

The Influence of the Implementation of the Personnel Information Management System (SIMPEG) on Employee Performance at the Class IIB State Detention Center in Sengkang

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ARTICLE INFO

Keywords: SIMPEG, management information system, employee performance, personnel administration, public organization

Received : 20, June

Revised : 22, July

Accepted: 29, August

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ABSTRACT

This study examines the implementation of the Personnel Management Information System (SIMPEG) and its relationship with employee performance at the Class IIB Sengkang State Detention Center. A quantitative survey design was used with 39 respondents selected from a population of 63 employees. Data were collected through observation, questionnaires, and documentation, and analyzed using descriptive statistics, Pearson correlation, simple linear regression, and coefficient of determination. The findings show that SIMPEG implementation and employee performance were both categorized as very good. The Pearson correlation was 0.854 with $p < 0.001$, indicating a very strong positive relationship. The coefficient of determination was 0.730, meaning that SIMPEG accounted for 73% of the observed variation in employee performance. The findings indicate that strengthening information quality, system use, managerial support, and decision-making functions can contribute substantially to employee performance.

INTRODUCTION

Personnel management in public organizations increasingly requires information support that is fast, accurate, integrated, and user-friendly. Personnel information serves not merely as an administrative record but also as a foundation for task execution, attendance monitoring, leave management, career development, performance assessment, and decision-making. Consequently, the quality of the information system used for human resource management can influence an organization's ability to provide precise data when needed.

In administrative practice, managing data manually or through non-integrated systems can lead to various issues, such as reporting delays, recording errors, outdated data, and difficulties in tracking employee history. These issues form a crucial context for the implementation of the Personnel Information Management System (SIMPEG) at the Class IIB State Detention Center in Sengkang. Research indicates that SIMPEG implementation aims to streamline the recording, management, and monitoring of personnel data, as well as to facilitate the systematic provision of such information.

The Class IIB State Detention Center in Sengkang is a technical implementation unit that requires orderly personnel administration, given that its organizational activities involve detainee services, security, administrative management, and inter-unit coordination. In this context, accurate personnel information must be available to ensure effective administrative processes and decision-making. Research also shows that SIMPEG supports personnel data management, covering information related to transfers, promotions, performance assessments, leave, and attendance.

However, the implementation of technology does not automatically result in improved performance. System effectiveness is influenced by the quality of the information produced, human capabilities in information processing, inter-unit coordination, organizational and management support, the use of information for decision-making, and the value of the information to the work itself. Therefore, research on SIMPEG must view the system not merely as a technological tool, but as an integral part of the organization's administrative and management processes.

The Personnel Information Management System variable in this study employs six dimensions derived from Davis: information, humans as information processors, system concepts, organizational and management concepts, decision-making concepts, and the value of information. Meanwhile, employee performance is measured in terms of quality, quantity, task execution, and responsibility, based on the indicators used in the study, which draw upon Mangkunegara's framework. This framework enables an empirical examination of the relationship between the quality of system implementation and employee performance.

Previous research indicates a link between the Personnel Management Information System (SIMPEG) and job satisfaction regarding employee performance at the Class I Non-TPI Immigration Office in Pemalang (Anggreani & Wilandari, 2023). This study extends that context to a correctional

work unit—specifically, the Class IIB State Detention Center in Sengkang. The study contributes by providing empirical evidence regarding the strength of the relationship and the extent of SIMPEG's contribution to employee performance within an organizational setting characterized by work demands that require administrative order, security, and precision in task execution.

Against this backdrop, the study aims to analyze the level of SIMPEG implementation, describe employee performance levels, and examine the impact of SIMPEG implementation on employee performance at the Class IIB State Detention Center in Sengkang. The primary research questions focus on whether SIMPEG implementation has a positive relationship with and a significant influence on employee performance, as well as the magnitude of the contribution attributable to the system.

LITERATURE REVIEW

Personnel Management Information System

A management information system can be understood as a set of interconnected components and procedures designed to process data into the information required to carry out management functions. In the context of personnel administration, such a system is geared toward collecting, processing, storing, presenting, and utilizing employee data so that the resulting information supports work execution and decision-making. Thus, a Personnel Management Information System (SIMPEG) represents an application of management information systems focused specifically on personnel-related data and information needs.

Davis identifies information, humans as information processors, systems concepts, organization and management, decision-making, and the value of information as essential elements of a management information system. This perspective emphasizes that a system's success is determined not merely by the existence of software applications, but also by the people operating them, the workflows linking organizational units, organizational support, and the capacity of the information to add value to decision-making.

