
**THE ROLE OF PSYCHOLOGICAL SAFETY AND ENGAGEMENT AS
MEDIATORS BETWEEN TRANSFORMATIONAL LEADERSHIP AND TASK
PERFORMANCE OF GENERATION Z EMPLOYEES IN JABODETABEK
STARTUPS**



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Abstract

Generation Z has become an important part of the workforce, including in the rapidly growing startup companies in Indonesia. Although known for being adaptive to technology and creative, Generation Z still faces challenges in task performance due to a lack of technical skills and low work initiative. This study aims to examine the influence of transformational leadership on the task performance of Generation Z employees in startup companies in the Greater Jakarta (Jabodetabek) area, through the mediating roles of psychological safety and employee engagement. The study uses a quantitative approach with the CB-SEM method. The respondents consist of 301 Generation Z employees working in startups in the Jabodetabek area. The results show that transformational leadership has a positive effect on task performance, psychological safety, and employee engagement. In addition to its direct effect on task performance, employee engagement also acts as a mediator in the relationship between transformational leadership and task performance. On the other hand, psychological safety is found to have no significant direct effect on task performance and does not mediate the relationship between transformational leadership and task performance. However, this variable can have a significant impact on task performance when mediated by employee engagement. These findings provide important insights for organizations seeking to improve the performance of Generation Z employees in startups in the Jabodetabek area through strengthening transformational leadership, psychological safety, and employee engagement.

Keywords: Employee Engagement, Generation Z, Psychological Safety, Startup, Task Performance, Transformational Leadership

INTRODUCTION

According to the World Economic Forum, by 2025 Generation Z will comprise more than a quarter of the global workforce (Oleinika, 2023). This generation is characterized by its deep integration with technology, proactive attitude, and preference for dynamic work environments (Lakshmypriya & Ramakrishna, 2020). They are proficient in using everyday digital tools, highly interactive in virtual settings, and connected through social media. Unlike Generations X and Y who are more tolerant of ambiguity, Generation Z prioritizes transparency, sets high ambitions, and excels at multitasking (Lakshmypriya & Ramakrishna, 2020).

However, a ResumeBuilder survey (2023) revealed that 74% of managers consider Generation Z the most difficult to manage. The main issues cited are limited proficiency with professional workplace tools such as Microsoft Office, Google Workspace, and CRM platforms and low initiative (New York Post, 2023). Despite being perceived as tech-savvy (Zhang et al., 2024), their experience is often limited to consumer-oriented digital applications. Fryer (n.d.) attributes this gap to the dominance of instant digital culture, which minimizes exposure to more complex or technical software.

In addition, Forbes (2024) highlights that while Generation Z demonstrates empathy and emotional awareness, they often struggle to take initiative in structured work settings. Consequently, around 60% of them are laid off within the first few months of employment (Crawford-Marks, 2024).

This global pattern is also reflected in Indonesia, where Generation Z accounts for 27.94% of the population (BPS, 2020). At the peak of the demographic bonus in 2030–2040, they are projected to contribute up to 64% of the productive workforce (Katingka, 2023). Although this generation is known for its technological adaptability and creativity, challenges persist such as limited work experience, high expectations of flexibility, and gaps in both soft and hard skills (Rizky, 2025). According to Siti Kustiati from the Ministry of Manpower, Generation Z is often viewed as having low initiative, a low tolerance for work-related pressure, and a tendency to become bored easily (Al Hasan, 2024).

Startups represent a significant employment setting for Generation Z in Indonesia, especially in Greater Jakarta, with their involvement reaching 49.60% (MIKTI, 2021). As of the end of 2023, Indonesia ranked sixth globally in the number of startups, with over 2,500 companies (Hidayat, 2024). These startups are typically defined by flat organizational structures, rapid innovation cycles, and a high degree of responsiveness to market shifts (Bresciani & Eppler, 2010; Rode & Vallaster, 2005; Lee et al., 2016). Nonetheless, the performance of Generation Z employees in these settings is often constrained by insufficient technical proficiency and lack of work initiative.

In workplace contexts, employee performance particularly task performance is central to organizational effectiveness. Task performance reflects an individual's ability to complete core job responsibilities and is influenced by knowledge, habits, and skills (Armstrong & Taylor, 2020; Aguinis, 2013; Motowidlo & Van Scotter, 1994; Junça Silva et al., 2022). To address performance challenges among Generation Z employees, leadership style becomes a crucial factor. Leadership plays a pivotal role in helping organizations achieve competitive advantage and long-term goals (Keskes et al., 2018).

