eCo-Buss: Economics and Business

Vol.7, No.2, December 2024
Available online at: https://jurnal.kdi.or.id/index.php/eb

The Influence of Artificial Intelligence (AI) and Information Communications Technology (ICT) on Employee Mental Health With Technostress as Mediation in Generation Z Employees in West Kalimantan

Doni Bagaskara Caesar Laire[1)*], Hasanudin[2)], Karsim[3)], Maria Christiana Iman Kalis[4)], Ilzar Daud[5)]

[1)]b1021211041@student.untan.ac.id

[12345)]*Universitas Tanjungpura*
Jl. Prof. Dr. H. Hadari Nawawi / Jendral Ahmad Yani, Pontianak, Indonesia

Article history:

Received: 08 November 2024
Revised: 10 November 2024
Accepted: 08 December 2024
Available online: 10 December 2024

Keywords:

Artificial Intelligence;
Generation Z;
Information.and.Communication;
Mental Health;
Technostress;

ABSTRACT

This study investigates the influence of artificial intelligence (AI) and information system quality (ICT) on the mental health of Generation Z employees in West Kalimantan, with a specific focus on technostress as a mediating factor. The research uses an explanatory quantitative approach, employing a partial least squares-based structural equation model (PLS-SEM) via SmartPLS 4 software. The sample consists of 200 Generation Z employees, selected through purposive sampling based on age (18-27 years) and experience using AI and ICT for at least one year. The study reveals that AI positively and significantly affects employee mental health, while ICT has a negative and insignificant impact on employee mental health. Furthermore, technostress positively and significantly mediates the relationship between AI, ICT, and mental health. This research provides evidence that the effective use of AI and ICT, combined with proper technostress management, can enhance employee well-being and productivity, fostering innovation and efficiency in West Kalimantan's workforce, ultimately positioning the region to leverage Generation Z's digital skills to drive economic growth and attract investment in emerging tech sectors.

INTRODUCTION

Effective human resource management is critical to a firm's performance, especially when it comes to creating a positive work environment that motivates people to perform effectively (Karsim, 2023). Employees are vital not only for day-to-day operations but also for stimulating innovation and maintaining competitiveness. To remain competitive in the face of changing business conditions, organizations must constantly innovate by improving their business models and operations. The arrival of Generation Z into the workforce, a group adept at using today's technology to improve productivity and efficiency, further underscores the importance of

* Corresponding author

EISSN. 2622-4305
PISSN. 2622-4291
Published by Komunitas Dosen Indonesia.
DOI: 10.32877/eb.v7i2.1781

innovation. Generation Z's technological savvy opens up new potential for innovation, especially when it comes to combining information and communications technology (ICT) with artificial intelligence (Purmono, 2023; Karsim et al., 2024).

But the evidence shows that, despite the technology, the problem is real. Generation Z has mental health problems at work because of technology (Elkhatib, 2023). Mental health issues like anxiety, depression, and burnout are linked to the digital world this generation is used to (Sakdiyakorn et al., 2021). In the last 10 years, more and more young workers have been talking about mental health issues at work. This has made businesses think about how to keep their employees happy at work. Over the past decade, there has been a significant and undeniable rise in awareness of mental health challenges among young workers, which is great news that has prompted businesses to evaluate the role of job design and workplace conditions in maintaining employee well-being (Febiyana & Capdeville Chapuzet, 2022).

The evidence is clear that mental health issues are a bedrock for low productivity among employees, and the consequences of this high rate technology usage (Behuku et al., 2023). If there is one thing evidentially clear across the board, it is that more of this generation more and different mental health issues such as anxiety, depression and burnout are associated with how deep in the digital rabbit hole these emerging adults crawl everyday. Recent studies underscore examples like productivity loss due to high burn out levels or subpar quality of life. The Basic Health Research 2018 report clearly says that there are more than 19 million sufferers of psychiatric disorders (Maulana et al., 2019). These are major overarching themes in Generation Z as their work experiences come with ever more need of connectivity and technology dependency due to the nature of a modern way-of-work (Benítez-Márquez et al., 2022).

