



The Relationship Between General Attitudes towards AI and Work Engagement Among Generation Z

Vania Benita Bernice¹, Sri Tiatri²✉, Younita Rasimin³, Deryl Winston⁴, Robert Brian⁵

^{1,2,3,4,5}Faculty of Psychology, Universitas Tarumanegara, Indonesia

Article Info

Abstract

Keywords:
(Artificial
Intelligence,
General Attitudes
towards AI,
Generation Z,
Work Engagement)

Artificial Intelligence (AI) has experienced rapid growth, particularly among Generation Z in the workplace. AI offers numerous benefits across various domains, especially in enhancing productivity and work efficiency. However, the advancement of this technology has also generated concerns, such as job insecurity resulting from fears of being replaced by technology. Individuals' attitudes toward AI influence how they accept and utilize AI technologies. General attitudes toward AI may be either positive or negative, depending on how individuals perceive the development of AI technology. These differences in attitudes may influence individuals' work experiences, including their level of engagement at work. Work engagement is a positive psychological state characterized by vigor, dedication, and absorption in work activities. This study aimed to examine the relationship between general attitudes toward AI and work engagement among Generation Z. A quantitative approach with a correlational design was employed. The sample consisted of 101 Generation Z employees who were actively working and had experience using AI, selected through purposive sampling. Data were collected using the General Attitudes toward Artificial Intelligence Scale (GAAIS) and the Utrecht Work Engagement Scale (UWES). Pearson correlation analysis was conducted to examine the relationship between the variables. The results revealed no significant relationship between general attitudes toward AI and work engagement among Generation Z ($r = .056$, $p = .575$, $p > .05$). The relationship between the two variables was categorized as very weak. These findings indicate that general attitudes toward AI do not necessarily influence individuals' levels of work engagement. The findings further imply that efforts to enhance work engagement should consider factors beyond general attitudes toward AI, including aspects related to employees' work experiences and work environment.

✉ Alamat korespondensi:
Fakultas Psikologi Universitas Tarumanegara
Jl. Letjen S. Parman, Grogol Petamburan, DKI
Jakarta, 11440
E-mail: sri.tiatri@untar.ac.id

INTRODUCTION

Technological advancements such as Artificial Intelligence (AI) have grown exponentially in recent years. Among academics, Rosli et al. (2026) note that the majority of Gen Z students (60.5%) have been using AI for more than a year. Upon entering the professional world, Gen Z adopts these digital habits in their daily work. Global data from Deloitte (2025) shows that 57% of Gen Z workers have been actively using Generative AI (GenAI) a subset of AI in their daily work. As many as 30% of Gen Z workers utilize AI throughout their workday.

Gen Z workers' use of AI to support their professional tasks is concentrated in several job areas, including data analysis (39%), content creation (37%), design-related roles (34%), and project management (32%). The adoption of AI in these roles has had a significant positive impact on task efficiency, with 78% of Gen Z workers reporting an improvement in work quality and 77% noting that it has helped them reduce their work hours (Deloitte, 2025). This phenomenon demonstrates how functional reliance on AI has shaped new work patterns for Gen Z.

The extent of AI usage can also be assessed by looking at the percentage of Generative AI usage, which is a subset of AI. As of March 2024, there were at least hundreds of GenAI forums available to the public. Data shows that the forty GenAI forums with the highest traffic reached three billion visits per month. The GenAI ecosystem is dominated by flexible and functional chatbots, which account for 95% of the total forty GenAI forums, such as ChatGPT. ChatGPT, which has approximately 500 million monthly users, accounts for 82.5% of all AI traffic. This figure is equivalent to 12.5% of the total global workforce (Liu & Wang, 2026).

AI is a technological system designed to mimic human cognitive abilities, ranging from language processing and visual pattern recognition to data-driven decision-making (Wang & Siau, 2019). AI can provide various forms of support, including cognitive, structural/strategic, and emotional/psychosocial support. Cognitive support is provided by reducing the complexity of information. Furthermore, structural support is provided through work organization and planning. Finally, emotional support is provided by boosting self-efficacy, which transforms uncertainty into actionable steps (Çögenli, 2026). These capabilities make AI one of the greatest innovations of the digital transformation era. Therefore, AI can improve productivity and work quality with varying impacts (Brynjolfsson et al., 2023; Noy & Zhang, 2023).

The impact of AI in the professional environment is diverse and complex. It presents unique challenges for individuals by raising concerns about instability and anxiety regarding technological advancements. One of the greatest anxieties arising from the development of AI is job insecurity stemming from fears of being replaced by technology (Cramarenco et al., 2023). According to the "Deloitte Global 2025 Gen Z and Millennial Survey," which involved 23,482 participants from 44 countries, approximately 40% of Gen Z AI users experience ongoing stress and anxiety, with 35% of that stemming from their jobs (Deloitte, 2025). Thus, AI can be beneficial in improving individual well-being by helping to meet needs in various aspects. However, AI also presents challenges that can have a negative impact in the workplace.

