

The Impact of GERAK PRO on Employee Performance Through Exercise Motivation

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Abstract

This study aims to analyze the effect of using the GERAK PRO application on employee performance, with exercise enthusiasm as a mediating variable at PT PLN (Persero) UP3 Mojokerto, Indonesia. The study involved 144 active employees who had used the application for at least three months. A quantitative explanatory approach was applied using Structural Equation Modeling-Partial Least Squares (SEM-PLS). Data were collected using a Likert-scale questionnaire to examine the direct and indirect relationships among the variables. The results show that the GERAK PRO application does not directly affect employee performance but significantly increases exercise enthusiasm, which positively improves performance. Exercise enthusiasm fully mediates the relationship between application usage and employee performance. These findings indicate that digital health applications improve performance mainly through behavioral changes, better fitness, and stronger intrinsic motivation. This study contributes to the human resource management literature by confirming the mediating role of exercise enthusiasm in connecting digital wellness applications with employee performance. However, the study is limited to one organizational unit and cross-sectional data, which may reduce the generalizability of its findings.

Keywords: Behavioral Change, Digital Health Application, Digital Health Technology, Employee Performance, Exercise Enthusiasm, GERAK PRO

1. INTRODUCTION

Employee performance is a strategic factor that determines an organization's success in achieving operational targets and sustaining business continuity. From the perspective of Human Capital Theory, employee health and fitness are viewed as organizational investments that contribute to long-term productivity and competitiveness. Employees with good physical and mental health tend to demonstrate higher levels of concentration, work endurance, and more stable performance than those with suboptimal health. In the context of modern organizations, efforts to improve performance are no longer solely focused on technical aspects and competencies but also on promotive and preventive strategies through the utilization of digital health technology. Recent studies have indicated that employee health is directly associated with increased productivity, reduced work fatigue, and improved decision-making quality within organizations ([Koopmans, Bernaards, Hildebrandt, de Vet, & van der Beek, 2014](#); [Pradhan & Jena, 2017](#)). Therefore, organizations must integrate health-oriented approaches into sustainable human resource management strategies.

The development of mobile health (m-Health) has encouraged organizations to integrate digital health applications into human resource management. Digital interventions have been proven to enhance users' physical activity and promote healthier lifestyles ([Howarth, Quesada, Silva, Judycki, & Mills, 2018](#)). In addition, the quality and usability of health applications influence employee satisfaction and continued usage ([Oppong, Hinson, Adeola, Muritala, & Kosiba, 2021](#)). Other studies suggest that m-Health applications can facilitate health behavior changes through mechanisms such as self-monitoring, feedback, and structured goal setting ([Zhao, Freeman, & Li, 2016](#)). In the workplace context, increased physical activity through digital applications is associated with improved productivity and reduced absenteeism ([Calderwood et al., 2021](#)). Furthermore, recent studies have found that the implementation of digital health technologies in organizations can simultaneously enhance work efficiency and employee well-being ([Howarth et al., 2018](#)). However, most previous studies have focused on individual health outcomes or specific medical conditions, with limited attention given to the psychological mechanisms that mediate the relationship between application usage and organizational performance.

However, empirical studies examining the implementation of digital health applications in the public sector, particularly in developing countries such as Indonesia, are limited. Most prior research

has focused on private organizations or healthcare settings, with less attention given to public institutions and state-owned enterprises. This indicates a contextual gap, as organizational culture, bureaucratic structures, and technology adoption patterns in the public sector may differ significantly from those in private organizations ([Dwivedi et al., 2021](#); [Khasanah & Amillahaq, 2025](#)).

In the context of exercise behavior, enthusiasm or motivation to engage in physical activity plays a crucial role in maintaining this consistency. Research indicates that regular exercise is positively associated with productivity ([Sjøgaard et al., 2016](#)). Intrinsic motivation in exercising has also been shown to improve employee performance through increased energy levels and psychological well-being ([Signorini, Scurati, D'Angelo, Rigon, & Invernizzi, 2022](#)). This is supported by Self-Determination Theory, which explains that intrinsic motivation develops when the needs for autonomy, competence, and relatedness are fulfilled ([Ryan & Deci, 2020](#)). Additionally, [Ntoumanis et al. \(2021\)](#) emphasized that motivation based on psychological needs significantly influences individuals' engagement in physical activity. Therefore, digital health applications have the potential to act as external stimuli that foster internal motivation for sustained exercise. In this regard, technology functions not only as a tool but also as a facilitator of psychological and behavioral change.