Technostress because of the speedy technological advancements in AI and ICT within the place of work has considerably contributed to place of business intellectual health issues like burnout, tension, decreased productiveness (Salah-Eddine et al., 2021; Fukumura et al., 2021). To be exact, existing studies (Boonjing & Chanvarasuth, 2017; Wei & Li, 2022) have confirmed the positive influence of technostress on negative mental health results that suggests this harm regarding worker well-being would likely persist among Generation Z staff given its higher dependence level and possible more detrimental effects from technostress compared to other tech-savvy groups (Sampaio, 2021; Yang et al., 2022).

This research aims to provide a comprehensive perspective on the HR implications of technostress by focusing on Generation Z employees in West Kalimantan, analyzing the interactive effects of AI and ICT on mental health by mediating technostress. The findings will offer valuable insights for HRM practices by illustrating effective approaches to fostering a supportive, resilient workplace amidst rapid technological change. The current study is comprised of the context-based understanding to provide conveniences for local businesses and policymakers at West Kalimantan, where Generation Z are predicted represent 27% population in age group by year 2023 (Badan Pusat Statistik Kalimantan Barat, 2023).

This study offers suggestions for companies to enhance the use of technology while reducing its impact on employee welfare concerns effectively. It plays a role in expanding the existing body of work on health in workplaces. In this way, this research contributes to the broader HRM literature on mental health and well-being, proposing strategies to build a productive and psychologically supportive workplace for Generation Z in the context of ongoing technological advancements.

RESEARCH METHOD

This research employs an approach to systematically explore phenomena by collecting and

analyzing data and then presenting the findings in a numerical format (Abuhamda et al., 2021). Between November 2023 and May 2024 our team conducted data collection using sampling through a survey targeting 200 participants who satisfied particular eligibility requirements. The study followed the recommendation of five respondents, per indicator and necessitated a total of 150 participants (30 indicators x 5) to assess the specified variables effectively (Hair et al., 2020). To guarantee the accuracy and credibility of the results obtained in the study the research team selected a group of 200 participants that surpassed the minimum requirements and enhanced the evaluations. The variables were assessed using a five-point Likert scale where '1' denoted disagree and '5' Signified strongly agree. Participants who could take part in the study were workers residing in West Kalimantan between the ages of 18 and 27 possessing a minimum of one year of familiarity, with AI and ICT technologies.

In this study, specifically 200 Generation Z employees in West Kalimantan were included to explore the impact of artificial intelligence (AI) and information system quality (ICT) on mental health and technostress. Limited Liability Company (LLC) respondents, for example, were many. Rudi Jaya Logistics and CV. Indarco represents a wide variety of professional experiences that are central to the study. However, a number of respondents decided to remain anonymous about the identity of their companies as their AI and ICT implementations are sensitive. Respondents are grouped by industry and role for analysis purposes: financial services (e.g., accountants, financial analysts), information technology (e.g., network administrators), manufacturing and logistics (e.g., production supervisors, inventory managers), retail, and e-commerce. This approach offers a broad cross-sectional view of technostress across different work environments while ensuring that proprietary information is protected.

The SmartPLS 4 software combines partial least squares structural equation modelling (PLS-SEM) and bootstrapping, and allows researchers to determine the strength of the route correlations. The multivariate approach provides an opportunity to examine the hypothesized pathways from the beginning with detailed scrutiny. It allows us to test both the measurement and structural models for strength and significance and, as recommended in the literature (Hair et al., 2021), the study reliability can be ensured.

Table 1. Variables Measurement

No	Variables	Statements	Number of indicators	Sources
1	Artificial Intelligence (AI)	Trust in AI	3	(Sun et al., 2022)
		Emotional Scale	3	
2	Information Communication Technologies (ICT)	Overload	2	(Nimrod, 2018)
		Invasion	2	
		Complexity	2	
		Privacy	2	
		ICT inclusion in organization	1	
3	Technostress	Techno-overload	2	(Costin et al., 2023)
		Techno-invasion	2	
		Techno-complexity	1	
		Techno-uncertainty	1	
		Techno-insecurity	1	
		Lack of technical support	1	
4	Mental Health	Work-life balance	2	(Susanto et al., 2022)
		Job satisfaction	1	
		Emotional exhaustion	1	
		Motivation to work	1	
		Job stress	2	

Source: Compiled by the authors, 2024

Hypotheses Development

Artificial Intelligence (AI), Employee Mental Health, and Technostress

Artificial intelligence (AI) is the branch of science responsible for developing systems that perform cognitive tasks typically linked to human intelligence. They do so by using recently developed techniques such as machine learning, deep learning and natural language processing (McCarthy, 2004). There are different types of AI, from the very narrow to the general, and even the super (Pohan et al., 2023). For instance, AI can assist employees to be more productive by automating routine tasks that allow them to focus on harder and more meaningful work. In turn, this could be also beneficial for workers' mental health, reducing stress and boosting job satisfaction at the same time (Fukumura et al., 2021; Wei & Li, 2022; Yang et al., 2022).

