

Authentic Leadership, Psychological Capital, and Meaningfulness of Work: Predicting Generation Z Employees' Mental Well-Being

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Abstract

This study examined the effects of authentic leadership and psychological capital on the mental well-being of Generation Z employees and investigated the mediating roles of psychological capital and meaningfulness of work. Given Generation Z's increasing presence in the workforce and concerns regarding employee well-being, this study employed a quantitative approach using a cross-sectional survey of 300 Generation Z employees in Batam, Indonesia, selected through purposive sampling. Data were analyzed using partial least squares structural equation modeling (PLS-SEM) with SmartPLS 3.0. The structural model demonstrated substantial explanatory power for mental well-being ($R^2 = 0.747$), with predictive relevance indicated by $Q^2 = 0.582$. Authentic leadership positively affected mental well-being ($\beta = 0.485$, $p < 0.001$) and psychological capital ($\beta = 0.563$, $p < 0.001$), but did not significantly affect the meaningfulness of work ($\beta = 0.068$, $p = 0.235$). Psychological capital significantly mediated the relationship between authentic leadership and mental well-being ($\beta = 0.215$, $p < 0.001$), whereas meaningfulness of work did not ($\beta = 0.015$, $p = 0.246$). The findings highlight the importance of authentic leadership in strengthening psychological resources associated with Generation Z employees' mental well-being and provide implications for leadership development in organizations.

Keywords: Authentic Leadership, Generation Z, Psychological Capital, Meaningfulness of Work, Mental Well-Being

1. INTRODUCTION

The increasing participation of Generation Z (Gen Z) in the global workforce has reshaped organizational priorities, particularly regarding employee mental well-being. Gen Z employees have distinctive workplace expectations, including meaningful work, authentic interpersonal relationships, psychological safety, and overall well-being. As this generation becomes an increasingly important component of the workforce, organizations must develop working environments and leadership practices that support employees' psychological health while sustaining organizational performance. Mental well-being is particularly important because it is associated with work engagement, productivity, organizational commitment, and employee retention ([Moonsook, 2018](#); [Maya, Rahmat, & Heri, 2022](#); [Sao, Chandak, Barhate, & Mondal, 2024](#)).

The importance of workplace mental well-being is reinforced by the global scale of mental health challenges faced by employees. The [World \(2022\)](#) reported that approximately one in eight people worldwide live with mental disorders, with younger populations facing various social, economic, educational, and employment-related pressures during the transition into adulthood and working life. In Indonesia, mental health challenges remain significant, with limited access to professional support and treatment services ([World, 2022](#); [I-NAMHS, 2023](#); [Lubis, & Mayangsari, 2022](#); [Wibawa, & Rahmasari, 2024](#)).

The relevance of this issue becomes more apparent within the labor-market context of Batam City, an industrial, commercial, and Free Trade Zone (FTZ) center in the Riau Islands. Batam rapid industrial development, supported by foreign investment and a large number of business enterprises, reflects its strategic role in regional and national economic activities ([Parta, & Mahayasa, 2021](#); [Setiawan, Liong, & Sani, 2020](#)). However, this competitive environment may expose employees, particularly younger workers, to performance demands, work pressure, irregular schedules, and employment uncertainty. These conditions highlight the importance of examining organizational and psychological factors associated with Gen Z employees' mental well-being in

Batam ([Hogianto, Stambul, & Themba, 2024](#); [Aqil, Karabulut, & Hatipoglu, 2021](#); [Kusmargono, Jaya, Hadna, & Sumaryono, 2023](#)).

Among organizational factors, leadership is an important determinant of employee psychological experiences ([Anggraini, Bun, & Nainggolan, 2026](#); [Kho, Anggraini, & Aliandrina, 2023](#)). Authentic leadership, characterized by self-awareness, relational transparency, balanced information processing, and an internalized moral perspective, can promote trust, openness, fairness, and psychological safety. These characteristics are particularly relevant for Gen Z employees, who value transparent communication, ethical leadership, meaningful relationships, and constructive feedback. Previous studies have associated authentic leadership with positive employee attitudes and psychological outcomes ([Liang, 2024](#); [Wibawa and Rahmasari, 2024](#)).

However, the relationship between authentic leadership and employee mental well-being may occur through psychological mechanisms rather than direct effects alone. The Positive Organizational Scholarship (POS) perspective explains how positive organizational practices generate favorable employee outcomes through psychological resources. One mechanism is Psychological Capital (PsyCap), consisting of hope, self-efficacy, optimism, and resilience, which enables employees to cope with workplace challenges and maintain positive psychological functioning. Previous research indicates that authentic leadership can strengthen PsyCap, which subsequently contributes to employee well-being ([Chitac, & Agheorghiesei, 2023](#); [Afdal, & Kasran, 2020](#)).

Another mechanism is meaningfulness of work, referring to employees' perception that their work has purpose, significance, and value beyond financial compensation. Authentic leaders may enhance meaningfulness by communicating organizational values, involving employees in decision-making, and connecting individual contributions with broader organizational goals. Although previous studies have examined meaningfulness of work as a mediator between leadership and employee well-being, findings remain inconsistent across organizational and cultural contexts ([Specchia, Cozzolino, Carini, Galletti, Ricciardi, & Damiani, 2021](#); [Kusmargono et al., 2023](#)).

Although both mechanisms have been examined in previous research, psychological capital and meaningfulness of work are commonly investigated separately. Examining them simultaneously is theoretically important because PsyCap represents employees' internal psychological capacity, whereas meaningfulness of work reflects perceived purpose and significance derived from work. This dual-mediation framework provides a more comprehensive explanation of how authentic leadership influences employee mental well-being. Furthermore, evidence regarding Gen Z employees in developing-country contexts, particularly within industrial labor markets such as Batam, remains limited ([Adriansyah, 2019](#)).

Therefore, this study develops a dual-mediation model to examine the relationship between authentic leadership and mental well-being among Gen Z employees in Batam, Indonesia, with psychological capital and meaningfulness of work as simultaneous mediators. The study extends the positive organizational scholarship perspective by integrating two distinct psychological mechanisms into a unified framework. Practically, the findings may assist organizations and human resource practitioners in developing leadership practices and employee-support interventions that strengthen psychological resources and promote sustainable workplace well-being ([Ratnasari, Dwidienawati, Putri, Harijono, & Tanto, 2023](#)).

2. LITERATURE REVIEW

2.1 Authentic Leadership and Psychological Capital

Authentic leadership is conceptualized as a leadership approach grounded in self-awareness, relational transparency, balanced processing of information, and an internalized moral perspective. Authentic leaders are distinguished by their consistency between espoused values and enacted behaviors, their willingness to share relevant information openly, and their ethical commitment to navigating organizational decision-making ([Wahyuni & Aira, 2026](#)). This style of leadership creates a

psychologically safe organizational climate where employees feel encouraged to develop their personal capabilities without fear of negative consequences ([Maya, Rahmat, & Heri, 2022](#)); ([Hogianto, Stambul, & Themba, 2024](#)).