In addition, although previous studies have demonstrated the effectiveness of digital health interventions in improving physical activity and well-being, limited research has explicitly examined the underlying behavioral mechanisms that mediate the relationship between technology usage and employee performance. Understanding how exercise motivation functions as a psychological mediator is essential for explaining how digital health applications influence organizational outcomes. This perspective is supported by the Behavior Change Wheel, which emphasizes that behavior change interventions are effective when they target the psychological drivers of action ([Astuti & Alam, 2025](#); [Michie, Yardley, West, Patrick, & Greaves, 2017](#)).

PT PLN (Persero) UP3 Mojokerto has implemented the GERAK PRO application as part of its strategy to improve employee health through physical activity monitoring, fitness challenges, and a reward system. This implementation reflects the organization's efforts to adopt a technology-based approach to enhance human resource quality. However, a fundamental question arises as to whether the use of this application directly improves employee performance or whether performance improvement occurs through behavioral changes mediated by exercise motivation. Previous studies suggest that m-Health interventions have the potential to improve work outcomes ([Abejirinde, Ilozumba, Marchal, Zweekhorst, and Dieleman \(2018\)](#)), but have not specifically examined the mediating role of exercise behavior within the context of public organizations in Indonesia. Furthermore, studies on the relationship between digital health technologies and employee performance have yielded mixed results, indicating the need for more in-depth empirical investigation to understand the underlying mechanisms ([Mahmood, Kedia, Wyant, Ahn, & Bhuyan, 2019](#)).

Based on these research gaps, this study aims to address several key questions such as, whether the use of the GERAK PRO application affects employee performance, whether the application enhances exercise motivation, whether exercise motivation influences performance, and whether exercise motivation mediates the relationship between application usage and employee performance. This study aims to analyze the direct and indirect effects of GERAK PRO application usage on employee performance using the Structural Equation Modeling–Partial Least Squares (SEM-PLS) approach. By integrating the perspectives of Human Capital Theory and Self-Determination Theory, this study is expected to provide empirical contributions regarding the behavioral mechanisms that explain the effectiveness of digital health applications in improving organizational performance, particularly within state-owned enterprises. In addition, this study is expected to offer practical implications for organizations in designing technology-based policies that not only focus on physical health but also enhance employee motivation and performance sustainably, aligning with insights from Human Resource Analytics ([Marler & Boudreau, 2017](#)).

2. LITERATURE REVIEW

2.1 Digital Health Application

Advancements in information technology have transformed healthcare management through the utilization of mobile health (m-Health). Digital health interventions enable individuals to independently and continuously monitor their physical activity, lifestyle patterns, and fitness achievements ([Howarth et al., 2018](#)). Digital health applications not only function as activity-tracking tools but also serve as behavioural change instruments through feedback systems, gamification, and reward mechanisms. In an organizational context, the implementation of health applications becomes part of a strategy to enhance employee well-being, integrated with human resource management ([Perwitasari, Pahrudin, Wahyuni, Lermatan, & Sugiyanto, 2025](#)).

Along with technological development, mHealth applications increasingly adopt behavioural-based intervention approaches aimed at promoting sustainable lifestyle changes among their users. Research indicates that features such as self-monitoring, goal setting, and real-time feedback significantly influence the improvement of individuals' physical activity ([Zhao et al., 2016](#)). In addition, the adoption of digital health applications is influenced by perceived usefulness and perceived ease of use, as explained in the Technology Acceptance Model (TAM), where these factors serve as the primary determinants of technology adoption ([Venkatesh & Thong, 2016](#)).

