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Reducing Burnout among Police Personnel through Digital Competence, Stress Management, and Work Engagement

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Abstract: This study examines the effects of digital competence, stress management, and police officer engagement on burnout among personnel at the Pesisir Selatan Police Resort. The study used a quantitative explanatory design with a survey approach. Data were collected from 138 personnel selected from 211 active members and analyzed using multiple linear regression with IBM SPSS 26. The results show that digital competence has a negative and significant effect on burnout. Stress management also has a negative and significant effect on burnout. Police officer engagement similarly has a negative and significant effect on burnout. Simultaneously, the three variables significantly affect burnout, with an R Square value of 0.745. These findings indicate that stronger digital capability, better stress management, and healthier engagement contribute to lower burnout among police personnel. The study confirms that personal resources play an important role in helping police officers cope with demanding work conditions. The findings imply that police organizations need to strengthen digital skills, provide stress management support, and maintain healthy engagement to reduce burnout and sustain organizational effectiveness.

Keywords: Digital Competence, Stress Management, Police Officer Engagement, Burnout, Police Organization.

INTRODUCTION

Digital transformation has changed the way public sector organizations work, including police institutions. Administrative services, reporting systems, case documentation, and internal coordination increasingly rely on digital applications and data-based procedures. In the police context, technology is no longer an optional support instrument; it has become part of routine operational work. This transition improves speed and accuracy, yet it also introduces new job demands because personnel must adapt to digital systems while still dealing with time pressure, field risk, and service responsibility. When these demands are not balanced by adequate resources, the work environment becomes vulnerable to psychological strain and burnout (Aji et al., 2025).

Burnout is generally understood as a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that emerges when chronic job demands consume an employee's emotional and cognitive resources (Leiter & Maslach, 2021).

In high pressure occupations such as policing, burnout is particularly important because it may weaken judgment, reduce service quality, increase irritability, and lower organizational resilience. The preliminary survey conducted at Polres Pesisir Selatan also indicates that burnout is not a marginal issue. A total of 38% of personnel were identified in the moderate to high burnout category, while 46% still reported high engagement. This pattern suggests that the organization simultaneously faces pressure indicators and motivational potential, which makes it important to identify the personal resources that can reduce burnout without undermining engagement.

Table 1. Preliminary Survey of Burnout at Polres Pesisir Selatan

Aspect	Percentage	Interpretation
High emotional exhaustion	22%	Personnel experienced heavy emotional strain
Severe depersonalization	10%	Personnel showed cynical or apathetic attitudes toward duties
Reduced personal accomplishment	6%	Personnel felt less effective and less accomplished
Moderate-high burnout	38%	Aggregate indication across the three main burnout dimensions
High engagement	46%	Personnel still reported high involvement in their work

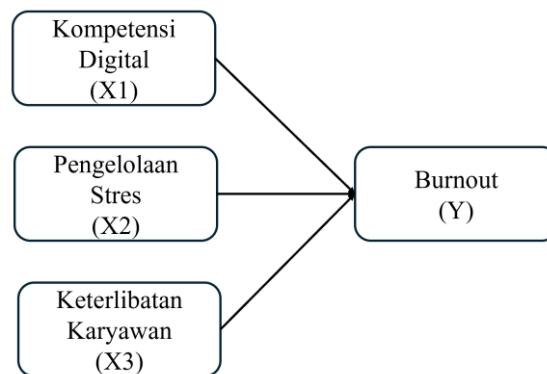
Source: Preliminary survey data of Polres Pesisir Selatan, 2024

From a theoretical perspective, this study draws on the Job Demands-Resources framework. The framework explains that burnout grows when high job demands are not offset by sufficient job resources or personal resources, whereas healthy motivation and engagement are more likely to emerge when employees possess strong resources for handling work pressures (Bakker & Demerouti, 2022). In police organizations, job demands are difficult to eliminate because personnel must operate under uncertainty, tight deadlines, public scrutiny, and institutional discipline. Therefore, a more realistic managerial approach is to strengthen strategic personal resources that help officers cope with those demands. This study focuses on three such resources: digital competence, stress management, and police officer engagement.