Psychological capital, as conceptualized within the positive organizational behavior framework, consists of four core psychological states, such as self-efficacy, optimism, hope, and resilience ([Dwimilten, Ismiyanti, Ariesa, Rochmah, Pratama, & Panie, 2026](#)). These states function as internal psychological resources that enable employees to effectively navigate workplace demands and recover from setbacks. Research has consistently demonstrated that authentic leadership positively influences employees' PsyCap by establishing a supportive environment that nurtures self-development, instills confidence, and reinforces goal-directed behavior. Through transparent communication and consistent modeling of ethical conduct, authentic leaders create conditions that activate and strengthen employees' positive psychological states ([Wibawa, & Rahmasari, 2024](#); [Chen, Masukujjaman, Gao, & Makhbul, 2023](#)).

2.2 Authentic Leadership and Meaningfulness of Work

The meaningfulness of work refers to an individual's subjective experience that their work is important, purposeful, and valuable in ways that extend beyond monetary compensation. It encompasses the degree to which employees perceive their tasks as aligned with their personal values, as contributing meaningfully to a broader organizational or societal mission, and as an expression of their authentic selves. Prior studies have suggested that authentic leaders, by articulating a compelling vision and reinforcing goal congruence, contribute to employees' perception of work as purposeful and significant ([Kusmargono, Jaya, Hadna, & Sumaryono, 2023](#); [Cumpăt, Zouri, Huțu, Cumpăt, Zouri, Grădinaru, Agheorghiesei, & Scripcariu, 2025](#)). However, this relationship is not universally consistent, particularly across different generational cohorts and cultural contexts.

Nevertheless, the relationship between authentic leadership and the meaningfulness of work may vary across organizational and cultural contexts. Employees do not necessarily derive meaning from leadership practices in the same way, and generational differences may further influence how employees interpret purpose, values, and authenticity in the workplace ([Andini, Solikah, & Faisal, 2026](#); [Murib, 2025](#)). This provides a basis for examining the relationship specifically among Gen Z employees.

2.3 Psychological Capital, Meaningfulness of Work, and Mental Well-Being

The [World \(2022\)](#) defines mental well-being as a positive state in which individuals recognize their abilities, cope with normal life stresses, work productively, and contribute to their communities. Within organizational settings, mental well-being reflects employees' capacity to maintain positive psychological functioning while managing workplace demands and interpersonal relationships ([Fleming, 2024](#)). Psychological capital can contribute to mental well-being by providing employees with internal resources for managing occupational stress and adversity. Self-efficacy enables employees to approach challenges with greater confidence, hope supports goal pursuit, optimism facilitates positive expectations, and resilience enables recovery following difficulties. Collectively, these resources can help employees maintain psychological equilibrium and positive functioning when facing workplace pressures ([Chen, Masukujjaman, Gao, & Makhbul, 2023](#)).

Meaningfulness of work represents another potential psychological pathway to mental well-being. When employees perceive their work as valuable and purposeful, their work experience can provide a sense of fulfillment, identity, and psychological significance. This perception may contribute to positive psychological functioning because employees can interpret workplace activities as consistent with their personal values and a broader sense of purpose ([Wibawa & Rahmasari, 2024](#)). Accordingly, both PsyCap and Meaningfulness of Work represent theoretically distinct mechanisms through which workplace experiences may be associated with employees' mental well-being.

2.4 Theoretical Integration: Positive Organizational Scholarship, Positive Organizational Behavior, and Self-Determination Theory

This study integrates three complementary theoretical perspectives, such as Positive Organizational Scholarship (POS), Positive Organizational Behavior (POB), and Self-Determination Theory (SDT). Each perspective explains a different component of the proposed model. Positive organizational scholarship provides a broader organizational perspective for understanding how positive organizational practices and relationships can generate beneficial employee outcomes. Within this framework, authentic leadership can be viewed as a positive organizational resource that promotes trust, transparency, psychological safety, and constructive interpersonal relationships. These conditions create an organizational context in which employees can develop positive psychological functioning.

Positive organizational behavior provides the theoretical foundation for psychological capital. POB focuses on positive psychological capacities that are measurable, developable, and relevant to performance and well-being. Within this perspective, PsyCap functions as an internal psychological resource that helps employees manage challenges, pursue goals, and recover from adversity. Authentic leadership is therefore expected to contribute to employee well-being partly by strengthening these psychological capacities.

Self-determination theory provides an additional explanation of how organizational experiences influence employees' psychological functioning. SDT proposes that individuals function optimally when their basic psychological needs for autonomy, competence, and relatedness are supported. Authentic leadership may support these needs by providing employees with opportunities for voice and autonomy, recognizing their capabilities, and developing transparent and genuine interpersonal relationships. Such experiences may subsequently contribute to employees' perception that their work is meaningful and aligned with their values.

This theoretical perspective is particularly relevant to Generation Z. As a generation that has entered and increasingly participated in the contemporary workforce, Gen Z employees have been described as placing considerable importance on authenticity, transparent communication, personal development, meaningful work, and positive interpersonal relationships. These expectations correspond closely with the psychological needs emphasized by SDT. Therefore, SDT provides a theoretical bridge between authentic leadership practices and the workplace expectations of Gen Z. Leadership behaviors that support autonomy, competence, and relatedness may be more readily interpreted by Gen Z employees as authentic, supportive, and meaningful workplace experiences. This connection strengthens the rationale for examining PsyCap and the meaning of work as psychological mechanisms associated with the mental well-being of this demographic. Taken together, POS explains the supportive organizational context created by authentic leadership, POB explains the development of PsyCap as an internal psychological resource, and SDT explains how the satisfaction of fundamental psychological needs may shape employees' perceptions of purpose, value, and psychological functioning. The integration of these perspectives provides a theoretical foundation for examining both direct and indirect relationships between authentic leadership and mental well-being.

2.5 Conceptual Framework and Hypotheses

Based on the integration of POS, POB, and SDT, this study proposes a dual-mediation framework linking authentic leadership to mental well-being through psychological capital and the meaningfulness of work. Authentic leadership represents the organizational and relational context, while psychological capital represents employees' internal psychological resources, and the meaningfulness of work represents their perceived purpose and significance of work. Mental well-being represents the psychological outcome of these organizational and individual processes.

The simultaneous examination of psychological capital and the meaningfulness of work is important because the two mediators represent different theoretical pathways. Psychological capital concerns employees' capacity to cope with challenges and mobilize positive psychological resources, whereas the meaningfulness of work concerns the extent to which employees perceive their work as

purposeful and valuable. Testing both mechanisms within one model enables the study to examine whether these pathways operate concurrently in explaining the relationship between authentic leadership and mental well-being among Gen Z employees.