The quality and usability of applications are crucial factors in determining successful adoption ([Oppong et al., 2021](#)). Applications with clear navigation systems and relevant features tend to enhance sustained engagement. Other studies have shown that digital service quality (e-service quality) also affects user satisfaction and long-term loyalty ([Ha, Huang, & Park, 2019](#)). Digital health interventions have been proven to positively impact productivity and reduce certain health risks ([Calderwood et al., 2021](#)). Furthermore, recent studies have revealed that the implementation of digital health technologies can improve employee well-being while simultaneously enhancing organizational performance ([Howarth et al., 2018](#)).

These findings indicate that the use of health applications has implications not only at the individual level but also for overall organizational performance. GERAK PRO, a digital health application implemented at PT PLN (Persero) UP3 Mojokerto, is designed to encourage employees' physical activity through step tracking, fitness challenges, and achievement-based reward systems. This implementation reflects a promotive and preventive approach aligned with the concept of human capital investment. From the perspective of Human Capital Theory, employee health is considered a strategic asset that contributes to long-term productivity. Therefore, the use of digital health applications has the potential to serve as an organizational instrument for improving performance through enhanced employee health. Furthermore, [Pradal-Cano et al. \(2020\)](#) emphasized that the consistent use of digital health applications can improve users' physical activity and quality of life, which ultimately contributes to increased work productivity.

2.2 Exercise Motivation

Advancements in information technology have transformed healthcare management through the utilization of mobile health (mHealth). Digital health interventions enable individuals to independently and continuously monitor their physical activity, lifestyle patterns, and fitness achievements ([Howarth et al., 2018](#)). Digital health applications not only function as activity-tracking tools but also serve as behavioral change instruments through feedback systems, gamification, and reward mechanisms. In an organizational context, the implementation of health applications becomes part of a strategy to enhance employee well-being, integrated with human resource management ([Lani, Hutajulu, & Mollet, 2025](#)).

Along with technological development, mHealth applications increasingly adopt behavioral-based intervention approaches aimed at promoting sustainable lifestyle changes among their users. Research indicates that features such as self-monitoring, goal setting, and real-time feedback significantly influence the improvement of individuals' physical activity ([Zhao et al., 2016](#)). Recent studies further confirm that digital health applications in workplace settings are effective in promoting physical activity and reducing sedentary behavior, which contributes to improved employee well-being and productivity ([McKay et al., 2018](#); [Stephenson, McDonough, Murphy, Nugent, & Mair, 2017](#)). In addition, the adoption of digital health applications is influenced by

perceived usefulness and perceived ease of use, as explained in the Technology Acceptance Model (TAM), where these factors serve as the primary determinants of technology adoption ([Venkatesh & Thong, 2016](#)).

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These findings indicate that the use of health applications has implications not only at the individual level but also for overall organizational performance. However, the effectiveness of such applications is not solely determined by their features but also by their ability to influence users' behavioral and motivational processes ([Michie et al., 2017](#)). GERAK PRO, a digital health application implemented at PT PLN (Persero) UP3 Mojokerto, is designed to encourage employees' physical activity through step tracking, fitness challenges, and achievement-based reward systems. This implementation reflects a promotive and preventive approach aligned with the concept of human capital investment. From the perspective of Human Capital Theory, employee health is considered a strategic asset that contributes to long-term productivity. Therefore, the use of digital health applications has the potential to serve as an organizational instrument for improving performance through enhanced employee health.

2.3 Employee Performance

Employee performance refers to the work outcomes achieved by individuals while carrying out their responsibilities in accordance with organizational expectations. Performance reflects the level of effectiveness and efficiency in achieving the work objectives. From the perspective of human capital theory, the quality of human resources, including health and individual capabilities, serves as a key determinant of organizational productivity. Employees with good physical and mental health tend to have higher work endurance and lower risk of fatigue. Employee performance is influenced not only by technical competencies but also by health, motivation, and work environment. Research indicates that employee health is significantly associated with productivity and work quality ([Pradhan & Jena, 2017](#)). Additionally, regular physical activity can improve fitness and reduce stress levels, thereby positively affecting work performance ([Sjøgaard et al., 2016](#)). [Koopmans et al. \(2014\)](#) also state that individual performance is influenced by physical and psychological conditions that support sustained work activities.