In this study, the indicators for SIMPEG are operationalized into ten statement items representing six dimensions. These indicators encompass the ease of accessing personnel information; the availability of accurate and up-to-date data; the timeliness of data input and processing; professionalism in maintaining data integrity; inter-unit coordination; management support; the speed of information access for decision-making; trust in SIMPEG information; the influence of information on personnel policies; and the contribution of information to work efficiency and effectiveness.

Employee Performance

Employee performance refers to the work outcomes achieved by an individual in alignment with organizational tasks, responsibilities, standards, and targets. Performance is assessed not only by the volume of work completed but also by the quality of the output, the accuracy of task execution, adherence to regulations, and the employee's sense of responsibility toward the work. In public sector organizations, employee performance is a crucial element, as it

determines the organization's capacity to carry out its service and administrative functions.

This study employs four performance dimensions based on Mangkunegara's framework: quality, quantity, task execution, and responsibility. Quality pertains to precision and the alignment of work outcomes with established standards. Quantity relates to the efficient use of time and the volume of work completed. Task execution reflects the ability to perform duties according to procedures and adapt to changes, while responsibility encompasses integrity, compliance with rules, and commitment to work outcomes.

The Relationship Between SIMPEG and Employee Performance

Conceptually, SIMPEG can enhance performance because the system provides the information required by employees and management to carry out their work. Easily accessible and accurate information can reduce data retrieval time, minimize administrative errors, and accelerate decision-making processes. Ultimately, this support fosters a more focused and efficient working environment.

This relationship also encompasses behavioral and organizational dimensions. Employees who effectively utilize the system can more easily handle administrative and reporting tasks, while management support ensures consistent system usage. Therefore, SIMPEG is expected to have a positive impact on performance when the system is fully integrated with the organization's work procedures.

Research by Anggreani and Wilandari (2023) regarding SIMPEG and job satisfaction at the Class I Non-TPI Immigration Office in Pemalang serves as a relevant empirical reference. Subsequent research conducted in the Sengkang context examined the direct relationship between SIMPEG and performance.

Hypothesis

H1: The implementation of the Personnel Management Information System (SIMPEG) has a positive and significant effect on employee performance at the Class IIB State Detention Center in Sengkang.

METHODOLOGY

This study employs a quantitative approach with an associative survey design. This design was selected because the research aims to examine the relationship and influence between the Personnel Management Information System (X) and employee performance (Y). The study was conducted at the Class IIB State Detention Center in Sengkang, Wajo Regency.

The study population consisted of all 63 employees at the Class IIB State Detention Center in Sengkang. A sample of 39 respondents was used. This sample size was determined using the Slovin/Taro Yamane formula with a 10% margin of error, subsequently rounded to 39 respondents.

The research instrument was a questionnaire utilizing a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Variable X comprised 10 items representing six dimensions of the Personnel Management Information System (SIMPEG), while Variable Y comprised 10 items

representing four dimensions of employee performance. Data collection was carried out through observation, questionnaires, and documentation.

Data analysis included descriptive analysis to categorize the levels of SIMPEG implementation and employee performance; Pearson Product-Moment correlation analysis to test the strength of the relationship; simple linear regression analysis to test the influence; and the coefficient of determination to assess the magnitude of Variable X's contribution to Variable Y. Data processing was performed using SPSS 26 for Windows.

The simple regression equation used was $Y = a + bX$. In the research model, Y represents employee performance, X represents SIMPEG, a is the constant, and b is the regression coefficient. The significance of the influence was determined based on the significance value at the $\alpha = 0.05$ level.

RESEARCH RESULT

Descriptive Results of SIMPEG

Data analysis results indicate that the implementation of the Personnel Management Information System (SIMPEG) at the Class IIB State Detention Center in Sengkang falls into the "very good" category. Based on 39 respondents and 10 statement items, the total score obtained was 1,720. These findings demonstrate that respondents generally perceive the system as capable of supporting personnel information needs, coordination, decision-making, and work efficiency.

SIMPEG Aspect	Score	Category
Information	Very good	Very good
Human as information processor	Very good	Very good
System concept	168 / 195	Very good
Organization and management	168 / 195	Very good
Decision making	181 / 195	Very good
Value of information	174; 171; 170	Very good
Total	1,720	Very good

Among the reported indicators, access to information for decision-making purposes achieved a score of 181 out of an ideal 195. This result stands out as a significant finding, as it indicates that information from SIMPEG is perceived as helpful to the decision-making process. Support for the system's development also received a highly positive rating, reflecting organizational acceptance of the system's use.

