



Enhancing Job Satisfaction through Human Resource Information Systems and Communication: A Commitment-Based Approach to Achieve Sustainable Development Goals (SDGs) in Education-Oriented Organizations

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ABSTRACT

This study examines the influence of Human Resource Information Systems (HRIS) and organizational communication on job satisfaction, with organizational commitment serving as a mediating factor in the educational context. A quantitative method was employed through a structured survey involving employees in an education-related industrial organization. The analysis was conducted using SPSS to test direct and indirect relationships among variables. The results indicate that both HRIS and communication significantly enhance job satisfaction, and this effect is further strengthened when organizational commitment is present. Because HRIS improves transparency and communication fosters engagement, employees feel more aligned with organizational goals, increasing satisfaction. These findings provide insights for educational institutions and human resource managers seeking to implement data-driven and participatory systems in line with SDG 8, which promotes decent work and economic growth through inclusive workplace strategies.

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1. INTRODUCTION

In the evolving landscape of organizational management, the integration of Human Resource Information Systems (HRIS) and organizational communication has become vital in shaping employee experiences and workplace outcomes. HRIS functions as a centralized digital platform that manages employee data, streamlines administrative tasks, and supports real-time decision-making in human resource operations (Hossain et al., 2025). Organizational communication (covering vertical, horizontal, and diagonal flows) ensures the accurate and timely exchange of information across different levels of the institution, enhancing clarity and mutual understanding (Bukar et al., 2025). These two elements are strongly associated with positive employee perceptions of fairness, involvement, and motivation at work. Furthermore, organizational commitment serves as a key psychological link, reinforcing how HR systems and communication practices translate into meaningful attitudes such as job satisfaction.

Several studies have supported the positive influence of HRIS and communication on job satisfaction. HRIS improves transparency and reduces administrative ambiguity, leading to enhanced employee trust and satisfaction (Shiri, 2020). Communication practices that are clear and inclusive have been shown to increase employee engagement and morale (Wang, 2024). In addition, HRIS enhances organizational commitment by giving employees better access to performance data, career paths, and feedback (Supardi & Rizky, 2018). Organizational commitment itself has been shown to play a significant mediating role, reinforcing the connection between institutional practices and employee outcomes (Johan & Yusuf, 2022). However, limited studies have examined how HRIS and communication jointly impact job satisfaction through the mediating role of organizational commitment, particularly within the Indonesian manufacturing sector.

This study aims to address that research gap by analyzing the effects of HRIS and organizational communication on job satisfaction, with organizational commitment as a mediating variable. The study contributes to Sustainable Development Goals (SDGs), especially SDG 8, by focusing on how digital human resource systems and inclusive communication support decent work and employee well-being. The novelty of this study lies in its integrated approach, which views HRIS and communication as interrelated drivers of job satisfaction, with commitment acting as the emotional bridge. By offering a comprehensive model grounded in organizational psychology and digital management, the study provides both theoretical enrichment and practical implications for enhancing satisfaction and retention in education-oriented industries.

2. LITERATURE REVIEW

The integration of HRIS has become increasingly central in modern human resource management, offering organizations the capacity to efficiently manage and disseminate employee data. As shown in **Table 1**, HRIS systems are characterized by their integration of functions, promotion of data transparency, and contribution to operational efficiency. These features not only improve internal workflows but also support employee satisfaction by making HR processes more accessible and reliable (Rangkuti, 2025). A properly implemented HRIS enables timely access to accurate information, reducing administrative workload and increasing employee confidence in organizational procedures (Shiri, 2020; Ratnasari et al., 2024). Moreover, transparency in systems promotes fairness and trust, reinforcing employees' engagement with their roles and responsibilities.

Table 1. Feature description and impact on organizational efficiency.

Feature	Description	Impact on Organizational Efficiency
HRIS Integration	Combines various HR functions into a single, unified system	Improves decision-making and workflow across departments
Data Transparency	Ensures easy access to HR data for managers and employees	Increases trust and enhances employee satisfaction
Data Accuracy	Maintains accurate employee records across all HR processes	Reduces errors and supports efficient operational management

Beyond the technical capabilities of HRIS, its human impact lies in how it empowers both management and staff to interact with HR processes more meaningfully. For example, employees gain a better understanding of their job expectations, training needs, and performance evaluations. This clarity strengthens their emotional attachment to the organization, which is reflected in increased levels of organizational commitment (Supardi & Rizky, 2018). In organizations where HRIS is well integrated, workers often feel more recognized and valued, which contributes to positive psychological outcomes and reduced turnover. Thus, HRIS not only facilitates operations but also nurtures a more loyal and satisfied workforce.

Another critical component influencing job satisfaction is organizational communication. Research has consistently highlighted the role of communication in creating a transparent, inclusive, and engaging work environment (Lubis, 2024). Communication that flows smoothly across departments and hierarchies reduces misunderstandings and builds a shared understanding of organizational goals. Strong communication practices enhance morale and cohesion, which are key precursors to job satisfaction (Alfianto, 2024). The adoption of digital communication platforms such as intranets and collaborative tools also plays a role in supporting organizational transparency and employee voice, particularly in larger or digitally transformed organizations (Olaniyi *et al.*, 2024).

Organizational commitment, which encompasses affective, continuance, and normative dimensions, emerges as a significant mediator in the relationship between HR practices and employee outcomes. Employees with high organizational commitment exhibit increased performance and reduced turnover intentions (Marlapa & Indri, 2024). Commitment is cultivated when employees feel trusted, informed, and supported, conditions that are often facilitated by effective HRIS and communication systems (Wakabi & Matovu, 2024). As organizations evolve, integrating these systems with human-centered strategies becomes essential for promoting not only technical efficiency but also psychological well-being and sustained job satisfaction.