More importantly, motivation plays a central role in translating physical activity into a performance outcome. Strong intrinsic motivation to engage in exercise generates positive psychological states, such as increased energy, focus, and emotional stability, which are essential for optimal work performance ([Ryan & Deci, 2020](#)). Therefore, exercise motivation acts as an internal driver that connects physical health improvements to enhanced work outcomes. The use of digital health applications in organizations has the potential to influence employee performance both directly and indirectly through changes in exercise behavior. However, recent studies suggest that the indirect pathway through behavioral and motivational changes is often more significant than direct effects ([Abejirinde et al., 2018](#)). Applications such as GERAK PRO enhance exercise motivation through monitoring systems and reward mechanisms that foster a sense of accomplishment. Increased exercise motivation subsequently contributes to higher energy levels, focus, and productivity. Thus, exercise motivation functions as a mediating variable that explains the relationship between digital health application usage and employee performance.

2.4 Conceptual Framework

The conceptual framework illustrating the relationships among the variables is presented in the following figure:

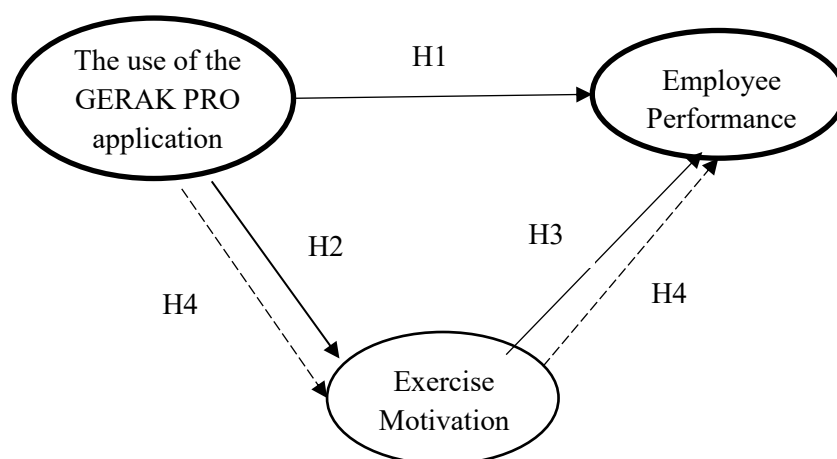


Figure 1. Conceptual framework

Figure 1 shows digital health applications are expected to influence employee performance through direct and indirect mechanisms. From the perspective of human capital theory, the use of health-related technology can enhance employee well-being, which, in turn, supports productivity and performance. However, the effectiveness of such applications is not solely determined by their usage but also by the extent to which they can encourage behavioral change. In this context, exercise motivation plays a crucial role as a psychological mechanism linking application usage to performance outcomes. Digital health applications are expected to enhance intrinsic motivation to engage in physical activity through features such as self-monitoring, feedback, and gamification. Increased exercise motivation leads to improved physical fitness, energy levels, and psychological well-being, which ultimately contribute to higher employee performance. Therefore, exercise motivation is positioned as a mediating variable that explains how and why digital health applications influence employee's performance.

This study aimed to analyze both the direct and indirect effects of digital health application usage on employee performance through the mediating role of exercise motivation. By applying the Structural Equation Modelling-Partial Least Squares (SEM-PLS) approach, this research is expected to provide empirical contributions to the development of digital health-based human resource management strategies, particularly in explaining the behavioral mechanisms underlying technology-driven performance improvement. Based on this conceptual reasoning, the hypotheses of this study are as follows:

- H₁*: The digital health application (GERAK PRO) positively affects employee performance
- H₂*: The digital health application (GERAK PRO) has a positive effect on exercise motivation
- H₃*: Exercise motivation positively affects employee performance
- H₄*: Exercise motivation mediates the effect of the digital health application (GERAK PRO) on employee's performance

3. METHODOLOGY

This study employed a quantitative approach with an explanatory research design. The quantitative approach is used to empirically test the relationships among variables through statistical analysis based on numerical data obtained from the respondents (Sugiyono, 2017). The explanatory design was chosen because this study aimed to explain the effect of the digital health application (GERAK PRO) on employee performance, with exercise motivation as a mediating variable. The study's objective is to examine the employees of PT PLN (Persero) UP3 Mojokerto who use the GERAK PRO application. The data used are primary data collected through the distribution of questionnaires to 144 respondents who met the research criteria. The research instrument used a five-point Likert scale to measure respondents' perceptions of the indicators of the research variables (Sugiyono, 2017).