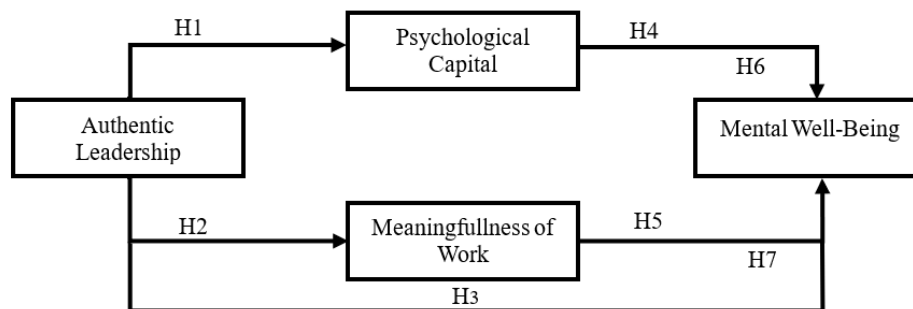


Figure 1. Research conceptual framework

Figure 1 summarizes the expected relationships between the four constructs. In addition to estimating whether authentic leadership is directly associated with mental well-being, the model tests whether leader authenticity first enhances psychological capital and the meaningfulness of work, which subsequently affects employee well-being. Therefore, psychological capital and the meaningfulness of work function as the intervening constructs through which transparent leadership behaviors are translated into positive psychological outcomes. The hypotheses derived from these paths are as follows:

- H₁*: Authentic leadership has a significant positive effect on psychological capital
- H₂*: Authentic leadership has a significant positive effect on the meaningfulness of work
- H₃*: Authentic leadership has a significant positive effect on mental well-being
- H₄*: Psychological capital has a significant positive effect on mental well-being
- H₅*: Meaningfulness of work has a significant positive effect on mental well-being
- H₆*: Psychological capital significantly mediates the relationship between authentic leadership and mental well-being
- H₇*: Meaningfulness of work significantly mediates the relationship between authentic leadership and mental well-being

3. RESEARCH METHODOLOGY

This study employed a quantitative approach with a correlational research design to examine the relationships among authentic leadership, psychological capital, work meaningfulness, and mental well-being among Generation Z employees. A quantitative design was selected to empirically test the proposed conceptual model and assess both direct and indirect relationships among the study constructs. The research was conducted in Batam, Indonesia, an industrial and service-oriented city with a substantial working-age population and diverse employment sectors.

3.1 Population, Sample, and Sampling Technique

The target population comprised Generation Z employees working in Batam, Indonesia. Generation Z was defined as individuals born between 1997 and 2012. Purposive non-probability sampling was employed based on three inclusion criteria, such as respondents belonged to Generation Z, respondents were currently employed in Batam, and respondents had a minimum of six months of work experience. The minimum work-experience criterion was established to ensure that participants had sufficient exposure to their supervisors, work environment, and organizational practices to evaluate the constructs examined in this study. A total of 332 responses were collected, of which 300 met the eligibility criteria and were retained for analysis, resulting in a usable response rate of 90.36%. The sample included respondents from several major employment sectors in Batam,

comprising manufacturing (41.3%), formal services (38.7%), retail and logistics (12.0%), and hospitality (8.0%). The inclusion of respondents across these sectors was intended to capture the variation in the employment environments experienced by Generation Z employees within Batam's major economic activities.

Non-response bias was assessed by comparing early and late respondents, following the assumption that late respondents may exhibit characteristics similar to those of individuals who did not respond to the survey. Independent-samples t-tests were conducted to compare the two groups across key demographic characteristics and primary study constructs. The results showed no statistically significant differences between early and late respondents ($p > 0.05$), suggesting that nonresponse bias was unlikely to materially affect the study findings.

3.2 Data Collection and Cross-Cultural Translation Procedure

Data were collected between August 2025 and January 2026 using a structured online questionnaire distributed through Google Forms. Because the measurement instruments were originally developed in English, a cross-cultural translation procedure was implemented to ensure semantic and conceptual equivalence in the Indonesian context. Authentic leadership was measured using four items. Meaningfulness of Work using five items from [Charles-Leijja, Castro, Toledo, and Ballesteros-Valdés \(2023\)](#), Psychological Capital [Barbayannis, Bandari, Zheng, Baquerizo, Pecor, and Ming \(2022\)](#), using six items from and Mental Well-Being using ten items from [\(Fleming, 2024\)](#).

The translation process followed a forward-backward translation procedure. First, the original English-language instruments were independently translated into Bahasa Indonesia by two bilingual researchers with knowledge of organizational behavior and management. The two Indonesian versions were compared and reconciled into a single preliminary version for the pilot test. Subsequently, the reconciled Indonesian version was back-translated into English by an independent professional translator who was not involved in the initial translation process. The back-translated version was compared with the original instrument to identify discrepancies in meaning, terminology, and conceptual interpretation. Any discrepancies were reviewed and resolved before finalizing the questionnaire. The translated questionnaire was subsequently pilot-tested with 30 Generation Z employees who met the study inclusion criteria. A pilot test was conducted to evaluate item clarity, readability, cultural appropriateness, and respondent comprehension before the main survey was administered. The feedback obtained during the pilot stage was used to refine the wording and ensure that the items were understandable within the Indonesian workplace context.

3.3 Operational Definition and Measurement Scales

The questionnaire consisted of two sections. The first section collected demographic information, including gender, age, educational level, length of employment, industry sector, and monthly income. The second section measured the four study constructs using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Authentic Leadership (AL) was operationalized as the degree to which employees perceive their supervisors to be self-aware, relationally transparent, morally principled, and balanced in processing information, measured using four items adapted from [\(Afdal & Kasran, 2020\)](#). Psychological Capital (PsyCap) was operationalized as employees' positive psychological states comprising self-efficacy, optimism, hope, and resilience, measured using six items from [Katircioglu et al. \(2022\)](#). Meaningfulness of Work (MW) was operationalized as the extent to which employees perceive their work as personally significant and purposeful. Mental Well-Being (MWB) was operationalized as the positive psychological state in which employees' function effectively, cope with stress, and find purpose in work, measured using ten items from [Fleming \(2024\)](#).

3.4 Contextual Validation and Measurement Model Assessment

To ensure that the measurement instruments were appropriate for the Indonesian context, contextual validation was conducted following cross-cultural translation and pilot testing procedures. The measurement instruments were initially translated from English to Bahasa Indonesia by two independent bilingual researchers with expertise in organizational behavior. The translated versions

were reconciled into a single Indonesian version and subsequently back-translated into English by an independent professional translator. Any discrepancies between the original and back-translated versions were reviewed and resolved to preserve the conceptual meanings of the original items. The resulting Indonesian questionnaire was pilot-tested with 30 Generation Z employees to assess item clarity, readability, and contextual appropriateness before the main survey was administered.