Given this, general attitudes toward AI can determine the level of acceptance and use of the technology in everyday life (Zhang & Dafoe, 2019). Based on research by Schepman & Rodway (2020), two main factors were identified that represent attitudes toward AI: positive attitudes toward AI and negative attitudes toward AI. Positive attitudes toward AI are characterized by the benefits AI provides to society and individuals, while negative attitudes toward AI reflect individuals' concerns about AI. This situation indicates a gap in the adoption of AI technology.

An individual's attitude toward AI plays a role in shaping how they utilize the technology in a work context. Individuals with a positive attitude toward AI will view it as a technology that is beneficial and supportive of human life, such as by increasing productivity, efficiency, and ease in completing tasks (Davenport & Ronanki, 2018). Conversely, individuals with negative attitudes toward AI will harbor concerns about the development of AI technology, such as job displacement,

security risks, and ethical issues surrounding its use (Brougham & Haar, 2018). These differences have the potential to influence individuals' work experiences, including their level of work engagement. According to Schaufeli & Bakker (2004), work engagement is conceptualized as an optimal affective and cognitive state, manifested through three essential dimensions: vigor, dedication, and absorption. Specifically, the vigor dimension represents an employee's mental resilience and energetic vitality in executing their tasks. The dimension of dedication represents pride, enthusiasm, and the emotional significance attached to one's profession. Meanwhile, absorption marks a cognitive phase in which an individual becomes fully immersed and focuses their full attention on the dynamics of their work. Individuals with high levels of work engagement tend to be more productive, committed, and capable of adapting to work demands.

In demographic literature, individuals born between 1993 and 2005 are specifically categorized as Generation Z (Turner, 2015). Gen Z is also known as the I-generation, the net generation, and digital natives. Technological advancements have shaped the characteristics of Gen Z, a generation whose formative years have been marked by the digital revolution, shifting social values, and uncertain economic dynamics (Chan & Lee, 2023). These conditions have made Gen Z the generation most familiar with technological developments, including the use of AI in both daily life and the workplace.

General attitudes toward AI and work engagement are highly relevant in the context of the modern workplace. However, research particularly in Indonesia on these two variables remains limited and tends to be examined separately. Meanwhile, Gen Z is a generation with a high level of exposure to technology, especially AI. Therefore, research on the relationship between general attitudes toward AI and work engagement among Gen Z is crucial to understanding the role that attitudes toward AI play in shaping levels of work engagement. This study was designed to empirically map Gen Z's affective and cognitive responses to AI in the workplace, while also providing organizations with guidance to ensure that the adoption of AI technology acts as a catalyst rather than a barrier to work engagement.

In response to the urgency of the phenomenon described above, this study aims to examine the relational dynamics between general attitudes toward AI and work engagement among Gen Z. This study seeks to expand the conceptual understanding of how Gen Z's general attitudes toward AI impact work engagement. Furthermore, this study offers a new foundation that has the potential to serve as a strategic reference for future research agendas in the field of industrial and organizational psychology.

METHOD

This study employs a quantitative approach with a correlational design. A quantitative approach was used because this study aims to examine the relationship between two variables: general attitudes toward AI and work engagement among Gen Z. A correlational design was chosen because the study does not apply specific treatments to participants but focuses on whether or not there is a significant relationship between the two variables (Fitzgerald et al., 2004). Thus, the correlational design provides an empirical picture that does not focus on testing the effectiveness of the two variables but rather examines the direction and strength of the relationship between them. This study is cross-sectional in nature because data were collected at a single point in time through the distribution of an online questionnaire. Through this design, the researcher can observe the relationship between the two variables based on the participants' conditions at the time of data collection. A cross-sectional design is used to examine associations at a single point in time; therefore, it is not intended to demonstrate a direct cause-and-effect relationship (Maier et al., 2023).

General attitudes toward AI refer to an individual's overall perspective on AI technology, comprising both positive and negative dimensions. This variable can be measured using the General Attitudes toward AI Scale developed by Schepman and Rodway (2020). This scale consists of a positive dimension (positive attitudes toward AI) and a negative dimension (negative attitudes toward AI). On

this measurement tool, a high score indicates an increasingly positive attitude toward the use of AI, while a low score indicates a negative attitude toward AI. Meanwhile, work engagement refers to employees' alignment with their job roles. According to this perspective, individuals express themselves physically, cognitively, and emotionally in the performance of their work (Kahn, 1990). This variable can be measured using the Utrecht Work Engagement Scale-9 (UWES-9), which consists of the dimensions of vigor, dedication, and absorption. On this scale, higher scores indicate a higher level of work engagement in an individual, while lower scores indicate low work engagement.