The sampling technique used in this study was purposive sampling, where respondents were selected based on specific criteria relevant to the research objectives. The criteria included employees who had actively used the GERAK PRO application for at least three months, ensuring that respondents had sufficient experience using the application to provide accurate evaluations. The sample size of 144 respondents is considered adequate as it represents the majority of the population (150 employees) and meets the minimum requirements for SEM-PLS analysis, which is suitable for small-to medium-sized sample sizes (Sarstedt, Ringle, & Hair, 2021). Data analysis was conducted using the structural equation modeling-partial least squares (SEM-PLS) approach. The PLS method was selected because it can simultaneously analyze relationships among latent constructs and is suitable for predictive and complex research models (Ghozali, 2018). In addition, PLS-SEM is effective for studies with relatively small sample sizes and does not require strict normality assumptions (Sarstedt et al., 2021).

Model evaluation was carried out in two stages: the evaluation of the measurement model (outer model) and the structural model (inner model). Outer model evaluation includes tests of convergent validity, discriminant validity, and construct reliability. Inner model evaluation was conducted by assessing path coefficients, R-square values, and significance testing through the bootstrapping procedure (Sarstedt et al., 2021). Hypothesis testing is performed by comparing the t-statistic and p-value with the predetermined significance level.

To ensure the quality of the research instrument, validity and reliability tests were conducted before hypothesis testing. Convergent validity was assessed using outer loading values and Average Variance Extracted (AVE), where loading values above 0.70 and AVE above 0.50 indicate adequate validity. Discriminant validity was evaluated using the Heterotrait-Monotrait Ratio (HTMT) criterion, with values below 0.90 indicating that the constructs were distinct from one another. Reliability was measured using Cronbach's Alpha and Composite Reliability, with values above 0.70 indicating that the instrument was reliable and consistent in measuring the constructs (Sarstedt et al., 2021). All data analysis processes were conducted using SmartPLS software to test the structural model and the mediating relationships among variables.

4. RESULT AND DISCUSSION

4.1 Result

This study aimed to analyze the effect of a digital health application (GERAK PRO) on employee performance, with exercise motivation as a mediating variable. Data analysis was conducted using the structural equation modeling-partial least squares (SEM-PLS) approach. The analysis stages included descriptive statistics, evaluation of the measurement model (outer model), and evaluation of the structural model (inner model).

Table 1. Descriptive statistics of variables

Variables	Mean	Std. Deviation	Category
Digital Health Application	4.12	0.63	High
Exercise Motivation	4.05	0.68	High
Employee Performance	4.18	0.59	High

Based on Table 1, the digital health application variable has a mean value of 4.12, exercise motivation 4.05, and employee performance 4.18. All the mean values fell into the high category. This indicates that the respondents had positive perceptions of the use of the GERAK PRO application, as well as high levels of exercise motivation and employee performance. The relatively small standard deviation (below 1.00) indicates that the distribution of responses is fairly homogeneous and not widely dispersed.

Table 2. Measurement model evaluation (outer model)

Construct	Indicator	Loading
GERAK PRO	GP1	0.812
	GP2	0.845



	GP3	0.873
Exercise Motivation	SB1	0.804
	SB2	0.851
	SB3	0.826
Employee Performance	KP1	0.833
	KP2	0.868
	KP3	0.842

A measurement model evaluation was conducted to ensure that the instruments used were valid and reliable in measuring the research constructs. Table 2 shows that all indicators have outer loading values above 0.70, with the highest value of 0.873 for indicator GP3. According to [Sarstedt et al. \(2021\)](#), loading values greater than 0.70 indicate good convergent validity, and the indicators adequately represent their constructs.