Following data collection, the measurement model was evaluated using Partial Least Squares Structural Equation Modeling (PLS-SEM). The assessment consisted of indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. Indicator reliability was assessed through outer loadings, with values of 0.70 or higher considered acceptable. Internal consistency reliability was evaluated using Cronbach's alpha and Composite Reliability (CR), with values above 0.70 indicating satisfactory reliability. Convergent validity was assessed using Average Variance Extracted (AVE), with a minimum value of 0.50 indicating that a construct explains at least 50% of the variance in its indicators.

Discriminant validity was assessed using the Heterotrait-Monotrait (HTMT) ratio. HTMT values below 0.90 were considered indicative of adequate discriminant validity. These criteria were applied to the Indonesian main-sample data to ensure that the constructs retained their intended measurement properties within the study context. The measurement assessment using the main sample of 300 Generation Z employees demonstrated satisfactory measurement properties. Outer loadings ranged from 0.702 to 0.932, while Cronbach's Alpha and Composite Reliability values ranged from 0.939 to 0.975. AVE values ranged from 0.722 to 0.859, and HTMT values ranged from 0.073 to 0.779. All values met the specified assessment criteria, providing evidence that the Indonesian-adapted instruments demonstrated adequate reliability, convergent validity, and discriminant validity for the present study.

3.5 Common Method Bias

Because the study relied on self-reported responses collected through a single questionnaire and from a single respondent at one point in time, Common Method Bias (CMB) was assessed. A full collinearity assessment was conducted using Variance Inflation Factor (VIF) values within the PLS-SEM procedure. The full collinearity VIF values for the latent constructs ranged from 1.214 to 2.418. All values were below the conservative threshold of 3.3, indicating that substantial common method bias was not detected in the data. Accordingly, CMB was considered unlikely to pose a serious threat to the interpretation of the structural model.

3.6 Data Analysis Strategy

The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 3.0. PLS-SEM was selected because the study focuses on examining predictive relationships and simultaneously assessing direct and indirect effects involving multiple latent constructs. The analysis followed a two-stage procedure. First, the measurement model (outer model) was evaluated to establish indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. The assessment included outer loadings, Cronbach's alpha, composite reliability, average variance extracted, and HTMT.

Second, the structural (inner) model was assessed to examine the hypothesized relationships among the constructs. The assessment included the coefficient of determination (R^2), predictive relevance (Q^2), effect size (f^2), and standardized path coefficients. The model's approximate fit was also evaluated using the Standardized Root Mean Square Residual (SRMR). Hypothesis testing was performed using bootstrapping with 5,000 resample. The significance of the structural paths and indirect effects was evaluated using t-statistics and p-values, with statistical significance determined at $p < 0.05$ and a two-tailed critical t-value of 1.96.

4. RESULTS AND DISCUSSION

4.1 Results

4.1.1 General Overview and Respondent Characteristics

This study involved 300 Generation Z employees working in several industries in Batam, Indonesia. All retained respondents met the predetermined inclusion criteria and completed the questionnaire, resulting in 300 valid observations for the analysis.

Table 1. Demographic characteristics of respondents

Characteristics	Category	(n=300)	(%)
Gender	Male	118	39.3
	Female	182	60.7
Age	>18 years	11	3.6
	18–21 years	36	12.0
	22–25 years	187	62.3
	25–28 years	66	22.0
Highest Education	Senior High School	17	5.6
	Diploma	31	10.3
	Bachelor Degree	214	71.3
	Master Degree	35	11.6
	Doctoral Degree	3	1.0
Work Experience	<1 year	46	15.3
	1–3 years	133	44.3
	3.5–5 years	67	22.3
	5.5–8 years	37	12.3
	>8 years	17	5.6
Monthly Income	<IDR 3,500,000	41	13.6
	IDR 3,501,000–5,500,000	118	39.3
	IDR 5,501,000–8,500,000	86	28.6
	IDR 8,501,000–10,500,000	40	13.3
	>IDR 10,501,000	15	5.0

Table 1 shows the demographic profile was predominantly female (60.7%), aged 22–25 years (62.3%), and held a bachelor's degree (71.3%). Most respondents had between one and three years of work experience (44.3%), while the largest income group reported monthly earnings of IDR 3,501,000–5,500,000 (39.3%). These characteristics indicate that the respondents represent a relatively young, educated, and early-career workforce, which is relevant for examining workplace experiences and psychological factors among Gen Z employees.

4.1.2 Measurement Model Assessment

Table 2. Measurement items, factor loadings, CA, AVE, and CR results

Construct	Item	Indicator / Item Description	Loading	CA	AVE	CR
Authentic Leadership	AL1	Leader Self-Awareness	0.904	0.949	0.822	0.949
	AL2	Relational Transparency	0.908	0.949	0.822	0.949
	AL3	Internalized Moral Perspective	0.904	0.949	0.822	0.949
	AL4	Balanced Processing of Information	0.910	0.949	0.822	0.949
Meaningfulness of Work	MW1	Task Purpose & Significance	0.928	0.968	0.859	0.968
	MW2	Alignment with Personal Values	0.919	0.968	0.859	0.968
	MW3	Contribution to Organizational Mission	0.929	0.968	0.859	0.968
	MW4	Expression of Authentic Self	0.932	0.968	0.859	0.968
	MW5	Broader Societal Impact	0.926	0.968	0.859	0.968
Psychological Capital	PC1	Self-Efficacy / Confidence	0.702	0.939	0.722	0.939

Construct	Item	Indicator / Item Description	Loading	CA	AVE	CR
Psychological Capital	PC2	Optimism for Future Success	0.883	0.939	0.722	0.939
	PC3	Hope & Goal Directedness	0.865	0.939	0.722	0.939
	PC4	Resilience in Facing Setbacks	0.876	0.939	0.722	0.939
	PC5	Sustaining Positive Outlook	0.883	0.939	0.722	0.939
	PC6	Emotional Recovery from Stress	0.873	0.939	0.722	0.939
Mental Well-Being	MWB1	Positive Emotional Functioning	0.897	0.975	0.797	0.975
	MWB2	Ability to Cope with Stress	0.894	0.975	0.797	0.975
	MWB3	Productive Work Engagement	0.894	0.975	0.797	0.975
	MWB4	Psychological Equilibrium	0.886	0.975	0.797	0.975
	MWB5	Purposeful Workplace Functioning	0.906	0.975	0.797	0.975
	MWB6	Optimistic Mindset at Work	0.885	0.975	0.797	0.975
	MWB7	Social Well-Being & Relationships	0.881	0.975	0.797	0.975
	MWB8	Stress Resilience & Adaptability	0.909	0.975	0.797	0.975
	MWB9	Personal Growth & Fulfillment	0.894	0.975	0.797	0.975
	MWB10	Overall Mental Health & Vitality	0.881	0.975	0.797	0.975

Table 2 shows the measurement model was assessed through indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. The indicator loadings ranged from 0.702 to 0.932, exceeding the recommended minimum of 0.70. Cronbach's alpha values ranged from 0.939 to 0.975, while composite reliability values ranged from 0.939 to 0.975, indicating satisfactory internal consistency. The AVE values ranged from 0.722 to 0.859, exceeding the minimum threshold of 0.50 and supporting convergent validity.