3. METHODS

This study employed a descriptive quantitative approach to examine the relationships between HRIS, organizational communication, organizational commitment, and job satisfaction. Detailed information for this method is explained elsewhere (Susilawati *et al.*, 2025). The research was conducted, focusing on employees who interacted directly with the organization's HRIS and communication systems. A structured questionnaire was developed to measure perceptions across the four main variables using Likert scale items, ensuring both consistency and comparability across responses. The questionnaire was divided into sections aligned with each construct: HRIS (efficiency, transparency, accessibility), organizational

communication (clarity, effectiveness, openness), organizational commitment (affective, normative, continuance), and job satisfaction (intrinsic and extrinsic factors).

The sample selection followed a purposive sampling technique, targeting employees with sufficient familiarity and experience in using the HRIS and participating in internal communication practices. This ensured that respondents could provide reliable insights on how these systems influenced their satisfaction and commitment. A total of 300 employees participated in the study, with 293 females (97.67%) and 7 males (2.33%), and the majority (46%) were aged between 21 and 30 years. This demographic profile reflects a relatively young, female-dominated workforce, a common characteristic in industrial sectors with high production intensity.

To ensure the validity and reliability of the instruments, the research utilized factor analysis and Cronbach's Alpha testing. Each variable's scale was confirmed to exceed the standard reliability threshold ($\alpha > 0.6$), indicating consistent internal measurement (Emilisa, Ratnasari, & Saputra, 2017). Data analysis was conducted using SPSS version 29, enabling a combination of descriptive statistics, path analysis, and hypothesis testing. Detailed information on how to analyze using statistical analysis is reported elsewhere (Fiandini et al., 2024; Rahayu et al., 2024; Afifah et al., 2022).

The main analytical focus was on testing both the direct and indirect effects of HRIS and communication on job satisfaction, with organizational commitment examined as a mediating variable. The path model was tested using regression techniques, and significance was determined based on p-values (< 0.05).

By combining robust quantitative tools with a targeted sampling strategy, this method provides a clear and reliable pathway to examine how digital HR systems and communication structures contribute to employee satisfaction. In line with organizational behavior theory and digital HRM frameworks, the methodology allows the study to quantify psychological constructs such as commitment and satisfaction, offering evidence-based insights into strategic HR design (Himawan, 2021).

4. RESULTS AND DISCUSSION

Figure 1 presents the conceptual model of the study, illustrating the hypothesized relationships among HRIS, organizational communication, organizational commitment, and job satisfaction. This framework is central to interpreting the statistical findings and evaluating the mediating role of organizational commitment in the direct and indirect paths toward job satisfaction.

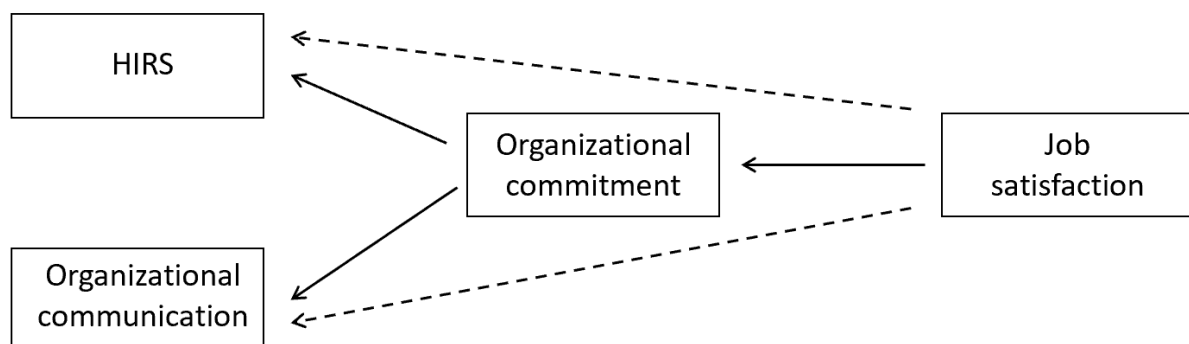


Figure 1. Conceptual model of HRIS, communication, organizational commitment, and job satisfaction.

The statistical analysis using SPSS v29 revealed several significant findings. The direct influence of HRIS on job satisfaction was strong, with a standardized coefficient (β) of 0.764 and a p-value of 0.000. This indicates a highly significant positive relationship, suggesting that improvements in HRIS implementation directly enhance employee job satisfaction. The HRIS appeared to support human resource functions effectively, including real-time access to personnel data, streamlined workflows, and transparent performance evaluations. These features contributed to the reduction of administrative burdens and allowed employees to experience greater clarity in their roles and responsibilities, thereby improving their satisfaction with work. This result aligns with previous reports (Shiri, 2020), which emphasized that digital HR systems foster trust and satisfaction by reducing ambiguity and promoting accessibility.

In addition to the role of HRIS, organizational communication was also found to have a significant and positive effect on job satisfaction. The standardized coefficient for this relationship was 0.310, with a p-value of 0.000. These results reinforce the importance of communication clarity, transparency, and timeliness in shaping employees' perceptions of their organizational environment. Employees who receive consistent and clear communication from management are more likely to feel informed, engaged, and aligned with organizational goals. Effective communication practices (whether through regular meetings, internal newsletters, or digital platforms) support employees' emotional connection to the organization and reduce the risk of misunderstandings or feelings of isolation. Effective communication is a critical driver of employee morale and job satisfaction, particularly in settings that involve complex organizational hierarchies (Rajhans, 2012; Nkansah-Dwamena, 2024)

Moreover, the analysis confirmed that organizational commitment plays a mediating role in the relationship between HRIS and job satisfaction. The direct path from HRIS to organizational commitment yielded a standardized coefficient of 0.674 ($p = 0.000$), while organizational commitment's direct influence on job satisfaction produced a coefficient of 0.310 ($p = 0.000$). The indirect effect of HRIS on job satisfaction through organizational commitment was statistically significant, with a β value of 0.175 and a p-value of 0.000. This supports the hypothesis that HRIS not only influences job satisfaction directly but also indirectly enhances it by strengthening employees' emotional attachment to the organization.