However, while AI provides various benefits, it also poses a number of obstacles. The increasing complexity of AI technology will undoubtedly cause technostress, in which personnel will struggle to adjust to AI-driven jobs (Salah-Eddine et al., 2021). This inevitably leads to an increased workload, feelings of being overwhelmed, and worry, all of which are detrimental to their mental health. Workers who are continuously forced to adapt to new AI systems would undoubtedly feel detached and frustrated. This may have a negative influence on their productivity and well-being. While AI has the potential to improve job productivity by reducing cognitive and physical demands, improper integration and the complexity it introduces can contribute to stress. As a result, a balanced approach to implementing AI in the workplace is essential to maximize its benefits while minimizing the risk of technostress (Kumara et al., 2023; Htahet & Johansson, 2023; Bhuchar & Kumar, 2023).

H1: Artificial intelligence (AI) has a significant positive effect on employee's mental health.

H4: Artificial intelligence (AI) has a significant positive effect on technostress.

H6: Artificial intelligence (AI) has a significant positive effect on employees' mental health through the mediation of technostress.

Information Communication Technologies (ICT), Employee Mental Health, and Technostress

Information and communication technologies (ICT) are defined as systems that manage information and enable communication between humans and electronic devices. ICT has progressed through four stages over time, from mechanical power to the digital era, which began in the 1960s. This advancement has brought about changes in the workplace. It has the potential to enhance productivity, automate operations, and improve global communication, which could lead to transformations in both economies and work processes (Korunka & Vartiainen, 2017; Dragano & Lunau, 2020). It seems fair to suggest that in modern companies, ICT undoubtedly raises productivity, improves employee communication, and increases organizational commitment. Furthermore, ICT flexibility, such as real-time data access and remote work options, has been shown to reduce stress, increase autonomy, and improve employee mental health (Febiyana & Capdeville Chapuzet, 2022; Berg-Beckhoff et al., 2017).

However, the growing ICT usage has created new difficulties, such as technostress, that must be handled. Employees face this form of stress as a direct result of their efforts to adapt to new technology, greater job complexity, and the continual desire to communicate. Technostress has the power to blur the lines between work and family life, encroach on personal time, and lead to burnout. This can have a detrimental impact on mental health and overall well-being (Bondanini et al., 2020). As dependence on ICT grows, particularly in high-demand professions,

several issues will undoubtedly arise, such as increased stress, weariness, and poor mental health (Kumara et al., 2023; Bhuchar & Kumar, 2023).

H2: Information and communication technologies (ICT) has a significant positive effect on employees' mental health.

H5: Information and communication technologies (ICT) has a significant positive effect on technostress.

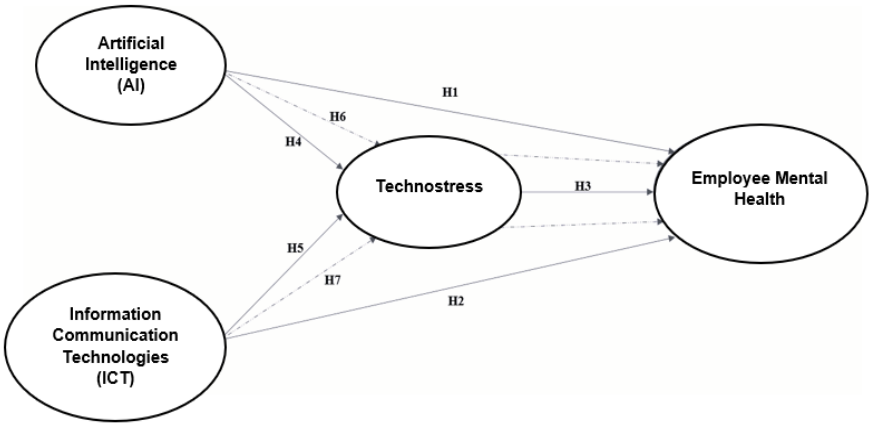
H7: Information and communication technologies (ICT) has a significant positive effect on employees' mental health through the mediation of technostress.