The subjects of this study were Gen Z individuals born between 1993 and 2005 who are currently employed, are familiar with or have used AI in their daily lives or at work, and were willing to voluntarily complete the research questionnaire. Based on these criteria, this study recruited 101 eligible participants who took part in the data collection. The sampling technique used was non-probability sampling with a purposive sampling method. This technique was chosen based on the need to obtain data from individuals with specific qualifications relevant to the study's focus, rather than based on random representation of the population. The sample size for this study was determined based on the number of participants who met the criteria and were successfully recruited during the data collection process (Creswell, 2009).

This study employed a natural setting because data collection was conducted under the participants' natural conditions without any manipulation by the researchers. Data collection was conducted online using Google Forms. This platform was chosen because it is more practical and facilitates the distribution of the questionnaire to participants who met the study criteria. The research instruments were compiled into a single questionnaire consisting of two sections: the General Attitudes toward Artificial Intelligence Scale (GAAIS) and the Utrecht Work Engagement Scale (UWES) Short Version (Schaufeli et al., 2006).

The General Attitudes toward Artificial Intelligence Scale (GAAIS) is used to measure general attitudes toward AI (Schepman & Rodway, 2020). The GAAIS uses a Likert scale with five response options: 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree. With a total of 101 research participants, the degree of freedom used was ($N - 2 = 99$). Based on the significance level of 0.05 used in the study, the minimum validity threshold (table r) for the GAAIS measure was determined to be (table $r = .195$). Based on the test results, it was found that the 20 items of the GAAIS measure had varying calculated r values. The GAAIS validity coefficient was lowest ($r = .343$) for item 13 and highest ($r = .665$) for item 6. Since all items have calculated r values greater than the table r value ($r > .195$), it can be concluded that the entire GAAIS measurement instrument is absolutely valid and accurately measures the variable "general attitudes toward AI." A summary of the GAAIS validity test results is presented in Table 1 below.

Table 1. GAAIS Validity Test

Item	Pearson Correlation	Description
GAAIS 1	.450	Valid
GAAIS 2	.486	Valid
GAAIS 3	.538	Valid
GAAIS 4	.437	Valid
GAAIS 5	.533	Valid
GAAIS 6	.665	Valid
GAAIS 7	.632	Valid
GAAIS 8	.408	Valid
GAAIS 9	.412	Valid
GAAIS 10	.459	Valid
GAAIS 11	.591	Valid

GAAIS 12	.599	Valid
GAAIS 13	.343	Valid
GAAIS 14	.349	Valid
GAAIS 15	.485	Valid
GAAIS 16	.474	Valid
GAAIS 17	.463	Valid
GAAIS 18	.422	Valid
GAAIS 19	.411	Valid
GAAIS 20	.401	Valid

In the reliability testing of the General Attitudes toward Artificial Intelligence Scale (GAAIS), Cronbach's alpha coefficient was used; a measurement instrument can be considered reliable and consistent if the coefficient value obtained is greater than the required minimum threshold ($\alpha \geq .70$). Based on the results of the reliability analysis, the reliability coefficient was ($\alpha = .814$), indicating that the measurement instrument has good reliability. Table 2 below summarizes the reliability coefficients obtained for the GAAIS measurement instrument.

Table 2. GAAIS Reliability

Cronbach's Alpha	N	Description
.814	20	Reliable

The Utrecht Work Engagement Scale (UWES) Short Version was developed by Schaufeli et al. (2006). The short version of the UWES consists of 9 items covering the three main dimensions of work engagement: vigor, dedication, and absorption (Schaufeli et al., 2002). The short version of the UWES uses a Likert scale with seven response options: 0 = Never; 1 = Almost Never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Very Often; and 6 = Always. With a total of 101 participants ($df = 99$) and a significance level of 0.05, the table r value has a standard reference of ($r_{table} = .195$). Based on the validity test results for the 9 UWES items, the range of calculated r values ranged from the lowest ($r = .475$) for UWES item 8 to the highest ($r = .794$) for UWES item 6. Since the calculated r values for all items were found to be significantly greater than the table r value ($r > .195$), it can be concluded that the UWES measurement instrument used in this study is valid. The statistical results of the validity test for the UWES measurement instrument are summarized in Table 3 below.

Table 3. UWES Validity

Item	Pearson Correlation	Description
UWES 1	.671	Valid
UWES 2	.700	Valid
UWES 3	.767	Valid
UWES 4	.786	Valid
UWES 5	.719	Valid
UWES 6	.794	Valid
UWES 7	.771	Valid
UWES 8	.475	Valid
UWES 9	.655	Valid

The reliability test for the Utrecht Work Engagement Scale (UWES) Short Version used the same Cronbach's Alpha formula as the test for the GAAIS. Based on the data analysis, a Cronbach's

Alpha value of ($\alpha = .869$) was obtained. Since this reliability value exceeds the required minimum threshold of ($\alpha \geq .70$), all items in the UWES were deemed highly reliable. The results of the reliability test for the UWES are presented in Table 4 below.