These findings offer valuable confirmation of the literature that describes HRIS as a dual-function tool, both operational and psychological. On the one hand, HRIS improves the technical efficiency of human resource operations. On the other hand, it helps employees perceive themselves as important stakeholders within the organizational system. When systems are transparent, accessible, and responsive, employees feel recognized and empowered. This perception fosters a sense of trust and loyalty, which constitutes the foundation of organizational commitment. Access to career progression data, timely feedback, and HR clarity supports employee retention and positive psychological engagement with the company (Supardi & Rizky, 2018).

Table 2 summarizes key factors that influence job satisfaction and the supporting literature that validates these relationships. The table further reinforces the role of HRIS and communication in shaping satisfaction, not only as isolated constructs but as interconnected systems within the broader HR ecosystem. Transparent HR practices supported by reliable systems and communication channels are strongly associated with higher employee motivation and satisfaction (Fatima et al., 2012). Furthermore, HRIS effectiveness contributes

to satisfaction by reducing transactional frictions and enabling data-based decision-making (Maamari & Osta, 2021).

Table 2. Factor, impact on job satisfaction, and supporting literature.

Factor	Impact on Job Satisfaction	Supporting Literature
HRIS Effectiveness	Increases satisfaction by providing transparency and simplifying processes	Shiri (2020)
Organizational Support	Strong managerial and system support enhances employee satisfaction.	Fatima et al. (2012)
Workplace Transparency	Clear communication and access to information improve morale and trust	Okunade (2025)
Organizational Commitment	Emotional attachment fosters higher satisfaction and loyalty	Johan & Yusuf (2022)
Communication Clarity	Reduces ambiguity and enhances engagement and belonging	Yu et al. (2022)

Interestingly, the results also revealed that the impact of HRIS on organizational commitment was slightly stronger than the impact of communication on commitment. This suggests that in data-driven or industrial work environments, the perceived reliability and supportiveness of digital systems play a stronger role in shaping employee attitudes than interpersonal communication alone. Nevertheless, communication remains a key element in reinforcing psychological bonds. Employees who feel heard and updated are more likely to form trust in leadership, especially when communication is coupled with transparent HR processes.

From a demographic perspective, younger employees (aged 21-30) reported higher levels of satisfaction with HRIS and communication systems compared to their older counterparts. This may be attributed to their familiarity with digital platforms and their expectations for immediate feedback and access to information. These generational insights mirror findings from previous studies (Shiri, 2020; Supardi & Rizky, 2018), who observed that digital natives tend to value HRIS features more positively than employees who rely on conventional communication methods. This difference points to the need for tailored strategies in HR design; organizations must accommodate diverse preferences in digital literacy and communication style.

The study also provides insights into gender dynamics within the workforce. With 97.67% of respondents being female, the results reflect how women perceive HRIS and communication structures in their workplace. While the gender imbalance may limit generalizability, it highlights an important demographic reality of the company. Interestingly, female employees expressed a high degree of satisfaction with the transparency and accessibility offered by the HRIS. This could be interpreted as a sign of how digital systems empower underrepresented or historically marginalized groups in workplace hierarchies by ensuring fairness in communication and recognition.

Organizational commitment also mediated the relationship between organizational communication and job satisfaction, though the strength of the indirect effect was somewhat lower than in the HRIS pathway. The findings showed that communication practices that promote openness and engagement contribute positively to employees' sense of belonging, which in turn enhances their satisfaction at work. Employees who receive frequent updates, feedback, and opportunities to express their ideas are more likely to develop a stronger

attachment to the organization. This mediating effect aligns with the assertions of previous studies (Johan & Yusuf, 2022), who argued that commitment is not merely a static trait but a dynamic response to workplace systems and social cues. When communication reinforces trust, fairness, and recognition, employees internalize those values, fostering both commitment and satisfaction.

These findings emphasize that organizational commitment serves as a crucial psychological bridge between structural inputs (such as HRIS and communication) and attitudinal outcomes like job satisfaction. It confirms that the presence of strong HR systems or communication channels alone does not guarantee satisfaction unless employees internalize the experience and align themselves emotionally with the organization's goals. High organizational commitment amplifies positive job outcomes, including productivity, engagement, and reduced turnover (Ampofo & Karatepe, 2022).

The mediating model tested in this study contributes significantly to advancing current understanding of workplace behavior. While existing research has extensively discussed the separate impacts of HRIS and communication, this study integrates both factors within a unified framework mediated by commitment. In doing so, it moves beyond linear cause-and-effect assumptions and proposes a more holistic perspective on job satisfaction. This perspective is especially relevant in contemporary human resource management, where organizations are increasingly required to adopt integrated systems that support not only operational efficiency but also employee well-being.

These findings also align with the global agenda of Sustainable Development Goal 8 (SDG 8), which emphasizes the promotion of "decent work and economic growth." A critical component of decent work is the presence of supportive, inclusive, and transparent organizational systems. By demonstrating that digital tools like HRIS and structured communication practices can increase satisfaction and commitment, the study reinforces the need for organizations to design HR infrastructures that are not only technologically sound but also people-centered. In this context, HRIS serves as more than a data system; it becomes a tool for empowerment, engagement, and equity. Communication, likewise, is more than message delivery; it is a process of meaning-making that connects individuals to institutional missions and values.

From a theoretical standpoint, this study validates and extends established models in organizational behavior by embedding digital infrastructure into traditional psychological constructs. The significance of HRIS and communication in shaping commitment reflects a convergence of information technology and human psychology. In the past, discussions about job satisfaction focused heavily on intrinsic motivation or leadership style. However, with the advancement of digital tools in the workplace, attention has shifted toward understanding how technology-driven systems can create environments that support psychological needs. Environments that meet psychological needs of belonging, autonomy, and competence lead to higher levels of job satisfaction.