Technostress and Employee Mental Health

Mental health refers to an individual's inner state that influences their ability to think, regulate mood, and control behavior. Good mental health fosters inner peace, enjoyment of life, and appreciation of others, playing a crucial role in managing stress and maintaining overall well-being (Kementrian Kesehatan Republik Indonesia, 2022). It allows employees to have resilient, innovative, and adaptable traits essential for thriving in today's work environment. However, Generation Z is particularly at risk for mental health disorders such as anxiety and depression, largely due to excessive technology use, spending multiple hours online and relying heavily on smartphones for work, social interactions, and entertainment (Behuku et al., 2023; Enos, 2020; Benítez-Márquez et al., 2022).

One of the diseases of health problems due to technological advances that occur is called technostress. Technostress, first coined by Craig Brod in 1984, refers to the strain caused by an individual's inability to adapt to new technologies, especially information and communication technology (ICT) (Nimrod, 2018; Salah-Eddine et al., 2021). This form of stress has adverse effects on employees' mental health, including anxiety, burnout, and diminished job satisfaction. Factors such as information overload, constant connectivity, and the constant need to adapt to new systems exacerbate this condition, resulting in mental and physical health issues, decreased productivity, and decreased commitment to the organization (Noor-ul-Amin et al., 2022; Bhuchar & Kumar, 2023; Boonjing & Chanvarasuth, 2017; Borle et al., 2021).

H3: Technostress have a significant positive effect on employees' mental health



Source: Developed by the authors, 2024

Figure 1. Research Framework

RESULTS AND DISCUSSION

This study focuses on Generation Z employees in West Kalimantan. This Study selected 200 individuals using purposive sampling. Our team selected participants who met the following criteria: 1) employees working in West Kalimantan; 2) aged between 18 and 27 years; 3) having at least one year of experience using AI and ICT technologies; and 4) experiencing the effects of these technologies in the form of increased workload, difficulties in adaptation, or issues related to work-life balance (technostress). The data collected also provide details about respondent characteristics such as gender, age, residence, education level, and the duration of AI and ICT usage in their work. Descriptive statistics regarding the respondents are presented in the following table.

Table 2. Respondent Demographics

Category	Description	Frequency	%
Gender	Male	83	43
	Female	114	57
	Total	200	100
Age	18-21 Years	70	35
	22-24 Years	84	42
	25-27 Years	46	23
	Total	200	00
Domicile	Sambas Regency	9	4.5
	Mempawah	10	5
	Regency	5	2.5
	Sanggau Regency	13	6.5
	Ketapang Regency	14	7
	Sintang Regency	8	4
	Kapuas Hulu	13	6.5
	District	13	6.5
	Bengkayang	10	5
	Regency	14	7
	Landak District	8	4
	Sekadau Regency	13	6.5
	Melawi Regency	59	29.5
	North Kayong	11	5.5
	Regency	200	00
	Kubu Raya		
	Regency		
	Pontianak City		
	Singkawang City		
	Total		
Education	High School	42	21
	Vocational High	23	11.5
	School	31	15.5
	Diploma	94	47
	Bachelor	10	5
	Master	200	100
	Total		
Duration of	1-2 Years	109	54.5
AI and ICT	2-4 Years	70	35
use in work	>5 Years	21	10.5
	Total	200	100