Table 4. UWES Reliability

Cronbach's Alpha	N	Description
.869	9	Reliable

The GAAIS measurement instrument used in this study was adapted into Indonesian by Sirait et al. (2024). Based on the adaptation results, the instrument demonstrated fairly good construct validity; however, the results of the Confirmatory Factor Analysis (CFA) did not meet the goodness-of-fit criteria (CFI = .760; RMSEA = .951; TLI = .730; SRMR = .087). These values do not meet the goodness-of-fit criteria recommended by Hu & Bentler (1995), namely (RMSEA < 0.05 and CFI, NFI, and GFI > 0.95).

Table 5. GAAIS Fit Measures

CFI	TLI	SRMR	RMSEA	RMSEA 90% CI	
				Lower	Upper
0.760	0.730	0.0867	0.0951	0.0795	0.110

The UWES-9 measurement instrument used in this study was adapted into Indonesian by Kristiana et al. (2018). Based on the adaptation results, the instrument demonstrated fairly good construct validity, with Confirmatory Factor Analysis (CFA) results meeting the goodness-of-fit criteria (CFI = .710; RMSEA = .232; TLI = .614; SRMR = .117). These values do not yet meet the goodness-of-fit criteria recommended by Hu & Bentler (1995), namely RMSEA < 0.05 and CFI, NFI, and GFI > 0.95.

Table 6. UWES Fit Measures

CFI	TLI	SRMR	RMSEA	RMSEA 90% CI	
				Lower	Upper
0.710	0.614	0.117	0.232	0.200	0.265

It can therefore be concluded that the factor structures of the two measurement instruments the GAAIS and the UWES-9 do not yet show optimal fit with the model. Nevertheless, the instruments still demonstrate adequate psychometric quality based on the results of the item validity and reliability tests. All items have item-total correlation coefficients that meet the established criteria, as well as Cronbach's alpha reliability values that fall within the "good" category. Therefore, both measurement instruments are deemed suitable for use in measuring the variables in this study, while still taking into account the limitations of the construct validity results obtained.

The research was conducted in stages to ensure a more focused research process. Each stage was systematically organized, from topic selection to the preparation of the final report. First, the topic was determined and the problem identified. This was done by examining the development of AI in the workplace and its relationship with Gen Z. Next, a literature review was conducted to gather

relevant references on general attitudes toward AI, work engagement, and the characteristics of Gen Z. The research instrument was developed by creating an online questionnaire containing an informed consent form, participant data sections, a section on general attitudes toward AI, and a section on work engagement. Data collection was then carried out by distributing the questionnaire to participants who met the study criteria. After the data was collected, it was processed and analyzed using statistical techniques. Finally, the journal article was systematically prepared in accordance with the applicable format.

The research data were analyzed using SPSS 27. The data analysis was conducted in several stages. First, a descriptive analysis was performed to characterize the participants, primarily based on age. Next, validity and reliability tests were conducted to ensure the quality of the measurement instruments. Following that, assumption tests were performed, consisting of two stages: a normality test using the One-Sample Kolmogorov-Smirnov method and a linearity test using the ANOVA Test for Linearity. After the results of the assumption tests indicated normality, the study proceeded to hypothesis testing, specifically a correlation test between variables using the Pearson Correlation method.

RESULT AND DISCUSSION

The primary focus of this study was on young workers; therefore, data were collected directly from 101 participants who are part of Gen Z. Based on Table 5, demographic data on the participants by age were obtained. The age distribution shows that 22 year olds constitute the largest group at 23.8%, followed by 21 year olds (14.9%) and 20-year-olds (10.9%). Smaller proportions were observed in the 24-year-old group (8 participants, 7.9%), the 23 year old group (7 participants, 6.9%), and the 26 year old group, which had the lowest representation with 6 participants (5.9%). Meanwhile, for the 28-30 year old age group, the proportion of participants was the same, at 5 participants (5%). An equal distribution was also shown by the 25 year old and 33 year old age groups, with each group contributing 4 participants (4%). There were only 3 participants aged 31 (3%). Finally, the smallest number of respondents in this study were those aged 27 and 32, with 2 participants each (2%). A more comprehensive overview of the participants' age distribution is presented in Table 5 below.