On a practical level, the results suggest that organizations (particularly in manufacturing or education-based industries) should adopt a dual focus in HR strategy: one that leverages technology for operational precision and another that promotes communication for emotional connection. This dual approach is especially critical in large organizations where administrative complexity can create distance between employees and leadership. The use of HRIS should be extended beyond payroll and personnel tracking to include modules for feedback, career development tracking, and performance visualization. Communication

strategies should be designed not only to disseminate information but also to engage employees in dialogue.

Companies should also recognize the demographic dimensions of system adoption. As the study shows, younger employees tend to interact more comfortably with digital platforms, while older employees may require support to develop digital literacy and confidence. Tailored training programs and support systems can help bridge this gap, ensuring that HRIS and communication platforms are accessible and effective for all segments of the workforce. Moreover, the strong representation of women in the sample suggests that HR strategies should be designed with gender-responsive perspectives, ensuring that workplace tools address diverse needs equitably.

The findings also have implications for employee retention strategies. Employees who perceive strong HR systems and open communication are more likely to remain committed to their organization, thereby reducing turnover and associated recruitment costs. This is especially important in manufacturing firms where operational continuity is essential. Retention is not only a matter of compensation or promotion; it is about the quality of everyday experiences. As shown in this study, when employees feel informed, supported, and connected, they are more likely to find meaning in their roles and stay engaged.

It is important to note that the study's setting (an education-related manufacturing firm in Indonesia) offers a unique cultural and organizational context. While many HRIS systems are modeled on Western corporate templates, their successful adoption in non-Western contexts depends on cultural alignment. In collectivist cultures, such as Indonesia, organizational commitment is closely tied to the perceived fairness of leadership and the visibility of contribution to group success. Therefore, HRIS and communication systems must be culturally adapted to reflect these values. Future research may explore how these systems are perceived across different cultural environments, adding richness to the global discourse on HRM and employee satisfaction.

The combined statistical evidence from this study supports a robust model in which HRIS and communication independently and jointly influence organizational commitment and job satisfaction. This model offers a practical framework for HR practitioners seeking to improve workplace engagement through system-level interventions. In particular, the mediated relationships underscore the importance of addressing both technical and emotional aspects of work. A well-functioning system must not only process information efficiently but also reinforce a shared identity and purpose among employees.

The use of path analysis as a statistical technique further strengthens the validity of these findings. Unlike simple regression, path analysis allows for the simultaneous testing of multiple relationships, offering a more comprehensive understanding of direct and indirect effects. The significance levels reported in this study (all p -values = 0.000) indicate that the observed relationships are not random but reflect meaningful patterns within the organizational environment. Moreover, the use of reliability testing and validity assessment through factor analysis enhances the credibility of the instruments used.

Taken together, these insights contribute to the growing call for evidence-based HRM, where decisions are guided not by intuition or tradition but by data and theoretical reasoning. In this light, the study stands as an example of how local organizational research can align with international standards and goals, offering practical pathways to building more resilient and responsive workplaces.

Further analysis of the structural model revealed nuanced differences in the strength of the relationships among variables. While both HRIS and communication demonstrated significant direct effects on job satisfaction, the path from HRIS to job satisfaction was

markedly stronger. This suggests that in organizations heavily dependent on data-driven operations, such as manufacturing, the presence of efficient, transparent, and responsive HRIS may serve as a more immediate determinant of employee satisfaction than interpersonal communication alone. HRIS facilitates autonomy by providing employees with real-time access to personal and organizational data, reducing their reliance on hierarchical requests for information. This sense of independence supports psychological empowerment, a known antecedent to job satisfaction (Cruz *et al.*, 2021).

However, the complementary role of communication should not be understated. While HRIS addresses informational clarity and procedural fairness, organizational communication fosters emotional connection and shared understanding. Communication bridges the relational gap between management and staff, allowing employees to contextualize their roles within broader organizational objectives. Employees interpret organizational cues not only through formal systems but also through the tone, frequency, and responsiveness of communication (Okunade, 2025). Thus, the co-existence of strong HRIS and effective communication practices provides a comprehensive support structure (one cognitive, the other affective) that underpins satisfaction and performance.

An interesting pattern also emerged when comparing the mediating influence of organizational commitment in the HRIS and communication models. The HRIS–commitment–satisfaction pathway revealed a higher total effect than the communication–commitment–satisfaction pathway. This finding highlights the capability of HRIS to shape employee perceptions of institutional support and predictability. Employees who view HR systems as accessible, fair, and efficient are more likely to develop affective commitment, which encompasses emotional attachment to the organization. Such attachment translates into more meaningful engagement with work, fewer complaints, and a stronger desire to contribute to the organization's goals (Saks *et al.*, 2022).

At the same time, the role of communication in nurturing normative and continuance commitment remains critical. Normative commitment, rooted in a sense of moral obligation, can be reinforced when organizational messages align with employees' values and emphasize shared purpose. Continuance commitment, which reflects perceived costs of leaving, may also be influenced by the availability of information about benefits, advancement, and career trajectories, all typically communicated by managers or HR personnel. Therefore, while HRIS tends to shape affective attachment, communication enhances commitment through socialization and value alignment.

This distinction has important implications for HR managers. It suggests that system investment alone is insufficient if not paired with consistent and value-driven communication. In other words, technology can deliver transparency, but only human interaction can interpret and reinforce meaning. Organizations must therefore design HR interventions that are both system-based and people-centric, with digital platforms providing infrastructure and communication strategies that build cohesion.

In terms of organizational behavior, these findings support the social exchange theory, which posits that employees' attitudes and behaviors are shaped by the quality of the exchange relationship they perceive with the organization. HRIS and communication act as vehicles of that exchange. Transparent HR systems signal fairness, while open communication conveys respect and inclusion. Employees, in turn, reciprocate with higher commitment and satisfaction. This reciprocity cycle enhances organizational stability and reduces dysfunctions such as absenteeism or disengagement (Beulen, 2009).