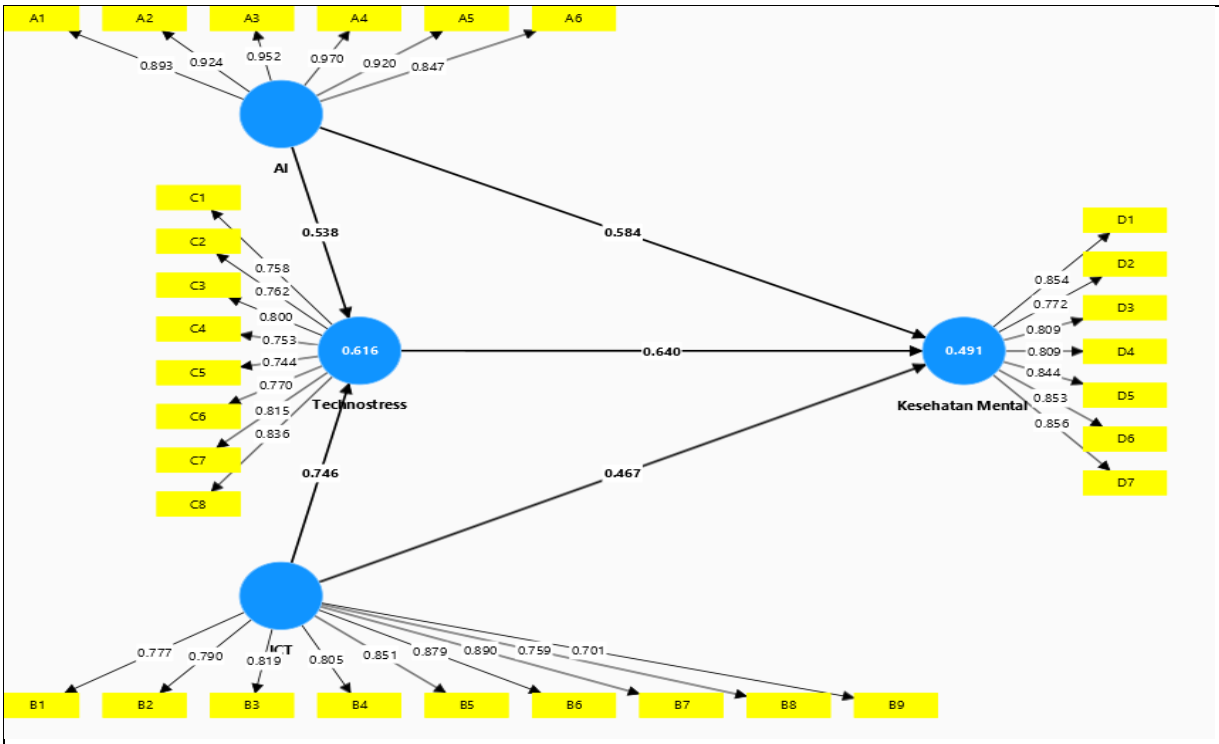
Source: Processed Data, 2024

This study employs PLS-SEM (Partial Least Squares) analysis, a multivariate data analysis technique that includes test for convergent validity, discriminant validity, and reliability validity. In the first test, there are criteria that must be met, such as outer loading, which has a minimum value of ≥ 0.7 to show that the indicator has a strong contribution to the measured construct and significance (Hair et al., 2020). Based on the following table 3, all indicators passed the outer test because the value of all indicators is above 0.7.

Table 3. Outer Loadings

	AI	ICT	Mental Health	Technostress
A1	0.893			
A2	0.924			
A3	0.952			
A4	0.970			
A5	0.920			
A6	0.847			
B1		0.777		
B2		0.790		
B3		0.819		
B4		0.805		
B5		0.851		
B6		0.879		
B7		0.890		
B8		0.759		
B9		0.701		
C1				0.758
C2				0.762
C3				0.800
C4				0.753
C5				0.744
C6				0.770
C7				0.815
C8				0.836
D1			0.854	
D2			0.772	
D3			0.809	
D4			0.809	
D5			0.844	
D6			0.853	
D7			0.856	

Source: Processed Data, 2024



Source: Processed Data, 2024

Figure 2. Research Algorithm Outer Model

The discriminant validity value test of the second test has been met since the correlation value of the indicator with its construct is larger than the correlation with other constructs. In other words, the value is larger than the threshold 0.5. Based on the Fornell-Larcker method, these values are called discriminant validity values (Hair et al., 2021). For each variable, the Fornell-Larcker discriminant validity values are as follows: AI (0.919), ICT (0.81), mental health (0.829), and technostress (0.78). In addition, the convergent validity value that is the average variance extracted (AVE) also had a value larger than 0.5: AI (0.844), ICT (0.656), mental health (0.687), and technostress (0.609).