Discriminant validity was assessed using the Heterotrait-Monotrait (HTMT) ratio. The HTMT values ranged from 0.073 to 0.779, with all values below the recommended threshold of 0.90. This indicates adequate discriminant validity among the study constructs. Therefore, each construct demonstrated sufficient empirical distinctiveness, confirming that the indicators measured their respective latent variables rather than overlapping with other constructs.

Table 3

Construct Pair	HTMT	Interpretation (<0.90)
Authentic Leadership ↔ Meaningfulness of Work	0.073	Valid
Authentic Leadership ↔ Psychological Capital	0.666	Valid
Authentic Leadership ↔ Mental Well-Being	0.763	Valid
Meaningfulness of Work ↔ Psychological Capital	0.157	Valid
Meaningfulness of Work ↔ Mental Well-Being	0.400	Valid
Psychological Capital ↔ Mental Well-Being	0.779	Valid

Table 3 shows that potential collinearity was checked using the VIF statistics for both the indicator and predictor constructs. The obtained values did not suggest problematic multicollinearity, indicating that excessive associations were unlikely to bias either the measurement or the structural estimates. Taken together, the evidence supports item reliability, internal consistency, convergent, and discriminant validity, and the absence of severe collinearity in the measurement model.

4.1.3 Structural Model Assessment

The structural model was evaluated using explanatory power (R^2), predictive relevance (Q^2), effect size (f^2), model fit, and structural path coefficients. The Standardized Root Mean Square Residual (SRMR) was used to assess the approximate fit of the PLS-SEM model.

Table 4. Model fit results

Model	SRMR	Recommended Criterion	Interpretation
Saturated Model	0.056	<0.080	Acceptable fit
Estimated Model	0.061	<0.080	Acceptable fit

Table 4 shows the SRMR values were 0.056 and 0.061 for the saturated and estimated models, respectively. Both values were below the commonly applied threshold of 0.08, indicating an acceptable level of model fit. The relatively small difference between the saturated and estimated models (0.005) also indicates that constraining the model according to the hypothesized structural relationships did not substantially increase the residual discrepancy. Normed Fit Index (NFI) may additionally be reported if available from the SmartPLS output. However, because the present analysis did not provide an NFI value, no NFI statistic is reported.

Table 5. R-square, Q-square, and GoF results

Construct/Model	R-square	R-square Adjusted	Q-square	Interpretation
Mental Well-Being (Y)	0.747	0.744	-	Substantial explanatory power
Psychological Capital (Z_1)	0.381	0.379	-	Moderate explanatory power
Meaningfulness of Work (Z_2)	0.005	0.002	-	Weak explanatory power
Overall Model	-	-	0.582	High predictive relevance
Goodness of Fit (GoF)	-	-	0.550	High overall model fit

Table 5 shows the model explained 74.7% of the variance in mental well-being ($R^2 = 0.747$), indicating substantial explanatory power. Psychological capital had an R^2 of 0.381, meaning that authentic leadership explained 38.1% of its variance. In contrast, the R^2 of meaningfulness of work was only 0.005, indicating that authentic leadership explained a very small proportion of its variance. The Q^2 value for mental well-being was 0.582, which is greater than zero and indicates predictive relevance for the endogenous construct.

Table 6. f -square results

Path Relationship	f -square	Interpretation
Authentic Leadership (X) $\rightarrow$ Psychological Capital (Z_1)	0.610	Large effect
Authentic Leadership (X) $\rightarrow$ Meaningfulness of Work (Z_2)	0.002	Small/No effect
Authentic Leadership (X) $\rightarrow$ Mental Well-Being (Y)	0.352	Large effect
Psychological Capital (Z_1) $\rightarrow$ Mental Well-Being (Y)	0.285	Medium effect
Meaningfulness of Work (Z_2) $\rightarrow$ Mental Well-Being (Y)	0.180	Medium effect

Table 6 shows that the effect-size analysis indicates that Authentic Leadership had a large effect on psychological capital ($f^2 = 0.610$) and on mental well-being ($f^2 = 0.352$). Psychological capital had a medium effect on mental well-being ($f^2 = 0.285$), while meaningfulness of work also demonstrated a medium effect on mental well-being ($f^2 = 0.180$). In contrast, the effect of authentic leadership on meaningfulness of work was negligible ($f^2 = 0.002$).

4.1.4 Structural Path Model

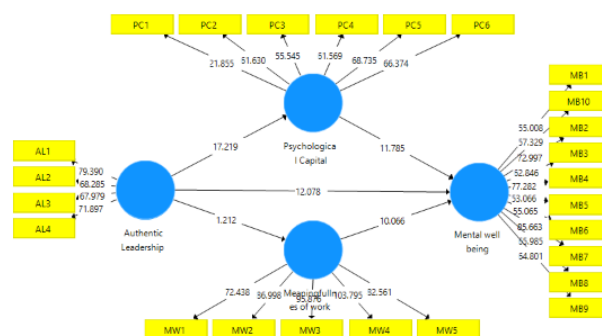


Figure 2. Bootstrapping results of the structural model

The bootstrapping diagram in Figure 2 displays the estimated structural pathways from authentic leadership to psychological capital ($t = 17.219$), meaningfulness of work ($t = 1.212$), and mental well-being ($t = 12.078$), as well as the paths from psychological capital ($t = 11.785$) and meaningfulness of work ($t = 10.066$) to mental well-being. Table 6 provides the numerical evidence used to evaluate the hypotheses, including the standardized path coefficients (β), t -statistics, p -values, and final decisions for each direct and indirect relationship.

4.1.5 Hypothesis Testing

Hypothesis testing was performed using the bootstrapping procedure in SmartPLS (version 3.0). The significance of each structural path was evaluated based on the path coefficient (β), t -statistic and p -value. A hypothesis was considered supported when the t -statistic exceeded 1.96, and the p -value was below 0.05. The results of the direct effects are presented in Table 6.