The empirical findings from this study also expand the application of technological acceptance models (TAM) in HR settings. While TAM traditionally emphasizes perceived ease of use and usefulness, this study shows that HRIS usefulness extends beyond individual task performance into the realm of organizational affect. Employees do not simply accept HR systems because they function well; they value them because these systems reflect fairness, recognition, and opportunity, intangible drivers of commitment and satisfaction.

Moreover, the integration of SDG 8 (Decent Work and Economic Growth) into this study offers a macro-level lens through which to interpret the data. Decent work is not merely about employment quantity, but about employment quality. The presence of systems and communication that promote dignity, fairness, and inclusion reflects a commitment to sustainable organizational growth. The findings suggest that investment in digital HR infrastructure and inclusive communication strategies contributes to institutional readiness for SDG-aligned transformation. This research, therefore, offers a micro-to-macro link between individual job satisfaction and national or global development agendas.

Beyond theory and policy, the findings generate actionable insights for organizations aiming to improve employee outcomes. First, the deployment of HRIS must be accompanied by training and capacity-building, especially in companies with multigenerational workforces. Digital comfort and expectations vary by age, and organizations must provide equitable support to ensure that all employees benefit equally from system access. Second, communication channels should be designed to be bidirectional and inclusive. Tools such as employee suggestion platforms, town hall meetings, and real-time feedback systems can reinforce the sense that employee voices are heard and valued.

Organizations must also pay attention to the alignment between system messages and human interactions. A disconnect between what the HRIS reflects and how managers communicate can lead to cognitive dissonance, reducing trust and undermining commitment. For example, if HRIS data suggests transparency but communication from leadership is inconsistent or top-down, employees may perceive a lack of integrity. Consistency across platforms (both digital and interpersonal) is essential in building an organizational culture that supports satisfaction and retention.

Despite its strengths, the study is not without limitations. The research is cross-sectional, limiting causal inference. While significant associations have been observed, the temporal dynamics between variables (such as whether commitment develops over time or fluctuates with changes in communication) remain unexplored. Future research using longitudinal designs would provide deeper insights into how these relationships evolve. Moreover, the study focused on a single organization with a unique demographic profile (female-dominated, predominantly young), which may constrain the generalizability of the findings. Broader studies across sectors and gender-balanced samples would allow for comparative analysis and richer theory development.

Another limitation relates to the self-report nature of the data, which is susceptible to social desirability bias. Employees may report satisfaction or commitment levels that conform to perceived expectations. To mitigate this, future studies could triangulate survey data with behavioral metrics such as turnover records, absenteeism, or promotion rates. Including qualitative data (such as interviews or focus groups) would also enrich understanding by capturing contextual narratives that numerical data may overlook.

Nevertheless, the study makes a distinct contribution to the field of human resource management by offering a tested model that links technology, communication, commitment, and satisfaction in an integrated structure. It invites HR professionals and scholars alike to view systems and relationships not as separate entities but as co-dependent components of

employee experience. The study also bridges academic and practitioner perspectives by translating theoretical constructs into implementable HR strategies.

Finally, in positioning its findings within the framework of SDG 8, this study underscores the broader significance of internal organizational practices. How a company treats, communicates with, and supports its employees is not only an internal matter but also a reflection of its role in promoting sustainable economic development. HRIS and communication are tools of governance, soft infrastructures that shape dignity at work. Their proper implementation is not just good management; it is good citizenship.

The culmination of these findings affirms the validity of the conceptual model proposed at the outset of the study. HRIS and organizational communication both exert strong, statistically significant effects on job satisfaction, both directly and through the mediating role of organizational commitment. Among these pathways, the HRIS (commitment and satisfaction chain) emerged as particularly robust, indicating that well-structured, transparent, and user-oriented HR systems have a considerable impact on how employees perceive their work and relationship with the organization. Organizational communication, while having a more modest direct effect, remains essential in shaping the emotional and cultural fabric that supports long-term engagement.

This study underscores that employee satisfaction is not simply a matter of discrete interventions but a systemic outcome shaped by multiple interrelated processes. Organizations that fail to align their HR systems with meaningful communication risk undermining the very gains that digitalization seeks to achieve. For instance, even the most advanced HRIS can be rendered ineffective if employees feel alienated due to poor managerial communication. Conversely, excellent communication may fall short if employees encounter inefficiencies, delays, or confusion when navigating HR procedures. The interaction of these components (systems and speech, data and dialogue) must be intentionally harmonized.

The study also reaffirms the importance of organizational commitment as a mediating force. This construct does not operate in isolation; it is built over time through continuous experiences of fairness, support, and recognition. The emotional bond between employee and organization is not automatically triggered by systems or communication alone, but by the coherence between what is offered and what is experienced. When systems deliver what they promise and communication validates that delivery with empathy and clarity, commitment emerges naturally. This commitment, in turn, solidifies job satisfaction, which leads to improved performance, reduced turnover, and enhanced organizational resilience.

The implications of this research extend beyond individual organizations to the broader pursuit of sustainability in human development. By demonstrating how internal institutional design (particularly digital infrastructure and interpersonal communication) shapes psychological well-being, this study contributes to a more inclusive interpretation of SDG 8 (Decent Work and Economic Growth). It highlights that decent work involves more than job availability; it entails the provision of systems and environments that respect dignity, foster engagement, and promote fairness. In contexts like Indonesia, where manufacturing remains a critical economic sector, these insights are particularly timely and relevant.

Moreover, the emphasis on satisfaction as a multidimensional construct (impacted by technology, communication, and commitment) challenges overly simplistic HR metrics that focus only on productivity or compliance. Satisfaction represents a holistic state of being, encompassing emotional, cognitive, and relational components. Organizations that value satisfaction as a strategic indicator will benefit not only from more stable and motivated

workforces but also from reputational gains, stakeholder trust, and long-term adaptability. In this regard, satisfaction is not an endpoint but a signal of organizational health and alignment.