Table 4. Discriminant Validity and Average Variance Extracted (AVE)

	AI	ICT	Mental Health	Technostress	Average Variance Extracted (AVE)
AI	0.919				0.844
ICT	0.424	0.81			0.656
Mental Health	0.584	0.467	0.829		0.687
Technostress	0.538	0.746	0.64	0.78	0.609

Source: Processed Data, 2024

Reliability validity test is the next step in assessing data reliability. Statistical measurements of consistency of indicators in a variable is measured by composite reliability. When a variable's value is greater than 0.7, that variable is deemed to have sufficient composite reliability. Additionally, Cronbach's alpha should be larger than 0.6 because the results are trustworthy (Hair et al., 2020). Thus, it was found that the composite reliability values for all variables were more than 0.9 which is much higher than the minimal criterion of 0.7, and hence the results are trustworthy and genuine.

Table 5. Composite Reliability and Cronbach's alpha

Variable	Composite Reliability (rho_a)	Cronbach's alpha
AI	0.97	0.963
ICT	0.939	0.934
Mental Health	0.926	0.924
Technostress	0.911	0.908

Source: Processed Data (2024)

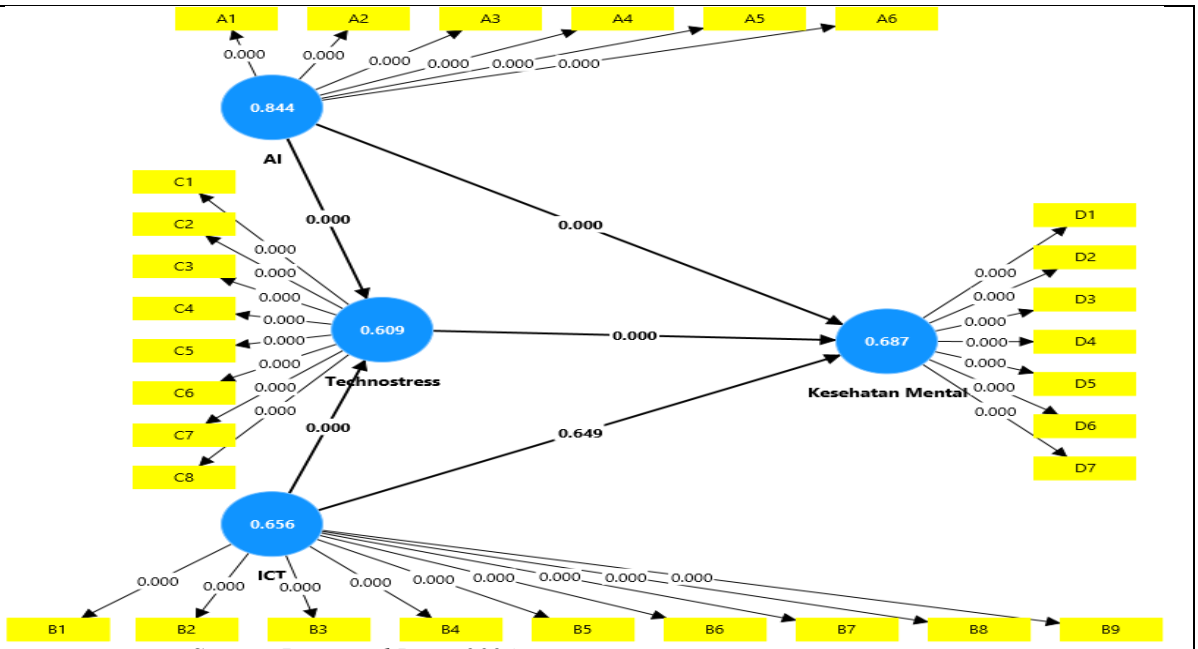
SEM-PLS analysis using the bootstrapping method, a multivariate data analysis method, is also carried out in this study by using the coefficient of determination (R^2) and path coefficient test. Coefficient of determination test is measured using R Square, or the research model is valid if the independent variables are able to explain how much of the dependent variable. This coefficient is between 0 and 1. The closer the result is to 1, the higher the level of the superior model and the stronger the influence of exogenous variables on endogenous ones. R^2 values of 0.75, 0.50, and 0.25 unequivocally indicate strong, medium and weak influence (Hair et al., 2020).