Table 6. f -square results

Path Relationship	f -square	Interpretation
Authentic Leadership (X) $\rightarrow$ Psychological Capital (Z_1)	0.610	Large effect
Authentic Leadership (X) $\rightarrow$ Meaningfulness of Work (Z_2)	0.002	Small/No effect
Authentic Leadership (X) $\rightarrow$ Mental Well-Being (Y)	0.352	Large effect
Psychological Capital (Z_1) $\rightarrow$ Mental Well-Being (Y)	0.285	Medium effect
Meaningfulness of Work (Z_2) $\rightarrow$ Mental Well-Being (Y)	0.180	Medium effect

Table 6 shows the statistical results demonstrate that authentic leadership had a significant positive direct effect on mental well-being ($\beta = 0.485$, $p < 0.001$). In addition, the total effect of authentic leadership on mental well-being was $\beta = 0.715$, reflecting the combined direct and indirect pathways. The indirect effect through psychological capital was significant ($\beta = 0.215$, $p < 0.001$), indicating that psychological capital represents an important mediating mechanism in the relationship between authentic leadership and mental well-being. By contrast, the indirect effect through the meaningfulness of work was not statistically significant ($\beta = 0.015$, $p = 0.246$). Although meaningfulness of work itself had a significant positive relationship with mental well-being ($\beta = 0.215$), authentic leadership did not significantly predict meaningfulness of work ($\beta = 0.068$, $p = 0.235$). Therefore, the complete mediation pathway through meaningfulness of work was not supported.

4.1.6 Multi-Group Analysis and Industry-Specific Differences

Multi-Group Analysis (MGA) was conducted to examine whether the structural relationships differed across demographic and industry groups. Gender and income groups did not demonstrate statistically significant differences in the structural paths ($p > 0.05$), suggesting that the estimated relationships were generally stable across these demographic categories. Industry-specific analysis, however, identified a statistically significant difference in the relationship between psychological capital and mental well-being. The path coefficient was stronger among manufacturing employees ($\beta = 0.442$) than among service-sector employees ($\beta = 0.318$), with an MGA difference of $p = 0.024$.

This result indicates that the strength of the relationship between employees' psychological resources and mental well-being varies across industry contexts. The industry finding should be interpreted as a contextual difference rather than evidence of a specific causal mechanism. Manufacturing and service employees may encounter different job demands and working conditions, which could contribute to variation in the role of psychological capital, however, the present study did not directly test the specific workplace factors underlying this difference. Overall, the MGA results provide additional evidence that the structural model is generally stable across gender and income groups, while indicating meaningful sectoral variation in the psychological capital–mental well-being relationship.

4.2 Discussion

4.2.1 Authentic Leadership and Psychological Capital

The empirical results strongly support H_1 , indicating a significant positive relationship between authentic leadership and psychological capital ($\beta = 0.563$, $t = 14.479$, $p < 0.001$). This finding suggests that employees who perceive their leaders as authentic tend to report stronger psychological resources, including self-efficacy, optimism, hope, and resilience. Authentic leaders demonstrate consistency between their values, words, and actions, while also encouraging transparent communication and balanced information processing. Such leadership characteristics can provide employees with a stable interpersonal environment in which they can develop confidence in their capabilities and maintain positive expectations when facing workplace challenges.

This finding is consistent with the principles of Positive Organizational Scholarship (POS) and Positive Organizational Behavior (POB). From a POB perspective, psychological capital represents a developable psychological resource rather than a fixed personal characteristic. Authentic leadership may therefore contribute to the development and reinforcement of these resources by providing employees with credible role models, constructive feedback, and psychologically supportive interactions. For Generation Z employees, who are increasingly entering organizational environments characterized by uncertainty and changing work expectations, such leadership conditions may be particularly relevant to the development of psychological resources ([Maya, Rahmat, & Heri, 2022](#)), who emphasized that authentic leadership fosters a work environment conducive to strengthening employees' psychological capital. However, this finding differs from that of ([Hogianto, Stambul, & Themba, 2024](#)), who observed that authentic leadership did not directly affect psychological capital when employees possessed high proactive personalities or relied heavily on informal trust structures rather than formal leadership. This divergence suggests that the influence of authentic leadership on psychological capital may be contingent upon individual personality traits and relational dynamics within the organization.

4.2.2 Authentic Leadership and Meaningfulness of Work

Conversely, contrary to the hypothesized relationship, H_2 was not supported, as authentic leadership did not have a significant effect on the meaningfulness of work ($\beta = 0.068$, $t = 1.188$, $p = 0.235$). The very small effect size ($f^2 = 0.002$) further indicates that authentic leadership contributed minimally to the variance in the meaningfulness of work. This result is particularly important because it suggests that employees' perceptions of meaningfulness may be formed through mechanisms that are more closely connected to the content and personal significance of work than to leadership behavior alone. This outcome contrasts with prior literature by [Kusmargono, Jaya, Hadna, and Sumaryono \(2023\)](#), which suggested a positive link between authentic leadership and work meaningfulness.

Meaningfulness of work is not necessarily created simply because employees perceive their supervisors as honest, transparent, or authentic. Rather, employees may derive meaningfulness from the extent to which their job provides opportunities to use their abilities, exercise autonomy, accomplish valuable tasks, develop professionally, and contribute to outcomes that they personally consider important. Job design characteristics such as task significance, skill variety, autonomy, and opportunities for personal development can therefore play an important role in shaping whether employees perceive their work as meaningful. Similarly, personal values and career aspirations may influence meaningfulness, independent of the characteristics of the immediate supervisor. This interpretation is particularly relevant when considering the Generation Z employees. Authentic leadership may provide a positive relational environment, but the perception that one's work is meaningful may depend more strongly on whether the actual job aligns with individual values, career identity, personal interests, and desired social contribution. Consequently, an authentic leader may be able to create trust and psychological safety without necessarily changing the intrinsic characteristics of an employee's job. This distinction helps explain why Authentic Leadership had a substantial effect on psychological capital ($f^2 = 0.610$) but almost no effect on meaningfulness of work ($f^2 = 0.002$).

This finding can also be interpreted through the lens of Self-Determination Theory (SDT). Authentic leadership may facilitate conditions that support employees' psychological needs, however, meaningfulness is ultimately associated with how employees interpret their work in relation to autonomy, competence, relatedness, and personally valued goals. In other words, leadership authenticity can create favorable interpersonal conditions without automatically transforming the work itself into a personally meaningful experience. The non-significant relationship therefore does not imply that leadership is irrelevant to meaningfulness; rather, it indicates that authentic leadership alone was insufficient to explain meaningfulness among the Gen Z employees in this sample.

The Indonesian and Batam employment contexts provide an additional perspective. Batam has a labor market characterized by substantial manufacturing activity alongside service and commercial employment. In such environments, employees may have to balance personal career aspirations with practical considerations such as income, employment stability, career opportunities, workload, and organizational requirements. Under these circumstances, perceptions of meaningfulness may reflect a combination of personal values and concrete job characteristics rather than leadership style alone. Thus, the meaning employees attach to their work may remain relatively independent of whether their immediate leader is perceived as authentic.