In supporting this strategic orientation, the present study offers a validated measurement model and a replicable methodology for assessing employee satisfaction. Organizations seeking to evaluate or redesign their HR functions can adopt the model used in this study to map the effects of their systems and communication practices on commitment and satisfaction. The use of path analysis, combined with reliability and validity testing, ensures that findings are not only statistically sound but also actionable. For HR departments operating in resource-constrained environments, this evidence-based approach provides a pathway to prioritize interventions that yield the greatest impact.

Importantly, the study encourages a shift in mindset from fragmented HR policy to integrated experience design. Employees do not differentiate between departments or platforms when evaluating their workplace experience; they interpret their environment holistically (Malik et al., 2023; Davila-Gonzalez & Martin, 2024). A delay in accessing payroll information or a lack of feedback from supervisors may carry equal weight in shaping perceptions of fairness. Therefore, HR strategy must be designed with coherence in mind, where systems, messages, leadership behaviors, and feedback loops align to support a unified organizational culture.

As organizations move toward greater digitalization and complexity, the risk of fragmentation increases. HRIS implementation, while offering tremendous benefits, must be guided by human-centered principles. Interface design, accessibility, and responsiveness matter. Employees must not only understand how to use the system but also feel that it works for them, not against them (Yarberry & Sims, 2021; Selimović et al., 2021; Tampi et al., 2022). Similarly, communication should be consistent, inclusive, and dialogic, not merely instructive. Leaders and HR managers must treat every message as an opportunity to build trust and reinforce commitment.

Finally, the study points to several strategic recommendations:

- (i) Integrate HRIS with performance development tools, allowing employees to track progress, receive feedback, and visualize career trajectories.
- (ii) Train managers in communication coaching, ensuring they know how to deliver messages that resonate across generational and cultural lines.
- (iii) Develop communication dashboards or platforms that reflect real-time organizational updates, accessible through the same HRIS interface.
- (iv) Conduct periodic satisfaction audits, using validated instruments to monitor the alignment between system performance, communication effectiveness, and employee commitment.
- (v) Embed SDG indicators into HR dashboards, enabling organizations to report on their contribution to decent work in measurable and globally relevant terms.

As organizations increasingly confront pressures related to globalization, automation, and demographic shifts, building resilient, human-centered work systems becomes not only a strategic priority but also a moral imperative (George, 2024). This study contributes to that goal by offering a tested framework for integrating system performance and psychological engagement through the lens of job satisfaction.

The interrelationship among HRIS, organizational communication, and job satisfaction (mediated by organizational commitment) provides a compelling model for understanding and enhancing workplace dynamics. It reinforces the idea that employee satisfaction is both a technological and relational achievement, requiring investment in systems that work and in cultures that care. The findings affirm that when people are supported with transparent

systems and empowered through meaningful communication, they respond with loyalty, engagement, and satisfaction. This, ultimately, is the essence of sustainable organizational development. Finally, this study adds new information regarding SDGs, as reported elsewhere (Table 3).

Table 3. Previous studies in SDGs.

No	Title	Ref.
1	Low-carbon food consumption for solving climate change mitigation	Nurramadhani et al. (2024)
2	Towards sustainable wind energy	Krishnan et al. (2024)
3	Assessment of student awareness and application of eco-friendly curriculum	Djirong et al. (2024)
4	Effect of substrate and water on cultivation of Sumba seaworm	Kerans et al. (2024)
5	Smart learning as transformative impact of technology	Makinde et al. (2024)
6	The relationship of vocational education skills in agribusiness	Gemil et al. (2024)
7	The influence of environmentally friendly packaging	Haq et al. (2024)
8	Sustainable packaging: Bioplastics as a low-carbon future step	Basnur et al. (2024)
9	Implementation of SDGs no. 12: Responsible production and consumption	Maulana et al. (2023)
10	Analysis of the application of Mediterranean diet patterns	Nurnabila et al. (2023)
11	Efforts to improve SDGs through education on diversification of food	Awalussillmi et al. (2023)
12	Safe food treatment technology	Rahmah et al. (2024)
13	Analysis of student's awareness of sustainable diet	Keisyafa et al. (2024)
14	Integrating multi-stakeholder governance	Yustiarini et al. (2025)
15	Computational engineering of malonate and tetrazole derivatives	Merzouki et al. (2025)
16	Innovative nanofluid encapsulation in solar stills	Namoussa et al. (2025)
17	Modernization of Submersible Pump Designs	Glovatskii et al. (2025)
18	SDGs in engineering education	Ragadhita et al. (2026)

5. CONCLUSION

This study confirms that HRIS and organizational communication significantly influence job satisfaction, both directly and through organizational commitment. HRIS emerged as a stronger predictor, particularly in enhancing affective commitment. Communication reinforced normative attachment and engagement. These findings offer a strategic model for human-centered HR design and contribute to SDG 8 by promoting inclusive, transparent, and efficient work environments. Organizations are encouraged to integrate digital systems with participatory communication to foster commitment, enhance satisfaction, and strengthen long-term organizational resilience.