Table 5. Demographic Data of Participants by Age (N = 101)

Age	N	%
20 Years old	11	10.90
21 Years old	54	14.90
22 Years old	24	23.80
23 Years old	7	6.90
24 Years old	8	7.90
25 Years old	4	4.00
26 Years old	6	5.90
27 Years old	2	2.00
28 Years old	5	5.00
29 Years old	5	5.00
30 Years old	5	5.00
31 Years old	3	3.00
32 Years old	2	2.00
33 Years old	4	4.00

It was found that the majority of respondents in this study were female, totaling 60 people (59.4%), while male respondents numbered 41 (40.6%). These results indicate that female participants outnumbered male participants in this study. The complete data are presented in Table 6 below.

Table 6. Demographic Data of Participants by Gender

Gender	N	%
Male	41	40.60
Female	60	59.40

It was found that the majority of respondents in this study were employed individuals, totaling 69 people (68.3%), followed by 32 students (31.7%) who work while attending college. The complete data are presented in Table 7 below.

Table 7. Demographic Data of Participants by Status

Status	N	%
Working	69	68.30
Students who work while studying	32	31.70

Based on the descriptive analysis, it was found that the variable “general attitudes toward AI” had a mean value of ($\bar{x} = 66.76$), while the variable “work engagement” had a mean value of ($\bar{x} = 36.07$). Based on these values, in general, the mean score per item for the “general attitudes toward AI” variable was above the scale’s mean ($\bar{x} = 3.63$), indicating that participants tended to have generally positive attitudes toward AI (the scale used a 1–5 Likert scale). Furthermore, the mean score per item for the work engagement variable is above the instrument’s mean ($\bar{x} = 4.01$), indicating that participants tend to have a high level of work engagement (the instrument uses a 0-6 Likert scale). Detailed information regarding the inter-variable dimensions can be found in Table 8 below.

Table 8. Description of Variable Dimensions

Variable	Min	Max	Mean	Std. Deviation
<i>General Attitudes towards AI</i>	39.00	88.00	66.76	10.02
<i>Work Engagement</i>	12.00	54.00	36.07	8.08

The data description for the “general attitudes toward AI” variable which consists of the “positive attitudes toward AI” and “negative attitudes toward AI” dimensions is presented in Table 9. Based on the descriptive analysis, it was found that the “positive attitudes toward AI” dimension had a mean value of ($\bar{x} = .740$). This indicator confirms that the majority of participants have a positive perception of AI, viewing it as a crucial digital asset for facilitating their work. Meanwhile, the “negative attitudes toward AI” dimension has a mean value of ($\bar{x} = .590$). However, the data also highlights a minority group that responded pessimistically, viewing AI as a source of concern. Nevertheless, overall, participants in this study tended to have a more positive attitude toward the use of AI. A more comprehensive overview of the descriptive data results for the “general attitudes toward AI” variable dimension is summarized in Table 9 below.

Table 9. Description of the Dimensions of the “General Attitudes toward AI” Variable

Variable	Min	Max	Mean	Std. Deviation
<i>Positive Attitudes towards AI</i>	25.00	58.00	.740	7.43
<i>Negative Attitudes towards AI</i>	9.00	37.00	.590	5.90

Based on the descriptive analysis of the work engagement variable dimensions, it was found that the dedication dimension had the highest mean value compared to the other dimensions, namely ($\bar{x} = 13.04$). This indicates that participants tend to have a high level of enthusiasm and pride in their work. Meanwhile, the vigor dimension ranked second highest with a mean value of ($\bar{x} = 11.37$). This indicates that participants tend to have a fairly high level of energy and enthusiasm at work. Finally, the absorption dimension had the lowest mean value of ($\bar{x} = 11.00$). However, this value is still considered good, indicating that participants are quite capable of concentrating and becoming fully immersed in their work. More detailed information regarding the distribution of the descriptive test scores for the dimensions of work engagement can be found in Table 10 below.

Table 10. Description of the Dimensions of the Work Engagement Variable

Dimensi	Min	Max	Mean	Std. Deviation
<i>Vigor</i>	3.00	18.00	11.37	3.07
<i>Dedication</i>	2.00	18.00	13.04	3.23
<i>Absorption</i>	6.00	15.00	11.00	2.06

The one-sample Kolmogorov-Smirnov test was chosen to test the assumption of normality in this study. It was found that the “general attitudes toward AI” variable had a significance value of ($P = .072$), while the “work engagement” variable had a significance value of ($P = .200$). Since each variable recorded a significance value above the 0.05 threshold ($p > 0.05$), it can be concluded that the data as a whole meets the assumption of a normal distribution. Table 11 presents a more comprehensive breakdown of the data.

Table 11. Normality Test Result

N	Total_GAAIS	Total_UWES		
	101	101		
Normal Parameters ^{a,b}	Mean	66.7624	36.0693	
	Std. Deviation	10.02013	8.07868	
Most Extreme Differences	Absolute	.085	.060	
	Positive	.055	.046	
	Negative	-.085	-.060	
Test Statistic	.085	.060		
Asymp. Sig. (2-tailed) ^c	.072	.200 ^e		
Monte Carlo Sig. (2-tailed) ^d	Sig.	.071	.498	
	99% Confidence Interval	Lower Bound	.064	.485
		Upper Bound	.077	.511

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 2000000.
- e. This is a lower bound of the true significance.