4.2.3 Authentic Leadership and Mental Well-Being

Regarding the third hypothesis, H_3 was strongly supported, with Authentic Leadership demonstrating a significant positive effect on mental well-being ($\beta = 0.485$, $t = 10.514$, $p < 0.001$). The effect size was also substantial ($f^2 = 0.352$), indicating that authentic leadership makes an important contribution to explaining employees' mental well-being in the structural model. One possible explanation is that authentic leadership directly influences the interpersonal conditions experienced by employees. Leaders who demonstrate consistency, transparency, ethical behavior, and openness may reduce uncertainty regarding expectations and workplace interactions. These characteristics can contribute to a more psychologically safe environment in which employees feel respected and supported. For Gen Z employees, such conditions may be particularly relevant because the transition into employment involves adapting to organizational expectations, interpersonal relationships, and performance demands.

This finding also reinforces the POS perspective that positive organizational environments can contribute to employee well-being. Rather than influencing mental well-being only through an increase in meaningfulness, authentic leadership may operate through more immediate relational and psychological mechanisms, including trust, perceived support, psychological safety, and reduced interpersonal uncertainty. This interpretation is consistent with previous research linking authentic leadership with employee well-being and positive workplace experiences by [Sari, Zahra, and Setiawati \(2025\)](#) and [Setiyowati and Sari \(2017\)](#), confirming that leadership grounded in transparency and mutual trust minimizes workplace anxiety and stress. The psychological safety built by authentic leaders serves as an essential foundation for maintaining long-term emotional stability and mental health among employees ([Febrianti, & Yulian, 2022](#); [Parveen, Quang, Tran, Kumar, & Shah, 2022](#)).

4.2.4 Mediating Effect of Meaningfulness of Work

H_7 was not supported, as the indirect effect of authentic leadership on mental well-being through the meaningfulness of work was not significant ($\beta = 0.015$, $t = 1.161$, $p = 0.246$). This result presents an important distinction between the direct role of the meaningfulness of work and its mediating role. Although the meaningfulness of work significantly predicts mental well-being in H_5 , authentic leadership does not significantly predict the meaningfulness of work in H_2 . Consequently, the pathway required for mediation was not established in this sample. This non-significant result contrasts with previous literature by [Kusmargono, Jaya, Hadna, and Sumaryono \(2023\)](#), which posited that meaningfulness of work plays a vital mediating role in generating positive employee outcomes.

This pattern can be described as a mediation paradox in the sense that meaningfulness is relevant to employees' well-being, while not functioning as the mechanism linking authentic leadership to well-being. This finding demonstrates that a variable can have a significant relationship

with an outcome without necessarily transmitting the effect of an antecedent variable. In this case, employees who perceive greater meaning in their work tend to report better mental well-being, but their perception of meaningfulness does not appear to be substantially shaped by their perception of authentic leadership. This finding further highlights the conceptual distinction between relational leadership conditions and the personal construction of work meaning. Authentic leadership primarily concerns how leaders behave and relate to employees, whereas meaningfulness concerns how employees interpret the purpose, value, and significance of their work. These constructs may therefore operate at different psychological levels. An authentic leader can communicate honestly, demonstrate integrity, and create a supportive relationship; however, employees may still determine whether their particular occupation, tasks, and career trajectory are meaningful based on their own values and circumstances.

This distinction is relevant in the Indonesian and Batam employment contexts. For many employees, work decisions involve practical considerations, such as income, employment security, career advancement, skill development, and organizational stability. In a labor market containing both manufacturing and service-sector employment, meaningfulness may be shaped by the interaction between personal aspirations and the concrete characteristics of the job. Leadership behavior may improve the quality of the employment relationship without necessarily changing the perceived purpose or significance of the underlying work. The Batam context may also help explain why meaningfulness operates as an independent contributor to well-being rather than as a leadership-mediated mechanism. Employees may construct the meaning of their work from personal career goals, family or economic responsibilities, professional identity, opportunities for development, and perceptions of social contribution.

These factors are not directly captured by the authentic leadership construct. Therefore, the non-significant mediation result suggests that future research should consider job design, person-job fit, personal values, career calling, organizational purpose, and perceived social impact as potential antecedents of the meaningfulness of work. Overall, the findings reveal two distinct pathways associated with employee mental well-being. Authentic leadership is significantly associated with mental well-being both directly and indirectly through psychological capital, whereas meaningfulness of work is independently associated with mental well-being but does not transmit the relationship between authentic leadership and mental well-being. This distinction strengthens the theoretical contribution of the study by showing that positive leadership and meaningful work should not necessarily be treated as interchangeable sources of employee well-being. Instead, they may represent different psychological pathways that require different organizational interventions.

4.2.5 Meaningfulness of Work and Mental Well-Being

H_5 was supported, indicating that the meaningfulness of work has a significant positive effect on mental well-being ($\beta = 0.215$, $p < 0.001$, $f^2 = 0.180$). This finding demonstrates that employees who perceive their work as purposeful, valuable, and personally significant tend to report better mental well-being. This result aligns with that of [Wibawa and Rahmasari \(2024\)](#). Grounded in self-determination theory ([Katircioglu, Arasli, & Cizreliogullari, 2022](#)), fulfilling basic psychological needs through meaningful work fundamentally improves individual psychological functioning. Perceiving work as meaningful enhances an employee's sense of control and resilience, both of which are critical prerequisites for sustaining mental well-being.

The meaningfulness of work can provide employees with a sense of purpose and coherence in their daily activities. When employees perceive that their work contributes to personally valued goals or produces outcomes that they consider worthwhile, work may become a source of psychological fulfillment rather than merely an economic activity. From the perspective of SDT, meaningful work can be related to the satisfaction of psychological needs and the experience of engaging in activities that are consistent with personally endorsed values. For Gen Z employees, this relationship may be particularly relevant because work can represent not only a source of income but also a component of personal identity, development, and future career direction. Nevertheless, the positive direct relationship between the meaningfulness of work and mental well-being should be distinguished from

its role as a mediator. The results indicate that meaningfulness is associated with well-being; however, this does not necessarily mean that leadership is the antecedent through which meaningfulness is developed.

4.2.6 Mediating Effect of Psychological Capital

H_6 was supported, with Psychological Capital significantly mediating the relationship between authentic leadership and mental well-being ($\beta = 0.215$, $t = 10.538$, $p < 0.001$). This indirect effect indicates that authentic leadership is associated with stronger psychological capital, which in turn is associated with higher mental well-being. The mediation finding provides empirical support for integrating POS and POB in explaining the relationship between leadership and employee well-being. Authentic leadership can establish an environment characterized by transparency, consistency, and interpersonal trust, while psychological capital represents an internal psychological resource through which employees respond to workplace demands. The significant indirect effect therefore suggests that the relationship between leadership and well-being is not solely interpersonal; it can also involve the development of employees' psychological resources.