5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

6. REFERENCES

- Alfianto, A. D. (2024). The role of the work environment and organizational communication in increasing work morale and job satisfaction in government institutions. *Journal of Organizational and Human Resource Development Strategies*, 1(02), 112-125.
- Ampofo, E. T., and Karatepe, O. M. (2022). The effects of on-the-job embeddedness and its sub-dimensions on small-sized hotel employees' organizational commitment, work engagement and turnover intentions. *International Journal of Contemporary Hospitality Management*, 34(2), 509-533.
- Awalussillmi, I., Febriyana, K.R., Padilah, N., and Saadah, N.A. (2023). Efforts to improve sustainable development goals (SDGs) through education on diversification of food using infographic: Animal and vegetable protein. *ASEAN Journal of Agricultural and Food Engineering*, 2(2), 113-120.
- Basnur, J., Putra, M.F.F., Jayusman, S.V.A., and Zulhilmi, Z. (2024). Sustainable packaging: Bioplastics as a low-carbon future step for the sustainable development goals (SDGs). *ASEAN Journal for Science and Engineering in Materials*, 3(1), 51-58.
- Beulen, E. (2009). The contribution of a global service provider's Human Resources Information System (HRIS) to staff retention in emerging markets: Comparing issues and implications in six developing countries. *Journal of Information Technology and People*, 22(3), 270–288.
- Bukar, K., Usman, M., and Ngubdo, U. M. (2025). Effect of Communication Strategies on Organisational Performance. *Solo International Collaboration and Publication of Social Sciences and Humanities*, 3(02), 225-236.
- Cruz, A. P. C. D., Frare, A. B., Accadrolli, M. C., and Horz, V. (2021). Effects of informal controls and psychological empowerment on job satisfaction. *Revista Contabilidade & Finanças*, 33, 29-45.
- Davila-Gonzalez, S., and Martin, S. (2024). Human digital twin in industry 5.0: A holistic approach to worker safety and well-being through advanced AI and emotional analytics. *Sensors*, 24(2), 655.
- Djirong, A., Jayadi, K., Abduh, A., Mutolib, A., Mustofa, R.F., and Rahmat, A. (2024). Assessment of student awareness and application of eco-friendly curriculum and technologies in Indonesian higher education for supporting sustainable development goals (SDGs): A case study on environmental challenges. *Indonesian Journal of Science and Technology*, 9(3), 657-678.
- Fatima, A., Iqbal, M., and Majeed, A. (2012). Impact of organizational communication on job satisfaction and organizational commitment: A comparative study. *Interdisciplinary Journal of Contemporary Research in Business*, 4(1), 1–13.
- Gemil, K.W., Na'ila, D.S., Ardila, N.Z., and Sarahah, Z.U. (2024). The relationship of vocational education skills in agribusiness processing agricultural products in achieving sustainable development goals (SDGs). *ASEAN Journal of Science and Engineering Education*, 4(2), 181-192.

- George, A. S. (2024). Bridging the digital divide: Understanding the human impacts of digital transformation. *Partners Universal International Innovation Journal*, 2(3), 1-34.
- Glovatskii, O., Kalimbetov, B., Ergashev, R., Kholbutaev, B., Pardaev, M., Ergasheva, G., Nasirova, N., and Khimmataliev, D.O. (2025). Modernization of Submersible Pump Designs for Sustainable Irrigation: A Bibliometric and Experimental Contribution to Sustainable Development Goals (SDGs). *Indonesian Journal of Science and Technology*, 10(3), 427-438.
- Haq, M.R.I., Nurhaliza, D.V., Rahmat, L.N., and Ruchiat, R.N.A. (2024). The influence of environmentally friendly packaging on consumer interest in implementing zero waste in the food industry to meet sustainable development goals (SDGs) needs. *ASEAN Journal of Economic and Economic Education*, 3(2), 111-116.
- Hossain, Q., Ikbai, M. Z., and Rahman, M. M. (2025). A meta data-driven decision support in human capital management: reviewing hr and predictive analytics integration. *ASRC Procedia: Global Perspectives in Science and Scholarship*, 1(01), 215-246.
- Johan, M., and Yusuf, R. (2022). Organizational commitment as a mediator of human resource management practices and job satisfaction. *Jurnal Administrasi dan Manajemen*, 3(2), 82–92.
- Keisyafa, A., Sunarya, D.N., Aghniya, S.M., and Maula, S.P. (2024). Analysis of student's awareness of sustainable diet in reducing carbon footprint to support sustainable development goals (SDGs) 2030. *ASEAN Journal of Agricultural and Food Engineering*, 3(1), 67-74.
- Kerans, G., Sanjaya, Y., Liliyasi, L., Pamungkas, J., and Ate, G., Y. (2024). Effect of substrate and water on cultivation of Sumba seaworm (nyale) and experimental practicum design for improving critical and creative thinking skills of prospective science teacher in biology and supporting sustainable development goals (SDGs). *ASEAN Journal of Science and Engineering*, 4(3), 383-404.
- Krishnan, A., Al-Obaidi, A.S.M., and Hao, L.C. (2024). Towards sustainable wind energy: A systematic review of airfoil and blade technologies over the past 25 years for supporting sustainable development goals (SDGs). *Indonesian Journal of Science and Technology*, 9(3), 623-656.
- Lubis, M. (2024). The role of communication and employee engagement in promoting inclusion in the workplace: A case study in the creative industry. *Feedback International Journal of Communication*, 1(1), 1-15.
- Maamari, B. E., and Osta, A. (2021). The effect of HRIS implementation success on job involvement, job satisfaction and work engagement in SMEs. *International Journal of Organizational Analysis*, 29(5), 1269-1286.
- Makinde, S.O., Ajani, Y.A., and Abdulrahman, M.R. (2024). Smart learning as transformative impact of technology: A paradigm for accomplishing sustainable development goals (SDGs) in education. *Indonesian Journal of Educational Research and Technology*, 4(3), 213-224.