Digital competence refers to the ability to use digital tools, information, and communication technologies effectively, critically, safely, and responsibly in work settings. In a police organization that is becoming more digitalized, higher digital competence should reduce procedural errors, manual workload, and anxiety toward technology. Stress management refers to the ability to identify stressors and regulate responses to work pressure through adaptive coping, emotional control, and behavioral strategies (Cohen & Wills, 1985). Effective stress management is expected to protect officers from emotional depletion. Meanwhile, police officer engagement reflects the degree to which personnel feel energetic, dedicated, and psychologically connected to their work and organization. Healthy engagement typically supports persistence and meaning at work, and it tends to be negatively related to burnout when work conditions remain manageable (Bakker & Demerouti, 2022; Justina et al., 2022).

Previous studies have generally examined burnout through separate lenses such as role conflict, work stress, digitalization, and employee engagement. Khalid et al. (2020) showed that work pressure variables contribute to burnout in the banking sector. Hadjri et al. (2025) confirmed that stress and burnout affect employee outcomes in a telecommunications company. Sari & Hadi (2023) found that digital literacy and employee engagement are associated with burnout in technology companies, while Nurma Isnawati & Jati Waskito (2024) emphasized the role of digital competence and stress management in the digital era. However, empirical studies that simultaneously test digital competence, stress management, and police officer engagement as determinants of burnout in a local police organization remain limited. This gap is important because police work combines technological adaptation, psychological pressure, and organizational discipline in ways that differ from most civilian workplaces.

This study therefore aims to analyze whether digital competence, stress management, and police officer engagement affect burnout among personnel at Polres Pesisir Selatan, both partially and simultaneously. The novelty of this research lies in three aspects. First, it places burnout analysis in the context of a district-level police organization with high public service and operational demands. Second, it integrates three personal resource variables in one explanatory model. Third, it positions digital competence as an increasingly relevant resource in a digitalized police work environment. Based on this framework, the study asks whether each independent variable individually affects burnout and whether all three variables jointly explain burnout among police personnel.



Source: Developed by the authors, 2026

Figure 1. Conceptual Framework

METHOD

This study employed a quantitative explanatory design with a survey approach. The research was conducted at Polres Pesisir Selatan, and the population consisted of all 211 active personnel distributed across several functional units, including intelligence, investigation, narcotics, traffic, community guidance, and public service divisions. The minimum sample size was estimated using the Slovin formula with a 5% error tolerance, resulting in a minimum requirement of 138 respondents. However, because data collection in the police organizational setting depended on personnel accessibility and operational availability, respondents were selected through nonprobability accidental sampling. Accordingly, the sample should be understood as representing explanatory evidence drawn from accessible personnel within the organization rather than as a basis for full statistical generalization to the entire population. To reduce the risk of unit concentration, the researcher maintained respondent coverage across several functional divisions so that the data continued to reflect the broader organizational context of the police resort (Septiano & Sari, 2020; Sugiyono, 2021).

The research instrument was a structured questionnaire measured using a five point Likert scale, ranging from strongly disagree to strongly agree. The burnout variable was represented by 9 statements covering emotional exhaustion, depersonalization, and reduced personal accomplishment (Leiter & Maslach, 2021). Digital competence was measured with 18 statements reflecting access to technology, information management, communication, digital content creation, digital security, and problem solving with technology (European Commission, 2022). Stress management consisted of 24 statements representing coping ability, emotional regulation, work life balance, sleep quality, time management, and productivity related control (Cheng et al., 2023). Police officer engagement was measured using 27 statements describing job satisfaction, responsibility, organizational commitment, performance, communication, absenteeism tendency, turnover tendency, participation in initiatives, and pride in the organization (Bakker & Demerouti, 2022). These indicators were arranged based on established conceptual dimensions in the relevant literature and were adapted to the operational context of police work so that each item reflected the realities faced by personnel in Polres Pesisir Selatan.

Instrument quality was evaluated through validity and reliability testing. All questionnaire items met the validity requirement because their corrected item total correlations exceeded the critical value of 0.167. Reliability results were also very strong, with Cronbach’s Alpha values of 0.945 for burnout, 0.986 for digital competence, 0.987 for stress management, and 0.992 for police officer engagement. Before hypothesis testing, the data were examined through classical assumption tests, including normality, multicollinearity, and heteroscedasticity. After these assumptions were satisfied, the hypotheses were tested using multiple linear regression, partial significance testing through t tests, simultaneous significance testing through the F test, and the coefficient of determination using IBM SPSS version 26 (Septiano & Sari, 2021).