Descriptive Results of Employee Performance

Employee performance also falls into the "very good" category. The total score obtained was 1,727, based on 39 respondents and 10 items. Nine items fell into the "very good" category, while one item fell into the "good" category. Thus, employees are generally perceived as capable of performing their work with good quality, quantity, task execution, and responsibility.

Performance Indicator	Indicator Example	Result
Quality	Accuracy and compliance of results with standards	Very good
Quantity	Time efficiency, working hours discipline, volume of work	Very good
Task execution	Compliance with SOP and adaptability	Good-very good
Responsibility	Integrity, compliance, concern for results	Very good
Total	10 items	1,727 - Very good

Pearson Correlation Test

The Pearson correlation results show a coefficient of 0.854 with a significance level of 0.000, based on a sample of 39 respondents. This coefficient falls within the 0.80–1.00 range, which is categorized in research criteria as a very strong relationship. The positive sign indicates a direct relationship: an improvement in the quality of SIMPEG implementation tends to be accompanied by an improvement in employee performance.

Variable	SIMPEG	Employee Performance
SIMPEG	1.000	0.854**
Employee Performance	0.854**	1.000
Sig. (2-tailed)	—	0.000
N	39	39

Simple Linear Regression

The simple linear regression analysis yields the equation $Y = 7.463 + 0.835X$. The constant of 7.463 represents the predicted performance value when the SIMPEG value is at zero within the model. The regression coefficient of 0.835 indicates that for every one-unit increase in the SIMPEG score, the predicted employee performance score increases by 0.835 units.

Model	B	Std. Error	Beta	t	Sig.
Constant	7.463	3.719	—	2.007	0.052
SIMPEG	0.835	0.084	0.854		

Coefficient of Determination

The model summary shows an R value of 0.854 and an R-squared value of 0.730. Thus, SIMPEG explains approximately 73% of the variation in employee performance within this research model, while the remaining 27% is attributable to other factors not included in the study. These findings indicate a substantial contribution, although this does not imply that employee performance is entirely determined by SIMPEG.

R	R Square	Adjusted R Square	Std. Error of Estimate
0.854	0.730	0.722	3.19553

Hypothesis Testing

Hypothesis	Evidence	Decision
SIMPEG is very good	Score 1.720; categorized very good	Accepted
Employee performance is very good	Score 1.727; categorized very good	Accepted
SIMPEG positively affects performance	$r = 0.854$; $p = 0.000$; $R^2 = 0.730$; $t = 9.995$	Accepted

DISCUSSION

The Implementation of SIMPEG

The finding that SIMPEG falls into the "excellent" category indicates that the system has been accepted as an integral part of the personnel administration process. High ratings regarding information access, coordination, management support, and the use of information for decision-making demonstrate that the system is viewed not merely as a data repository, but also as a tool that supports work activities. This aligns with the management information system concept, which integrates information quality with the relationships between people, systems, organizations, and decision-making processes.

The decision-making indicator received a high score. From a managerial perspective, this is significant because personnel information holds value when it can be utilized at the right moment to determine a course of action. A system that provides information rapidly reduces reliance on manual document searches and enables leadership to gain a more systematic overview of the workforce.

The excellent rating for the "human" dimension—as the processor of information—also highlights that the system's effectiveness remains contingent upon user competence and discipline. High-quality data is not generated solely by the application itself, but rather through processes involving data entry, updating, validation, and maintenance. Consequently, sustaining the benefits of SIMPEG requires strengthening user capacity and ensuring data integrity through proper oversight.

Employee Performance

Employee performance falling into the "very good" category indicates that respondents generally perceive work execution as meeting organizational demands. The four dimensions employed—quality, quantity, task execution, and responsibility—illustrate that performance encompasses not only work volume but also precision, procedural compliance, adaptability, and integrity.

The fact that one specific item fell only into the "good" category—despite overall performance being "very good"—is a significant observation. This discrepancy suggests there is still room for improvement in specific aspects of task execution. In organizational management, high aggregate results should not lead an organization to overlook relatively lower-scoring indicators; such

indicators can serve as focal points for intervention and continuous improvement.

Performance must also be understood within the context of the work characteristics at a State Detention Center. Operations in this environment demand procedural compliance, coordination, punctuality, and a sense of responsibility. Consequently, support from information systems capable of providing rapid data and information has the potential to strengthen the administrative processes underpinning task execution.

The Effect of SIMPEG on Employee Performance

A correlation coefficient of 0.854 indicates a very strong, positive relationship between SIMPEG and employee performance. Regression results reinforce this finding, as the SIMPEG coefficient is a positive 0.835 with a significance value of 0.000—well below the 0.05 threshold. This implies that, within the context of this study's data, improvements in the quality of SIMPEG implementation are associated with enhanced employee performance.