Table 3. AVE and reliability

Variables	AVE	Composite Reliability	Cronbach's Alpha
GERAK PRO	0.708	0.879	0.824
Exercise Motivation	0.693	0.871	0.812
Employee Performance	0.724	0.887	0.836

Table 3 shows the AVE values for all variables were above 0.50, indicating that more than 50% of the variance of the indicators was explained by the latent constructs. The composite reliability and Cronbach's alpha values were all above 0.70, confirming that the constructs were reliable ([Sarstedt et al., 2021](#)).

Table 4. Discriminant validity (HTMT)

Variables	GERAK PRO	Exercise Motivation	Employee Performance
GERAK PRO	-	0.721	0.683
Exercise Motivation	-	-	0.746

Table 4 shows the highest HTMT value was 0.746, which was below the threshold of 0.90. This indicates that each construct has good discriminant validity and that there are no multicollinearity issues among the variables ([Sarstedt et al., 2021](#)).

Table 5. Coefficient of determination (R^2)

Endogenous Variables	R^2	Category
Exercise Motivation	0.462	Moderate
Employee Performance	0.578	Moderate

Table 6 shows an R^2 value of 0.462 indicates that 46.2% of the variance in Exercise Motivation is explained by GERAK PRO. Meanwhile, an R^2 value of 0.578 indicates that 57.8% of the variance in Employee Performance is explained by GERAK PRO and Exercise Motivation. According to [Sarstedt et al. \(2021\)](#), these values fall into the moderate category and indicate the good predictive capability of the model.

Table 6. Hypothesis testing results

Hypothesis	Relationship	Coefficient	t-Stat	p-Value	Decision
H_1	GERAK PRO → Employee Performance	0.289	2.874	0.004	Accepted
H_2	GERAK PRO → Exercise Motivation	0.680	8.912	0.000	Accepted
H_3	Exercise Motivation → Employee Performance	0.512	6.145	0.000	Accepted

H_4	GERAK PRO → Motivation → Performance	0.348	5.021	0.000	Accepted
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Based on Table 6, the first hypothesis (H_1) states that the digital health application (GERAK PRO) positively affects employee performance. The results show a coefficient of 0.289, with a t-statistic of 2.874 and a p-value of 0.004 (<0.05), indicating that H_1 is accepted. This coefficient reflects a moderate positive effect, suggesting that the use of GERAK PRO contributes to improving employee performance, although the magnitude of its direct influence is not significant. This finding implies that while digital health applications can support performance, their effectiveness may depend on other supporting factors, particularly behavioural aspects.

The second hypothesis (H_2) states that GERAK PRO positively affects exercise motivation. The results show a coefficient of 0.680, t-statistic of 8.912, and p-value of 0.000, indicating a highly significant effect and the strongest relationship in this model. The relatively large coefficient demonstrates a strong influence, indicating that the application plays a substantial role in increasing employees' motivation to engage in physical activity. This suggests that the features embedded in GERAK PRO, such as activity tracking, challenges, and rewards, are effective in stimulating behavioural engagement and encouraging consistent exercise.

The third hypothesis (H_3) states that exercise motivation positively affects employee performance. The coefficient of 0.512, with a t-statistic of 6.145 and p-value of 0.000, indicates a significant and strong positive relationship between the two variables. This finding implies that employees with higher exercise motivation tend to exhibit better performance, likely because of increased physical fitness, energy levels, and psychological well-being. In this context, exercise motivation serves as an important internal driver that enhances productivity and effectiveness.

The fourth hypothesis (H_4) states that exercise motivation mediates the effect of GERAK PRO on employee performance. The results show an indirect effect coefficient of 0.348, with a t-statistic of 5.021 and a p-value of 0.000 (<0.05), indicating that H_4 is accepted. The magnitude of this indirect effect was greater than that of the direct effect of GERAK PRO on performance, highlighting the importance of the mediating mechanism. Because the direct effect (H_1) remained significant after including the mediating variable, the type of mediation was partial mediation, in accordance with the criteria of Baron and Kenny (1986). This indicates that GERAK PRO improves employee performance both directly and indirectly, with the indirect pathway through exercise motivation playing a more substantial role in improving employee performance. These results emphasize that the effectiveness of digital health applications in enhancing performance is largely driven by their ability to foster behavioural change and intrinsic motivation among employees.

