., Rahja, M., Usherwood, T., Clemson, L., & Lannin, N. A. (2021). Methods and effectiveness of communication between hospital allied health and primary care practitioners: A systematic narrative review. *Journal of Multidisciplinary Healthcare*, 14, 493–511. <https://doi.org/10.2147/JMDH.S295549>
- Shin, I., Riforgiate, S. E., Godager, E. A., & Coker, M. C. (2025). Remote worker communication technology use related to role clarity, coworker support, and work overload. *Sustainability*, 17(7), 2830. <https://doi.org/10.3390/su17072830>
- Suharto, B., & Suprpto, S. (2023). The role of organizational commitment and employee engagement in mediating the impact of perceived organizational support on employee performance. *Dinasti International Journal of Management Science*, 4(6), 1215–1225. <https://doi.org/10.31933/dijms.v4i6.1960>
- Sulistiyani, E., Hidayat, Y. A., Setiawan, A., & Suwardi, S. (2022). Perceived organizational support, employee work engagement and work-life balance: Social exchange theory perspective. *Jurnal Riset Ekonomi dan Bisnis*, 15(2), 133–143. <https://doi.org/10.26623/jreb.v15i2.5336>
- Tseng, H. M., Chang, W. Y., & Chen, Y. C. (2021). Role clarity and team performance in healthcare: The impact of structured role workshops. *Journal of Nursing Management*, 29(6), 1423–1432. <https://doi.org/10.1111/jonm.13345>
- van Diggele, C., Roberts, C., & Lane, S. (2022). Leadership behaviours in interprofessional student teamwork. *BMC Medical Education*, 22(1), 834. <https://doi.org/10.1186/s12909-022-03923-5>
- Vehvilainen, E., Charles, A., Sainsbury, J., Stacey, G., Field-Richards, S. E., & Westwood, G. (2024). Influences of leadership, organizational culture, and hierarchy on raising concerns about patient deterioration: A qualitative study. *Journal of Patient Safety*, 20(5), e73–e77. <https://doi.org/10.1097/PTS.0000000000001234>
- Wang, X., Zhang, Y., & Zhang, L. (2021). The influence of effective communication, perceived respect, and willingness to collaborate on nurses' perceptions of nurse-physician collaboration in China. *Journal of Nursing Management*, 29(8), 2349–2357. <https://doi.org/10.1111/jonm.13271>
- Wei, H., Sewell, K. A., Woody, G., & Rose, M. A. (2018). The state of the science of nurse work environments in the United States: A systematic review. *International journal of nursing sciences*, 5(3), 287–300. <https://doi.org/10.1016/j.ijnss.2018.04.010>
- Wong, C. A., Spence Laschinger, H. K., & Cummings, G. G. (2021). Authentic leadership and nurses' voice behaviour and perceptions of care quality. *Journal of Nursing Management*, 29(2), 249–258. <https://doi.org/10.1111/jonm.13168>
- Yasin, R., Jan, G., Huseynova, A., & Atif, M. (2023). Inclusive leadership and turnover intention: The role of follower-leader goal congruence and organizational commitment. *Management Decision*, 61(3), 589–609. <https://doi.org/10.1108/MD-07-2021-0925>
- Zhang, L., Han, L., Liang, X., Wang, R., Fan, H., Jia, Y., Li, S., & Jiang, X. (2025). The relationship between transformational leadership and work engagement among intensive care unit nurses: The mediating function of organizational climate. *BMC Nursing*, 24, 398. <https://doi.org/10.1186/s12912-025-03057-1>
- Zhang, Y., & Liu, X. (2024). Role ambiguity and role conflict effects on employees' emotional exhaustion in healthcare service settings. *Journal of Health Psychology*, 29(6), 1023–1035. <https://doi.org/10.1080/23311975.2024.2326237>
- Zhu, J. J., & Song, H. M. (2022). The impact of career growth on knowledge-based employee engagement: The mediating role of affective commitment and the moderating role of perceived organizational support. *Frontiers in Psychology*, 13, 805208. <https://doi.org/10.3389/fpsyg.2022.805208>