This study shows how exogenous variables AI and ICT have a great influence on technostress, accounting for 61.6% of its variation. In addition, the mental health variable is 49.1% influenced by AI, ICT, and technostress which means that AI, ICT, and technostress have a moderate impact on this variable.

Table 6. R Square Value

Endogenous Variable	R-square
Mental Health	0.491
Technostress	0.616

Source: Processed Data, 2024



Source: Processed Data, 2024

Figure 3. Research Algorithm Inner Model

This study also uses a route coefficient test using bootstrapping techniques to thoroughly evaluate the correlations between the variables in the structural equation modeling framework. The bootstrapping approach is critical for establishing the importance of the hypothesized correlations, demonstrating whether the impacts are positive or negative. In this analysis, a two-sided test is applied, where a t-value of 1.96 at a 5% significance level indicates significance, and all correlations exceeding this threshold are illustrated in the results figure, along with a p-value < 0.05 (α = 5) (Hair et al., 2021).

According to Tables 7 and 8, all hypotheses proposed by the researcher were significant, with a p-value below 0.05, as shown in Table 11 below. The significance testing in the bootstrapping method for SEM-PLS analysis relies on the t-statistic and p-value; specifically, a hypothesis is deemed significant if its t-statistic is ≥ 1.96 and its p-value is < 0.05 (Hair et al., 2020). As a result, the correlations between the variables in this study model are verified since both criteria are met, indicating a true effect between the studied variables. Notably, six hypotheses were found to be significantly accepted, with all indicating positive connections, while one was determined to be negligible and negative.

Table 7. Results of Coefficient Paths test (Direct Effect)

Direct Effect	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Description
AI => Mental Health	0.338	0.34	0.076	4.466	0	Positive and Significant
ICT => Mental Health	-0.043	-0.046	0.092	0.463	0.649	Negative and Not Significant
Technostress => Mental Health	0.49	0.494	0.086	5.703	0	Positive and Significant
AI =>	0.27	0.268	0.051	5.273	0	Positive and

Technostress ICT => Technostress	0.632	0.635	0.04	15.613	0	Significant Positive and Significant

Source: Processed Data, 2024

Table 8. Results of Coefficient Paths test (Indirect Effect)

Indirect Effect	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Description
AI => Technostress => Mental Health	0.132	0.132	0.034	3.862	0	Positive and Significant
ICT => Technostress => Mental Health	0.31	0.314	0.061	5.05	0	Positive and Significant

Source: Processed Data, 2024

The findings show that Hypothesis H1 is supported, indicating a significant connection between artificial intelligence (AI) and employee mental health, with a t-statistic of 4.466 (which exceeds 1.96) and a p-value of 0.000 (which is below 0.05). aligns with the findings from previous research (Fukumura et al., 2021; Wei & Li, 2022; Bogavac et al., 2023) it mention that in daily practice, AI helps improve production efficiency, product quality, and meet company needs. AI also plays an important role in maintaining the mental health of West Kalimantan's generation Z employees by improving workplace productivity through technologies such as Windows Cortana, Google Assistant, and management platforms such as Monday.com. In addition, AI is used in automation and robotization systems to replace humans in dangerous jobs, reducing the risk of injury. AI is also used in robotic process automation (RPA) and CAD software such as Autodesk Fusion 360.

The findings indicate that we did not support Hypothesis H2, as we found no significant relationship between information and communication technologies (ICT) and employee mental health. Our analysis shows a t-statistic of 0.463 (which is less than 1.96) and a p-value of 0.643 (which exceeds 0.05). Previous research reveals that this generation sees digital technology more as a tool to optimize workflow than a factor that affects their mental health (Seemiller & Grace, 2017; Bulut, 2021). Generation Z grew up in a world surrounded by the internet, and has learned to deal with technology on its own, without any help from previous generations. Researchers point out that the impact of ICT on the mental health of children because they have been exposed to technology at a young age than was the case in previous generations (Roberta et al., 2021; Ljungquist & Lund, 2023). They are more adaptable to challenges that may come up from the use of ICT in the workplace because their independence in the use of technology.