4.2 Discussion

The results of this study indicate that the GERAK PRO digital health application positively affects employee performance. This finding supports the Human Capital Theory perspective, which posits that health is a strategic organizational investment that enhances productivity. In the context of modern organizations, health is not only viewed as a physical condition but also encompasses psychological well-being, which contributes to overall work performance. Recent studies have shown that digital health interventions can improve productivity through increased employee fitness (Rossi et al., 2025). However, such interventions have also been proven to reduce work fatigue, which in turn enhances individual performance (Pronk, 2009).

Employees in good physical condition tend to have higher energy levels, better focus, and greater work endurance. This is reinforced by Cancelliere, Cassidy, Ammendolia, and Côté (2011), who found that increased physical activity is significantly associated with reduced absenteeism and improved employee performance. In addition, Proper and van Oostrom (2019) emphasized that workplace health programs based on physical activity contribute to sustained improvement in work performance. The significant effect of GERAK PRO on exercise motivation indicates that technology can serve as an external stimulus to strengthen intrinsic motivation. Self-Determination Theory explains that when the needs for competence, autonomy, and social relatedness are fulfilled, individuals demonstrate higher engagement in an activity (Ryan & Deci, 2020). In the context of

digital applications, features such as activity tracking, challenges, and reward systems provide a sense of achievement that encourages sustained exercise.

This finding is consistent with [Kao and Ruan \(2022\)](#) assertion that gamified health applications can enhance users' intrinsic motivation through reward mechanisms and real-time feedback. Furthermore, [Johnson et al. \(2016\)](#) found that the use of wearable fitness technology can increase the consistency of physical activity by up to 27% compared to conventional methods. This suggests that technology functions not only as a supporting tool but also as an agent of behavioral change. From a motivational perspective, the adoption of the GERAK PRO application can be explained by the Technology Acceptance Model (TAM). This model emphasizes that perceived usefulness and perceived ease of use are the main determinants of technology acceptance. [Venkatesh and Thong \(2016\)](#) showed that digital systems that are easy to use and relevant to user needs increase usage intensity and long-term engagement. In this context, the success of GERAK PRO in enhancing exercise motivation indicates that the application meets both usability and functional relevance requirements of employees.

The significant effect of exercise motivation on employee performance demonstrates that physical activity provides both psychological and physiological benefits to employees. Regular exercise can improve blood flow to the brain, enhance cognitive function, and stabilize emotions. These conditions enable employees to work effectively, creatively, and productively. The findings of this study are consistent with [Bernerth, Aguinis, and Taylor \(2021\)](#), who found that employees who exercise regularly exhibit higher productivity levels and lower stress compared to less physically active employees. Similarly, [Wiese, Kuykendall, and Tay \(2018\)](#) found that physical activity contributes to improved psychological well-being, which directly affects work performance.

Previous findings by [McCallum, Rooksby, and Gray \(2018\)](#) also support these results, showing that the use of physical activity-tracking applications increases exercise consistency and positively impacts work productivity. Thus, exercise motivation can be understood as a psychological factor that mediates the relationship between technological interventions and individual work results. The partial mediating role of exercise motivation indicates that behavioral change is a key mechanism for explaining the relationship between the use of digital health applications and employee performance. This suggests that technology does not directly improve performance but operates through the internalization of healthy behaviors consistently. In other words, the GERAK PRO application acts as an enabler, while changes in exercise behavior are the main drivers of performance improvement.

This finding aligns with [Michie, Van Stralen, and West \(2011\)](#), who emphasized that technology-based interventions are effective when they successfully influence behavior through specific psychological mechanisms. In addition, [Abejirinde et al. \(2018\)](#) demonstrated that mHealth interventions combined with lifestyle changes have a more significant impact on work outcomes than purely technical interventions. From a management perspective, these findings are relevant to the concept of Total Quality Management (TQM), which emphasizes continuous improvement within organizational systems. Enhancing human resource quality through health and well-being is part of a broader strategy to improve overall organizational performance. In this context, the use of digital health applications can be viewed as a managerial innovation that supports workforce quality improvement.