RESULTS AND DISCUSSION

The respondents were dominated by personnel aged 31-40 years (48%), male officers (82%), high school graduates (48%), and members with less than 10 years of service (42%). This composition suggests that most respondents were in the productive and operationally active stage of their careers. The structure is relevant because work intensity, adaptation to technology, and exposure to organizational pressure are often strongest in this segment of the police workforce.

Measurement quality was satisfactory. All questionnaire items were declared valid, with corrected item-total correlation values ranging from 0.733 to 0.841 for burnout, 0.868 to 0.910 for digital competence, 0.831 to 0.900 for stress management, and 0.881 to 0.920 for police officer engagement. Reliability was also very high across variables. In addition, the regression assumptions were met. Residuals were normally distributed with a Kolmogorov-Smirnov significance value of 0.200, multicollinearity was absent because tolerance values were above 0.10 and VIF values were close to 1, and the scatterplot indicated no heteroscedasticity pattern. These results support the use of multiple linear regression for hypothesis testing.

The descriptive analysis shows that burnout was at a moderate level, while the three independent variables were at an adequate level. Digital competence recorded the highest TCR among the independent variables, followed by stress management and police officer engagement. This pattern is important because it indicates that organizational resources already exist, but they are not yet equally strong across all dimensions. Engagement, in particular, still has room for improvement, which is relevant because engagement is expected to function as a buffer against burnout.

Table 2. Descriptive Statistics and Reliability of Research Variables

Variable	Items	Mean	TCR (%)	Cronbach’s Alpha	Interpretation
Burnout (Y)	9	3.43	68.55	0.945	Moderate
Digital competence (X1)	18	3.90	78.01	0.986	Adequate
Stress management (X2)	24	3.57	71.36	0.987	Adequate
Police officer engagement (X3)	27	3.34	66.79	0.992	Adequate

Source: Primary data processed with IBM SPSS 26, 2026.

Table 3. Multiple Linear Regression Results

Variable	B	t	Sig.	Decision
Constant	-2.891	-1.653	0.101	Not significant
Digital competence (X1)	-0.207	-12.386	0.000	Significant
Stress management (X2)	-0.113	-8.771	0.000	Significant
Police officer engagement (X3)	-0.125	-12.488	0.000	Significant

Source: Primary data processed with IBM SPSS 26, 2026.

Table 4. Simultaneous Testing and Model Adequacy

Test	Result	Meaning
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F test	130.514; Sig. 0.000	Digital competence, stress management, and engagement jointly affect burnout
R Square	0.745	74.5% of burnout variation is explained by the model
Tolerance / VIF	0.998-0.999 / 1.001-1.002	No multicollinearity
Normality	K-S Sig. 0.200	Residuals are normally distributed

Source: Primary data processed with IBM SPSS 26, 2026.

Digital Competence and Burnout

The regression results indicate that digital competence has a negative and significant effect on burnout, with a coefficient of -0.207, a t value of -12.386, and a significance level below 0.001. This finding suggests that higher levels of digital competence are associated with lower burnout among police personnel. In the context of Polres Pesisir Selatan, this result is particularly relevant because police work increasingly requires personnel to interact with digital reporting systems, administrative databases, case documentation platforms, and technology-based communication tools. Officers who possess stronger digital competence are more likely to perform these tasks efficiently, accurately, and with less psychological strain. As a result, they are less likely to experience frustration, cognitive overload, and work-related tension arising from technological demands. In this sense, digital competence functions as an important personal resource that helps officers adapt to digitalized work processes and reduces the risk of emotional exhaustion. This finding is consistent with Sutanto (2023) and (Kumpikaitė-Valiūnienė et al., 2021), who reported that inadequate digital skills may intensify stress and burnout in environments that increasingly depend on technology. For Polres Pesisir Selatan, the result implies that strengthening practical digital capability through task-based training and continuous technological support may become an important strategy for burnout prevention.

Stress Management and Burnout

The regression results show that stress management has a negative and significant effect on burnout, with a coefficient of -0.113, a t value of -8.771, and a significance level below 0.001. This finding indicates that better stress management is associated with lower burnout among police personnel. In the context of Polres Pesisir Selatan, this result is understandable because police work is characterized by operational pressure, emotional demands, public service responsibilities, and exposure to unpredictable situations. Personnel who are able to regulate their emotions, manage time effectively, maintain work life balance, and apply adaptive coping strategies are more likely to withstand repeated work demands without experiencing severe emotional exhaustion. In this sense, stress management serves as a personal protective mechanism that helps officers maintain psychological stability in a demanding work environment. This finding is in line with Aghniya et al. (2022), who emphasized that unmanaged work stress increases burnout, and with Akbar et al. (2025) as well as Kamarulzaman (2020), who found that effective stress management improves well-being and reduces work-related exhaustion. For Polres Pesisir Selatan, the implication is that burnout prevention should not rely solely on discipline and performance control, but should also include institutional support such as coping skills training, counseling access, supervisor sensitivity, and peer support mechanisms.