- Malik, A., Budhwar, P., Mohan, H., and NR, S. (2023). Employee experience—the missing link for engaging employees: Insights from an MNE's AI-based HR ecosystem. *Human Resource Management*, 62(1), 97-115.
- Marlapa, E., and Endri, E. (2024). Work stress, organizational commitment, and turnover intention: The intervening role of work satisfaction. *Jurnal Aplikasi Bisnis dan Manajemen (JABM)*, 10(2), 503-503.
- Maulana, I., Asran, M.A., and Ash-Habi, R.M. (2023). Implementation of sustainable development goals (SDGs) no. 12: Responsible production and consumption by optimizing lemon commodities and community empowerment to reduce household waste. *ASEAN Journal of Community Service and Education*, 2(2), 141-146.
- Merzouki, M., Khibech, O., Fraj, E., Bouammali, H., Bourhou, C., Hammouti, B., Bouammali, B., and Challioui, A. (2025). Computational engineering of malonate and tetrazole derivatives targeting SARS-CoV-2 main protease: Pharmacokinetics, docking, and molecular dynamics insights to support the sustainable development goals (SDGs), with a bibliometric analysis. *Indonesian Journal of Science and Technology*, 10(2), 399-418.
- Namoussa, T.Y., Boucerredj, L., Khechekhouche, A., Kemerchou, I., Zair, N., Jahangiri, M., Miloudi, A., and Siqueira, A. (2025). Innovative nanofluid encapsulation in solar stills: Boosting water yield and efficiency under extreme climate supporting sustainable development goals (SDGs). *Indonesian Journal of Science and Technology*, 10(3), 419-426.
- Nkansah-Dwamena, E. (2024). Just sustainabilities: Building bridges and breaking barriers to empower employees for inclusive workplaces—Evidence from Ghana. *Merits*, 4(4), 325-345.
- Nurnabila, A.T., Basnur, J., Rismayani, R., Ramadhani, S., and Zuhilmi, Z. (2023). Analysis of the application of mediterranean diet patterns on sustainability to support the achievement of sustainable development goals (SDGs): Zero hunger, good health and well beings, responsible consumption, and production. *ASEAN Journal of Agricultural and Food Engineering*, 2(2), 105-112.
- Nurramadhani, A., Riandi, R., Permanasari, A., and Suwarma, I.R. (2024). Low-carbon food consumption for solving climate change mitigation: Literature review with bibliometric and simple calculation application for cultivating sustainability consciousness in facing sustainable development goals (SDGs). *Indonesian Journal of Science and Technology*, 9(2), 261-286.
- Okunade, J. K. (2025). Exploring the impact of effective internal communication strategies on employee morale, productivity, and organizational culture. *Lakhomi Journal Scientific Journal of Culture*, 6(1), 1-11.
- Olaniyi, O. O., Ugonnia, J. C., Olaniyi, F. G., Arigbabu, A. T., and Adigwe, C. S. (2024). Digital collaborative tools, strategic communication, and social capital: Unveiling the impact of digital transformation on organizational dynamics. *Asian Journal of Research in Computer Science*, 17(5), 140-156.

- Ragadhita, R., Fiandini, M., Al Husaeni, D.N., and Nandiyanto, A.B.D. (2026). Sustainable development goals (SDGs) in engineering education: Definitions, research trends, bibliometric insights, and strategic approaches. *Indonesian Journal of Science and Technology*, 11(1), 1-26.
- Rahmah, F.A., Nurlaela, N., Anugrah, R., and Putri, Y.A.R. (2024). Safe food treatment technology: The key to realizing the sustainable development goals (SDGs) zero hunger and optimal health. *ASEAN Journal of Agricultural and Food Engineering*, 3(1), 57-66.
- Rajhans, K. (2012). Effective organizational communication: A key to employee motivation and performance. *Interscience Management Review*, 2(2), 81-85.
- Rangkuti, Z. (2025). Evaluation of human resource management information systems in enhancing employee satisfaction. *Riwayat: Educational Journal of History and Humanities*, 8(2), 1202-1213.
- Ratnasari, C. D., Emilisa, L., and Saputra, G. (2024). HRIS and employee data optimization in manufacturing: An empirical study. *Manajerial*, 24(1), 111–125.
- Saks, A. M., Gruman, J. A., and Zhang, Q. (2022). Organization engagement: a review and comparison to job engagement. *Journal of Organizational Effectiveness: People and Performance*, 9(1), 20-49.
- Selimović, J., Pilav-Velić, A., and Krndžija, L. (2021). Digital workplace transformation in the financial service sector: Investigating the relationship between employees' expectations and intentions. *Technology in Society*, 66, 101640.
- Shiri, H. (2020). The impact of Human Resource Information Systems on job satisfaction: Evidence from education sector organizations. *US-China Education Review*, 10(6), 830–839.
- Supardi, E., and Rizky, E. R. (2018). Pengaruh sistem informasi SDM terhadap komitmen organisasi di perusahaan manufaktur. *Jurnal Pendidikan Manajemen Perkantoran*, 3(2), 226–232.
- Susilawati, A., Al-Obaidi, A.S.M., Abduh, A., Irwansyah, F.S., and Nandiyanto, A.B.D. (2025). How to do research methodology: From literature review, bibliometric, step-by-step research stages, to practical examples in science and engineering education. *Indonesian Journal of Science and Technology*, 10(1), 1-40
- Tampi, P. P., Nabella, S. D., and Sari, D. P. (2022). The influence of information technology users, employee empowerment, and work culture on employee performance at the Ministry of Law and Human Rights Regional Office of Riau Islands. *Enrichment: Journal of Management*, 12(3), 1620-1628.
- Wakabi, R., and Matovu, M. (2024). Adoption of human resource information system across East African SME's: A systematic review. *International Journal of Multidisciplinary Studies on Management, Business, and Economy*, 7(2), 37-54.
- Wang, A. (2024). Enhancing HR management through HRIS and data analytics. *Applied and Computational Engineering*, 64(1), 223-229.

- Yarberry, S., and Sims, C. (2021). The impact of COVID-19-prompted virtual/remote work environments on employees' career development: Social learning theory, belongingness, and self-empowerment. *Advances in Developing Human Resources*, 23(3), 237-252.
- Yu, M., Wang, H., and Xia, G. (2022). The review on the role of ambiguity of tolerance and resilience on students' engagement. *Frontiers in Psychology*, 12, 828894.
- Yustiarini, D., Soemardi, B.W., and Pribadi, K.S. (2025). Integrating multi-stakeholder governance, engineering approaches, and bibliometric literature review insights for sustainable regional road maintenance: Contribution to sustainable development goals (SDGs) 9, 11, and 16. *Indonesian Journal of Science and Technology*, 10(2), 367-398.