Based on the results of the ANOVA Test for Linearity, a deviation from linearity value of ($F = 1.56$), ($p = .061$) was obtained when testing the variables “general attitudes toward AI” and “work engagement.” Since the significance level was greater than ($p > 0.05$), this indicates that the assumption of a linear relationship between the two variables is met. Therefore, both variables meet the requirements for Pearson’s correlation test. A more detailed explanation to supplement the interpretation of the data can be found in Table 12 below.

Table 12. Linearity Test Result

	Sum of Squares	df	Mean Square	F	Sig.		
Total_UWES *	Between Groups	(Combined)	3084.878	37	83.375	1.526	.069
Total_GAAIS		Linearity	20.770	1	20.770	.380	.540
		Deviation from Linearity	3064.108	36	85.114	1.558	.061
	Within Groups		3441.637	63	54.629		
	Total		6526.515	100			

Based on the results of the Pearson correlation analysis between the variables “general attitudes toward AI” and “work engagement,” it was found that there is no relationship between these two variables among Gen Z. This conclusion is based on the correlation coefficient ($r = .056$) and the significance value ($p = .575 > 0.05$). Thus, it can be concluded that Gen Z’s attitudes toward AI do not influence their level of work engagement. A more comprehensive breakdown of the statistical analysis results is summarized in Table 13 regarding the hypothesis test results.

Table 13. Hypothesis Test Results

	GAAIS_Total	UWES_Total	
GAAIS_Total	Pearson Correlation	1	.056
	Sig. (2-tailed)		.575
	N	101	101
UWES_Total	Pearson Correlation	.056	1
	Sig. (2-tailed)	.575	
	N	101	101

These findings confirm that the relationship between the variables in this study falls into the “very weak” category. The absence of a direct correlation between “general attitudes toward AI” and “work engagement” is one of the main conclusions of this study. Individuals who have positive or negative attitudes toward AI are not necessarily more or less engaged in their work. This finding suggests that fluctuations in work engagement are likely driven by external factors beyond the scope of general attitudes toward AI.

Empirically, general attitudes toward AI do not serve as a primary predictor of work engagement. The dynamics of work engagement can be assumed to depend more on external factors,

such as work experience and an individual's perception of quality of life. Support for these findings can also be found in the study by Liu & Wang (2026), which shows that the use of AI does not directly increase work engagement but rather does so through quality of work life as a mediating variable. Work engagement is more influenced by the quality of work experience and the fulfillment of individual psychological needs than by attitudes toward AI (Wu et al., 2025).

According to the literature by Mazzetti et al. (2023), the level of an individual's work engagement depends heavily on personal resources, job resources, social support, and a supportive work environment. This is particularly true of personal resources that is, the internal resources within an individual that enable them to remain optimistic, motivated, and positive when facing any job demands. According to the study by Mazzetti et al. (2023), these aspects have the strongest relationship with work engagement compared to other factors. Additionally, an increase in an individual's work engagement can also stem from social and organizational factors such as support from supervisors and coworkers, performance feedback, a healthy work environment, and so on.

On the other hand, a study by Kong et al. (2021) indicates a positive relationship between the level of AI awareness and job burnout. The results show that individuals' awareness of AI developments does not always lead to a positive work experience. Thus, the more individuals are aware of AI developments, the more likely they are to experience psychological stress, job-related anxiety, and work-related fatigue. Consequently, general attitudes toward AI do not directly increase work engagement.

This can also be explained by the job demands-resources theory (JD-R) (Bakker & Demerouti, 2008), which states that an individual's level of work engagement is determined more by the extent to which the resources available in the job are able to offset the pressures and demands faced. Consequently, general attitudes toward AI have not yet served as a primary resource capable of enhancing Gen Z's vigor, absorption, and dedication to their work.

The majority of participants were between the ages of 20 and 33, falling into the Generation Z category. The lack of a significant relationship between the two variables may also be influenced by the characteristics of Gen Z, who have grown up alongside the development of digital technology. As digital natives, Gen Z employees have an inherent affinity for technology that has been established from an early age. Therefore, technologies such as AI are likely to be viewed simply as a normal part of daily life among Gen Z and do not exert a significant psychological influence on work engagement (Benítez-Márquez et al., 2022). Research by Benítez-Márquez et al. (2022) also notes that Gen Z is more motivated by meaningful work, opportunities for skill development, and a positive work environment than by the presence of technology.