Police Officer Engagement and Burnout

The regression results further indicate that police officer engagement has a negative and significant effect on burnout, with a coefficient of -0.125, a t value of -12.488, and a significance level below 0.001. This means that higher engagement is associated with lower burnout among police personnel. In the context of Polres Pesisir Selatan, this finding suggests that officers who feel more connected to their duties, committed to organizational goals, and proud of their role in the institution are better able to sustain their energy and psychological resilience in carrying

out demanding assignments. Healthy engagement gives personnel a stronger sense of meaning, belonging, and motivation, which in turn helps counter emotional depletion and detachment from work. Thus, engagement does not merely contribute to performance, but also functions as an important psychological buffer against burnout. This finding supports the view of Bakker & Demerouti (2022), who argued that balanced engagement helps employees withstand work pressure, and with Justina (2022), who showed that properly managed engagement can strengthen well-being rather than lead to overextension. For Polres Pesisir Selatan, this result implies that organizational efforts to improve communication quality, recognition, participation in decision making, and pride in the institution may play a strategic role in reducing burnout and sustaining the long-term well-being of police personnel.

The Simultaneous Effect of Digital Competence, Stress Management, and Engagement

When tested simultaneously, digital competence, stress management, and police officer engagement were found to have a significant effect on burnout. The regression model produced an F value of 130.514 with a significance level below 0.001, while the R Square value reached 0.745. This indicates that 74.5% of the variation in burnout among personnel at Polres Pesisir Selatan can be explained jointly by the three independent variables, whereas the remaining 25.5% is influenced by other factors outside the model. This result shows that burnout in the police organizational context is not shaped by a single variable, but by the combined role of technological capability, psychological coping capacity, and motivational attachment to work. In the context of Polres Pesisir Selatan, where personnel face increasing digital demands, operational pressure, and the need to maintain commitment to organizational duties, these three factors function as important personal resources that help reduce vulnerability to burnout. The finding is consistent with the Job Demands–Resources perspective, which emphasizes that employees are better able to cope with demanding work conditions when they possess adequate personal and work-related resources (Bakker & Demerouti, 2022). The result also supports Sari and Hadi (2023), who highlighted the importance of digital capability, stress-related management, and engagement-related factors in maintaining healthier work conditions. For Polres Pesisir Selatan, this finding implies that burnout prevention should be approached in an integrated manner through digital upskilling, stress management support, and organizational practices that strengthen healthy engagement, rather than through isolated interventions.

Managerial Implications

The findings carry direct implications for human resource management in police organizations. First, digital competence should be strengthened through practical training that is matched with real work systems, not only through one-off technical socialization. Second, stress management support should be institutionalized through counseling access, supervisor sensitivity, peer support, and coping skill development. Third, engagement should be nurtured through recognition, communication, involvement, and fair workload arrangements. The strong R Square value also indicates that these three aspects are strategic leverage points for burnout prevention. At the same time, 25.5% of burnout remains explained by other factors such as workload, leadership style, work environment, and organizational support. Future studies can therefore extend the model to achieve broader explanatory power.

CONCLUSION

This study concludes that digital competence, stress management, and police officer engagement have negative and significant effects on burnout among personnel at Polres Pesisir Selatan. Simultaneously, the three variables form a strong explanatory model, with an R Square value of 0.745, indicating that they substantially explain burnout in the studied context. These findings confirm the relevance of the Job Demands–Resources perspective by showing that digital competence, stress management, and engagement function as personal resources that

help police personnel cope with demanding work conditions. In practical terms, the results suggest that burnout prevention in police organizations should be supported through digital capability development, stress management support, and organizational practices that strengthen healthy engagement. This study is limited by its focus on one police organization and its reliance on self-reported questionnaire data. Future research is therefore recommended to involve broader institutional settings and combine perceptual data with other forms of assessment in order to provide a more comprehensive understanding of burnout in police institutions.

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