Furthermore, integrating technology into human resource management systems enhances organizational effectiveness through increased employee engagement. [Marler and Boudreau \(2017\)](#) found that HR digitalization improves organizational efficiency and employee engagement using data-driven approaches. This is supported by [Alieva and Powell \(2023\)](#), who stated that digital transformation in organizations yields optimal results when accompanied by changes in employees' internal behavior. From a practical standpoint, these findings have important implications for organizations, particularly state-owned enterprises such as PT PLN (Persero). The implementation of digital health applications such as GERAK PRO should be optimized not only as a monitoring tool but also as a means of fostering a healthy lifestyle culture in the workplace. Organizations must ensure that application features are designed to enhance intrinsic motivation, such as through reward systems, group challenges, and personalized feedback.

Additionally, organizations should integrate digital health programs with human resource management policies, such as performance appraisal systems, employee well-being programs, and engagement strategies. This approach will create a synergy between technology, individual behavior, and organizational systems, leading to more sustainable improvements in employee performance. Overall, the findings of this study reinforce the argument that the use of digital health applications not only impacts individual health improvement but also has strategic implications for the organization's performance. Exercise motivation is a key variable that mediates the relationship between technology and work performance. Therefore, the success of implementing health technology in organizations largely depends on its ability to encourage sustainable behavioral changes.

5. CONCLUSIONS

5.1 Conclusion

This study aimed to analyze the effect of the GERAK PRO digital health application on employee performance, with exercise motivation as a mediating variable. The SEM-PLS analysis results indicate that the GERAK PRO application has a positive and significant effect on employee performance. In addition, the application also has a positive effect on exercise motivation, which in turn enhances the employee's performance. Exercise motivation plays a role as a partial mediator in the relationship between digital health applications and employee performance. This indicates that performance improvement occurs not only directly through application usage but also indirectly through behavioral changes that enhance energy, focus, and readiness to work. Overall, these findings confirm that the implementation of digital health applications can serve as an effective strategy for improving human resource quality and organizational productivity.

From a practical perspective, organizations should integrate digital health applications into their human resource management strategies. Companies can implement structured wellness programs by incorporating applications such as GERAK PRO into daily work routines, for example, through step challenges, scheduled physical activity programs, and performance-based incentives. Additionally, organizations can align the use of health applications with HR policies by linking participation in physical activity programs to employee well-being initiatives, attendance management, or non-financial reward systems.

Furthermore, companies may develop supportive policies, such as providing flexible break times for physical activity, offering rewards for achieving fitness targets, and integrating application data into employee wellness monitoring systems. For instance, HR departments can design monthly fitness challenges with recognition or incentives for active participants, thereby fostering a culture of healthy behavior within the organization. Thus, digital health applications function not only as technological tools but also as strategic instruments for promoting behavioral change and sustaining employee performance.

5.2 Research Limitations

This study had several limitations. First, the research was conducted within a single organizational context, namely PT PLN (Persero) UP3 Mojokerto, which may limit the generalizability of the findings to other sectors and industries. Second, data were collected using a self-reported questionnaire, which may have introduced response bias. Third, this study only examined one mediating variable, namely exercise motivation, while other potential factors such as organizational culture, work environment, and leadership were not included in the model.

5.3 Suggestions and Directions for Future Research

Future studies should expand the research scope by involving multiple organizations or industries to enhance generalizability. In addition, further research could incorporate additional variables, such as employee engagement, organizational support, or digital literacy, to provide a more comprehensive understanding of the factors influencing employee performance. Researchers are also encouraged to apply longitudinal designs to observe behavioral changes over time and explore the long-term impact of digital health applications on employee performance. From a practical perspective, organizations should continuously develop digital health applications by

enhancing user experience, personalization features, and motivational systems to maximize their effectiveness in promoting physical activity.

AUTHOR CONTRIBUTIONS

RR contributed to the conceptualization of the study, research design, data collection, and statistical analyses. He also prepared the original manuscript draft. JAN validated the research instruments and data analysis results and provided technical guidance and overall supervision throughout the research process. He also contributed to the critical review and editing of this manuscript. YKA contributed by providing theoretical and practical insights, assisting in the validation of the research findings, and participating in the revision of the manuscript.

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