Overall, the findings of this study regarding the relationship between general attitudes toward AI and work engagement among Gen Z do not show a significant correlation. These results indicate that work engagement is a variable influenced by more complex psychological conditions and can be affected by various factors. Some of the key factors that contribute to work engagement in the workplace include an individual's psychological state, organizational support, interpersonal relationships, the work environment, and meaningful work. Beyond these factors, the characteristics of Gen Z as digital natives who have lived with technology from an early age mean that technologies such as AI no longer have a significant impact on work engagement. Therefore, general attitudes toward AI are not a primary factor in work engagement levels among Gen Z.

As an academic study, this research is limited by several considerations that must be noted. First, this implies that the conclusions drawn are specific to the relevant group of participants and do not necessarily apply universally to the entire Gen Z population in Indonesia. Second, the self-report method is prone to subjectivity and social bias, which may influence the research findings. Third, the participants came from various companies across diverse industries. Consequently, differences in experiences and perspectives on AI technology may potentially influence the research results. Fourth, a limitation identified in this study concerns the results of the construct validity testing using Confirmatory Factor Analysis (CFA) on the General Attitudes toward Artificial Intelligence Scale

(GAAIS) and the Utrecht Work Engagement Scale-9 (UWES-9), which indicate that the models do not yet meet the recommended goodness-of-fit criteria.

Despite its limitations, this study still offers important implications. The findings expand the literature on the relationship between general attitudes toward AI and work engagement, although the relationship found is classified as weak. These findings suggest that general attitudes toward AI are not the primary factor determining an individual's work engagement, particularly in the workplace. Rather, other factors—such as an individual's experience and work environment—play a role. It is also recommended to conduct construct validity testing on the GAAIS and UWES-9 measurement instruments with a larger sample size and to conduct further evaluation of the factor structures of both instruments through more in-depth psychometric analysis so that the quality of variable measurement can be improved.

CONCLUSION

The findings indicate that there is no correlation between general attitudes toward AI and work engagement among Gen Z. Having grown up interacting intensively with technology from an early age, this generation views the existence of AI simply as a normal part of their daily routine. Consequently, the use of AI does not cause significant psychological distortion or impact that would profoundly affect the level of work engagement among working Gen Z members. Elements of the job demands-resources theory such as work-life balance, support from supervisors, a healthy work environment, and constructive feedback have been shown to play a far more essential role in meeting individuals' psychological needs than the mere use of AI. Therefore, it can be concluded that general attitudes toward AI do not yet function as a primary factor capable of influencing work engagement.

For Generation Z, it is suggested that the research findings can motivate individuals to adapt to advancements in AI technology, particularly regarding its application in the workplace. Individuals should no longer view AI as a threat, but rather as a tool that can support and facilitate their work processes. For companies, it is recommended to provide training and support regarding the use of AI technology in the workplace. However, companies should not focus solely on the implications of AI use in supporting work engagement but should also consider other factors such as a healthy work environment, organizational support, and so on. For future researchers, it is recommended to involve participants with more diverse backgrounds in terms of age, job type, industry sector, and so on. Additionally, to minimize subjectivity and social bias, future researchers can employ a wider variety of research methods. Future studies may also consider incorporating other variables that are associated with work engagement. In this way, a broader understanding of the factors influencing work engagement among Generation Z can be explored.