Importantly, the mediation effect occurs alongside a significant direct effect of authentic leadership on mental well-being ($\beta = 0.485$, $p < 0.001$). Thus, psychological capital represents one pathway through which authentic leadership is associated with mental well-being, while other direct or unmeasured mechanisms may also contribute to the relationship. Given the cross-sectional nature of the study, this result should be interpreted as an indirect statistical association rather than definitive evidence of temporal causality. This empirical evidence aligns with [Sari, Zahra, and Setiawati \(2025\)](#), who argued that leadership influences well-being primarily by serving as a catalyst for individual internal resources, and how internal psychological states effectively transmit leadership behaviors into positive employee health outcomes.

4.2.7 Psychological Capital and Mental Well-Being

H_4 was supported, with psychological capital showing a significant positive effect on mental well-being ($\beta = 0.382$, $t = 12.311$, $p < 0.001$). The effect size was moderate ($f^2 = 0.285$), indicating that psychological capital represents an important explanatory factor for employees' mental well-being. [Chen, Masukujjaman, Gao, and Makhbul \(2023\)](#) asserted that psychological capital acts as a buffer against occupational stress. Similarly, [Utami, Pratama, Yuninata, and Prihandoko \(2023\)](#) argued that mental well-being is reinforced through internal psychological resources, enabling individuals to remain resilient, emotionally balanced, and adaptive in dynamic organizational settings. Psychological capital comprises self-efficacy, hope, optimism, and resilience, which provide individuals with psychological resources for managing workplace demands. Employees with stronger self-efficacy may feel more capable of dealing with difficult tasks, while hope and optimism can support positive expectations regarding future outcomes.

Resilience, in turn, may help employees recover from setbacks and adapt to changing circumstances. These resources can contribute to more positive psychological functioning and may reduce the extent to which workplace challenges negatively affect employees' well-being. The result is consistent with the POB perspective, which conceptualizes psychological capital as a positive psychological resource that can be developed and strengthened within organizational contexts. The finding also provides an important link to H_1 : Authentic leadership significantly predicts psychological capital, while psychological capital subsequently predicts mental well-being. This pattern suggests that part of the relationship between leadership and well-being may operate through employees' internal psychological resources

5. CONCLUSIONS

5.1 Conclusion

This study examined the association between authentic leadership and the mental well-being of Generation Z employees through psychological capital and meaningful work in Batam, Indonesia. The findings indicate that authentic leadership is positively associated with both psychological capital and mental well-being, while psychological capital significantly mediates the relationship between

authentic leadership and mental well-being. In contrast, authentic leadership did not significantly predict the meaningfulness of work, and the meaningfulness of work did not mediate the relationship between authentic leadership and mental well-being, despite its significant positive association with mental well-being.

The findings provide broader theoretical implications by distinguishing between two psychological pathways through which workplace conditions may be associated with employee well-being. The results suggest that authentic leadership is particularly relevant to the development of employees' internal psychological resources, whereas meaningfulness of work represents a more individually interpreted dimension that may depend on factors beyond leadership behavior. Thus, meaningful work and authentic leadership should not be conceptualized as interchangeable sources of well-being. For Generation Z employees, the experience of meaningfulness may depend more strongly on how job characteristics, personal values, career aspirations, and perceived contribution align with the actual work they perform. By demonstrating these distinct pathways within the Generation Z workforce in an emerging Indonesian labor market, this study extends the application of Positive Organizational Scholarship (POS), Positive Organizational Behavior (POB), and Self-Determination Theory (SDT) by highlighting the importance of distinguishing leadership-based psychological resources from employee-level perceptions of work meaning.

5.2 Research Limitations

Several limitations should be considered when interpreting the findings. First, the cross-sectional design captures the relationships among the variables at a single point in time and, therefore, does not establish temporal or causal relationships. Longitudinal research would be useful to examine whether changes in leadership perceptions subsequently influence psychological capital and mental well-being over time.

Second, the study relied on self-reported measures collected through a single survey. Although measurement-model assessment indicated acceptable reliability and validity, self-reported data may still be subject to response tendencies and common method effects. Future research should incorporate multiple data sources, such as supervisor assessments, organizational records, and longitudinal employee reports, to strengthen the robustness of the findings.

Third, the sample consisted of Generation Z employees in Batam, Indonesia. Therefore, the findings reflect the organizational and socioeconomic context of this particular workforce and should not be generalized automatically to other generations, regions, or national contexts. Comparative studies across Indonesian cities, industries, and age cohorts could determine whether the observed relationships are context-specific or more broadly applicable.

5.3 Suggestions and Directions for Future Research

The findings provide several practical implications for organizations and Human Resource (HR) practitioners. First, organizations can strengthen authentic leadership through supervisor development programs that focus on self-awareness, relational transparency, ethical decision-making, balanced information processing, and consistency between words and actions. Because authentic leadership was significantly associated with psychological capital, leadership development can be complemented by practices that provide employees with constructive feedback, opportunities to build competence, and support when facing workplace challenges.

Second, the non-significant relationship between authentic leadership and the meaningfulness of work indicates that HR interventions should address job design directly rather than relying solely on leadership development to create a sense of meaning. Organizations can increase meaningfulness by providing greater task autonomy, clarifying task significance, expanding opportunities to use and develop employees' skills, and communicating how individual tasks contribute to broader organizational or social outcomes. Job enrichment, role redesign, employee involvement in decision-making, and opportunities to participate in socially meaningful projects may also help employees connect their daily activities with personally valued goals.

Third, HR practitioners can incorporate employees' individual values and career aspirations into career development and job allocation processes. Regular career conversations, individual development plans, mentoring, and opportunities for internal mobility may help employees identify connections between their work responsibilities and longer-term career objectives. These practices are particularly relevant to the present findings because the meaningfulness of work was positively associated with mental well-being, even though it was not significantly explained by authentic leadership.

Future studies should use longitudinal designs to examine the temporal development of authentic leadership, psychological capital, meaningfulness of work, and mental well-being. Future studies should also use multi-source data and expand the sample across different Indonesian regions and industries. In addition, researchers may examine job autonomy, person-job fit, value congruence, career calling, perceived social impact, and job design as potential antecedents or moderators of the meaningfulness of work. Such research could provide a more comprehensive explanation of why meaningfulness contributes to employee well-being but does not function as a mediating pathway between authentic leadership and mental well-being in the present study.

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AUTHOR CONTRIBUTIONS

RA contributed to the conceptualization, research design, methodology development, data analysis, interpretation of findings, and manuscript preparation. FFS contributed to the literature review, theoretical framework development, data collection, manuscript drafting, and revision of the manuscript. LS contributed to research supervision, validation of methodology, critical review, refinement of the discussion, and final manuscript approval. All authors contributed to reviewing and revising the manuscript, approved the final version, and agreed to be accountable for all aspects of the research.

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