The results indicate the validity of Hypothesis H3, and there is a strong association between technostress and employee mental health. The t-statistic of 5.703 and the p-value of 0.000 are clearly below the threshold of 1.96 and below the 0.05 significance level, indicating that this is a statistically significant result. Previous studies (Bhuchar & Kumar, 2023; Boonjing & Chanvarasuth, 2017; Borle et al., 2021) suggest that technostress is harmful to many aspects of the employees' life including behavior, self-perception and work life balance. As a result, it causes heightened psychobiological stress which has an impact on mental health and job productivity with the generation Z population in West Kalimantan.

The results support Hypothesis H4 in that a significant relationship is found between artificial intelligence (AI) and technostress, with a t statistic greater than 1.96 and p value less than 0.05 (5.273); thus, Hypothesis H4 is accepted. Previous research (Salah-Eddine et al., 2021; Htahet & Johansson, 2023; Sun et al., 2022) shows that excessive interaction with AI technology may cause negative psychological effects on west Kalimantan's generation Z employees, such as technical burnout and performance dissatisfaction. In addition, organizations may incur losses due to lack of resources which leads to the rejection of AI services and huge financial losses.

The results unambiguously and reliably confirm Hypothesis H5, in which information and communication technologies (ICT) and technostress are significantly correlated. This confirms the hypothesis as the t-statistic is 15.613 (more than 1.96) and the p-value is 0.000 (less than 0.05). Definitively, earlier research (Bondanini et al., 2020; Nimrod, 2018; Noor-ul-Amin et al., 2022) proves that ICT induced stress is caused by workers having to cope with technological changes and cognitive and social changes in their use of ICTs. It is clear that the technology innovations such as mobile phone, email, and instant messaging increase work overload, position ambiguity, and job instability for the employees of generation Z in West Kalimantan.

Our findings support Hypothesis H6, and show a significant relationship between artificial intelligence (AI) and employee mental health through technostress as a mediator, with a t-statistic of 3.862 (greater than 1.96), and a p-value of 0.000 (less than 0.05). Previous studies (Kumara et al., 2023; Htahet & Johansson, 2023; Bhuchar & Kumar, 2023) indicate that using AI excessively may lead to technostress (a mediator between AI and mental health), as a result of increased work complexity. West Kalimantan's Generation Z employees can experience mental health problems due to an overuse of AI that may lead to stress and social isolation.

The results verify hypothesis H7, meaning that there is a substantial relationship between information and communication technology (ICT) on employee mental health and technostress as the mediator as the t statistic of 5.05 (exceeding 1.96) and p value of 0.000 (less than 0.05). Excessive use of ICT at workplace can increase workload or task complexity, which creates technostress especially among generation Z employees, a factor negatively affecting their mental health that has been found in previous research (Kumara et al., 2023; Bondanini et al., 2020; Bhuchar & Kumar, 2023).

CONCLUSION

This study aimed to understand the potential of artificial intelligence (AI) and a system quality of information and communication technology (ICT) in affecting the mental health of Generation Z employees in West Kalimantan. We identified a potential mediating variable of technostress. It was to find out how these technologies are affecting the well-being of the employees, both negatively and positively.

The findings indicate that AI might have a positive mental health effect on Generation Z workers. This fits with previous research that has shown that AI can improve workplace efficiency and job satisfaction by means of tools like virtual assistants and project management tools. It was, however, demonstrated that using excessive AI could result in technostress and that this could be beneficial for mental health. Nevertheless, no significant impact on mental health can be found for ICT quality. For example, Generation Z employees may view technology as a

means of optimizing tasks rather than a factor contributing to their wellbeing, so this may be why. Additionally, there is clear evidence that technostress is a key means by which the impact of AI and ICT affects mental health. It is clear that the complexity brought about through technology use is a potential stressor that is detrimental to the mental health of employees and yet, currently there is no further research in this area.

RECOMMENDATIONS

Based on these findings, companies might want to take extra care with how they are using technology. While AI can increase productivity there is the chance that overuse will lead to higher stress since effort increases. Companies might think that they should develop training programs to help staff adjust to new technology and make the work environment better.

The other factors that may influence mental health and reduce technostress will also be examined including social support from colleague and management. It would also be useful to examine the subtle long-term effects of technology on mental health and see how treatments could be created to help employees deal with stress created by modern technology in the workplace.

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