REFERENCES

- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209–223. <https://doi.org/10.1108/13620430810870476>
- Benítez-Márquez, M. D., Sánchez-Teba, E. M., Bermúdez-González, G., & Núñez-Rydman, E. S. (2022). Generation Z Within the Workforce and in the Workplace: A Bibliometric Analysis. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.736820>
- Brougham, D., & Haar, J. (2018). Smart Technology, Artificial Intelligence, Robotics, and Algorithms (STARA): Employees' perceptions of our future workplace. *Journal of Management & Organization*, 24(2), 239–257. <https://doi.org/10.1017/jmo.2016.55>
- Brynjolfsson, E., Li, D., & Raymond, L. (2023). Generative AI at Work. *Communications of the ACM*, 68(1), 52–60. <http://arxiv.org/abs/2304.11771>
- Chan, C. K. Y., & Lee, K. K. W. (2023). The AI generation gap: Are Gen Z students more interested in adopting generative AI such as ChatGPT in teaching and learning than their Gen X and millennial generation teachers? *Smart Learning Environments*, 10(1), 60. <https://doi.org/10.1186/s40561-023-00269-3>
- Çöğenli, M. Z. (2026). Generative AI as a conditional job resource under job demands in academic knowledge work: directed content analysis using the job demands–resources framework. *Frontiers in Artificial Intelligence*, 9. <https://doi.org/10.3389/frai.2026.1774525>
- Cramarenco, R. E., Burcă-Voicu, M. I., & Dabija, D. C. (2023). The impact of artificial intelligence (AI) on employees' skills and well-being in global labor markets: A systematic review. *Oeconomia Copernicana*, 14(3), 731–767. <https://doi.org/10.24136/oc.2023.022>
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (3rd Edition). SAGE Publications, Inc.
- Davenport, T. H., & Ronanki, R. (2018). Artificial Intelligence for the Real World. *Harvard Business Review*.
- Deloitte. (2025). 2025 Gen Z and Millennial Survey. In *Deloitte Global*.
- Fitzgerald, S. M., Rumrill, Jr., P. D., & Schenker, J. D. (2004). Correlational designs in rehabilitation research. *Journal of Vocational Rehabilitation*, 20(2), 143–150. <https://doi.org/10.3233/JVR-2004-00237>
- Hu, L., & Bentler, P. M. (1995). Evaluating Model Fit. In *Structural Equation Modeling: Concepts, Issues, and Applications* (pp. 77–99). Sage Publications.
- Kahn, W. A. (1990). PSYCHOLOGICAL CONDITIONS OF PERSONAL ENGAGEMENT AND DISENGAGEMENT AT WORK. *Academy of Management Journal*, 33(4), 692–724. <https://doi.org/10.2307/256287>
- Kong, H., Yuan, Y., Baruch, Y., Bu, N., Jiang, X., & Wang, K. (2021). Influences of artificial intelligence (AI) awareness on career competency and job burnout. *International Journal of Contemporary Hospitality Management*, 33(2), 717–734. <https://doi.org/10.1108/IJCHM-07-2020-0789>
- Kristiana, I. F., Fajrianti, & Purwono, U. (2018). Analisis Rasch dalam Utrecht Work Engagement Scale-9 (UWES-9) versi bahasa Indonesia. *Jurnal Psikologi*, 17(2), 204–217.
- Liu, Y., & Wang, H. (2026). Who on earth is using Generative AI? *World Development*, 199, 107260. <https://doi.org/10.1016/j.worlddev.2025.107260>
- Maier, C., Thatcher, J. B., Grover, V., & Dwivedi, Y. K. (2023). Cross-sectional research: A critical perspective, use cases, and recommendations for IS research. *International Journal of Information Management*, 70, 102625. <https://doi.org/10.1016/j.ijinfomgt.2023.102625>
- Mazzetti, G., Robledo, E., Vignoli, M., Topa, G., Guglielmi, D., & Schaufeli, W. B. (2023). Work Engagement: A meta-Analysis Using the Job Demands-Resources Model. *Psychological Reports*, 126(3), 1069–1107. <https://doi.org/10.1177/00332941211051988>

- Noy, S., & Zhang, W. (2023). Experimental evidence on the productivity effects of generative artificial intelligence. *Science*, 381(6654), 187–192. <https://doi.org/10.1126/science.adh2586>
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior*, 25(3), 293–315. <https://doi.org/10.1002/job.248>
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The Measurement of Work Engagement With a Short Questionnaire. *Educational and Psychological Measurement*, 66(4), 701–716. <https://doi.org/10.1177/0013164405282471>
- Schaufeli, W. B., Salanova, M., González-romá, V., & Bakker, A. B. (2002). The Measurement of Engagement and Burnout: A Two Sample Confirmatory Factor Analytic Approach. *Journal of Happiness Studies*, 3(1), 71–92. <https://doi.org/10.1023/A:1015630930326>
- Schepman, A., & Rodway, P. (2020). Initial validation of the general attitudes towards Artificial Intelligence Scale. *Computers in Human Behavior Reports*, 1, 100014. <https://doi.org/10.1016/j.chbr.2020.100014>
- Sirait, B. L., Kornarius, Y. P., Caroline, A., Gunawan, A., & Putri Gusti, T. E. (2024). Pengaruh Sikap Umum Terhadap Kecerdasan Buatan dan Niat Pegawai untuk Terus Menggunakannya. *Jurnal Ilmiah Manajemen Dan Bisnis (JAMBURA)*, 7(2), 1025–1032. <http://ejurnal.ung.ac.id/index.php/JIMB>
- Turner, A. (2015). Generation Z: Technology and Social Interest. *The Journal of Individual Psychology*, 71(2), 103–113. <https://doi.org/10.1353/jip.2015.0021>
- Wang, W., & Siau, K. (2019). Artificial intelligence, machine learning, automation, robotics, future of work and future of humanity: A review and research agenda. *Journal of Database Management*, 30(1), 61–79. <https://doi.org/10.4018/JDM.2019010104>
- Wu, T.-J., Zhang, R.-X., & Zhang, Z. (2025). Navigating the human-artificial intelligence collaboration landscape: Impact on quality of work life and work engagement. *Journal of Hospitality and Tourism Management*, 62, 276–283. <https://doi.org/10.1016/j.jhtm.2025.02.005>
- Zhang, B., & Dafoe, A. (2019). Artificial Intelligence: American Attitudes and Trends. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3312874>