The R-squared value of 0.730 offers further substantive insight. Approximately 73% of the variation in employee performance can be explained by the SIMPEG variable within the model, while the remaining 27% is attributable to factors outside the model. This figure demonstrates that while the information system is a crucial factor, it is not the sole determinant of performance; factors such as ability, motivation, leadership, work environment, discipline, organizational culture, and other aspects also play a role.

These findings align with the theoretical premise that accurate, timely, relevant, and easily accessible information enables employees to complete tasks more efficiently. When personnel information needs are met through the system, the time and energy previously spent searching for or verifying data can be redirected toward actual work activities. Simultaneously, management gains a superior information base for supervision and decision-making.

The results also parallel the study by Anggreani and Wilandari (2023), which identified SIMPEG as a key variable in examining employee performance within the immigration sector. The shared institutional context—falling under the umbrella of government administration—strengthens the relevance of these findings, while the specific focus on the Class IIB State Detention Center in Sengkang provides a distinct empirical context.

From a practical standpoint, these results highlight the need to maintain system quality while simultaneously enhancing areas open to further development. Feature development, periodic data updates, internal oversight, and management support should be viewed as integral components of a performance improvement strategy. A robust system must be continuously adapted to operational needs to ensure it remains more than merely an administrative tool.

Possible Reasons for the Findings

There are several reasons that may explain the strong relationship between SIMPEG and performance. First, the system centralizes information, allowing employees and management to access data without lengthy manual searches. Second, more structured information can reduce the risk of recording errors

and expedite reporting. Third, rapid access to information supports coordination and decision-making.

Fourth, organizational support for system development can enhance user acceptance. Fifth, the use of the system leads to better documentation of administrative processes, making it easier to monitor work. It is this combination of technology, information quality, users, and management support that likely enables SIMPEG to make a significant contribution to performance at the research site.

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that the implementation of the Personnel Management Information System (SIMPEG) at the Class IIB State Detention Center in Sengkang falls into the "very good" category, based on the assessments of 39 respondents. Employee performance was also rated as "very good." Correlation results indicate a very strong positive relationship between SIMPEG and employee performance, while regression analysis reveals a positive and significant influence. The R-squared value of 0.730 indicates that SIMPEG explains 73% of the variation in employee performance within the research model.

From a practical standpoint, the organization is advised to maintain information quality, consistently update data, enhance user competence, and strengthen oversight of system usage. Further development of SIMPEG features should be aligned with actual work requirements, particularly regarding reporting, monitoring, and the provision of information for decision-making. The organization should also consider factors beyond SIMPEG that may account for the remaining 27% of performance variation not captured by the model.

ADVANCED RESEARCH

This study is limited by a relatively small number of respondents and the use of a single independent variable. Data were collected at a single research site; therefore, generalizing the findings to other organizational units requires caution. Future research could incorporate variables such as digital competence, job satisfaction, discipline, leadership, organizational culture, system service quality, or technology acceptance. Comparative studies across detention centers or technical implementation units could also provide broader insight into the conditions that make SIMPEG effective in enhancing performance.

ACKNOWLEDGMENT

The author extends gratitude to the Sengkang Class IIB State Detention Center and all respondents who provided information and supported the conduct of this research. Appreciation is also expressed to those who provided guidance in the completion of this study.

REFERENCES

- Agung, B., & Arifin, M. (n.d.). Sistem informasi manajemen kepegawaian pada administrasi dan pelayanan kepegawaian dalam kerangka merit system di lingkungan Kementerian Hukum dan HAM. Percetakan Pohon Cahaya.
- Anggreani, I. D., & Wilandari, A. (2023). Pengaruh sistem informasi manajemen kepegawaian SIMPEG dan kepuasan kerja terhadap kinerja pegawai Kantor Imigrasi Kelas I Non TPI Pematang. *Jurnal Ekonomina*, 2(11), 3188–3202.
- Badan Kepegawaian Negara. (2022, March 10). Sistem informasi kepegawaian nasional (SIASN).
- Davis, G. B. (2002). Sistem informasi manajemen. Pustaka Binaman Pressindo.
- Mangkunegara, A. A. A. P. (2009). Manajemen sumber daya manusia perusahaan. Remaja Rosdakarya.
- Sedarmayanti. (2009). Sumber daya manusia dan produktivitas kerja. Mandar Maju.
- Sugiyono. (2018). Metode penelitian kuantitatif. Alfabeta.
- Widodo, J. (2010). Analisis kebijakan publik: Konsep dan aplikasi analisis proses kebijakan publik. Bayumedia.