Transformational leadership, in particular, is widely recognized for its positive impact on employee performance (Barasa & Kariuki, 2020). It involves motivating followers to transcend personal interests in favor of collective goals (Nielson et al., 2008) and encouraging commitment that leads to performance exceeding expectations (Njiiu, 2017). Transformational leaders can also enhance psychological safety defined as the perception that one can express themselves without fear of negative consequences which fosters engagement, enthusiasm, and willingness to contribute (Schaufeli et al., 2006; Edmondson & Lei, 2014; Hoekx et al., 2024).

Furthermore, studies show that transformational leadership positively influences employee engagement, defined as the extent to which employees are emotionally and cognitively invested in their work (Ghadi et al., 2013; Lai et al., 2020; Song et al., 2012). Engaged employees typically deliver superior performance and contribute more meaningfully to organizational success (Paramarta, 2020; Forbes, 2012).

Given these dynamics, it is essential to examine the interrelated roles of transformational leadership, psychological safety, employee engagement, and task performance especially among Generation Z employees in Indonesian startup environments. Despite prior studies confirming the positive relationships between these variables (Lopez-Zapata et al., 2024; Jiatong et al., 2022; Hoekx et al., 2024), comprehensive research that investigates all four elements simultaneously remains limited, particularly in the Greater Jakarta context. This study also responds to calls by Kim et al. (2022) and Wang et al. (2021) to explore these dynamics in different cultural and organizational settings. The findings are expected to provide practical guidance for startups seeking to enhance Generation Z task performance through more effective leadership strategies aligned with generational characteristics.

REVIEW OF LITERATURE

Transformational Leadership (TFL) and Task Performance

Transformational leadership (TFL) is characterized by leaders who inspire, intellectually stimulate, and show individualized consideration toward their followers (Bass & Riggio, 2006). TFL has been consistently linked to enhanced employee outcomes, including motivation, innovation, and performance. In the context of task performance defined as the effectiveness with which employees carry out core job responsibilities (Borman & Motowidlo, 1993) TFL has shown positive and significant effects. Leaders who articulate a compelling vision and exhibit trust and respect for subordinates can drive employees to exceed performance expectations (Judge & Piccolo, 2004; Wang et al., 2011).

Moreover, TFL fosters a sense of purpose and ownership in employees, which enhances their intrinsic motivation to perform well on assigned tasks (Eisenbeiss et al., 2008). These leadership behaviors are particularly effective in dynamic and creative environments, such as startups, where employees must be proactive and adaptive to change.

Psychological Safety (PS) as a Mediator

Psychological safety refers to a shared belief among team members that the team is safe for interpersonal risk-taking (Edmondson, 1999). In transformational leadership settings, psychological safety emerges as a crucial mechanism that enables employees to express ideas, admit mistakes, and engage in learning behaviors (Kark & Carmeli, 2009). When

followers feel psychologically safe, they are more willing to engage in constructive behaviors that contribute to task performance.

The mediating role of psychological safety in the TFL-performance relationship has been supported by empirical studies. For instance, Detert and Burris (2007) found that transformational leaders foster environments where open communication and speaking up are encouraged, thereby indirectly enhancing performance through increased psychological safety.

Work Engagement (WE) as a Mediator

Work engagement, defined as a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption (Schaufeli et al., 2002) is another critical pathway through which TFL influences employee performance. Engaged employees are more likely to invest energy and effort in their work, leading to better task outcomes (Bakker & Demerouti, 2008).

Transformational leaders play a significant role in promoting engagement by aligning individual goals with organizational vision, recognizing contributions, and providing intellectual stimulation (Tims et al., 2011). Studies by Breevaart et al. (2014) and Aryee et al. (2012) support the mediating role of work engagement, demonstrating that TFL positively predicts engagement, which in turn enhances task performance.

Dual Mediation: PS → WE → Performance

Emerging research emphasizes the sequential mediation model where psychological safety fosters work engagement, which subsequently enhances performance (Nerstad et al., 2020). This dual mediation model suggests that when employees feel psychologically safe, they are more likely to be engaged in their work, leading to higher task performance. The pathway PS → WE → Performance builds upon the Job Demands–Resources (JD-R) model (Bakker & Demerouti, 2007), positing that psychological safety acts as a job resource that promotes engagement and, ultimately, performance.

Such dual mediation effects have been validated in knowledge-intensive and innovation-driven contexts (Carmeli et al., 2010), supporting the idea that emotional and psychological resources are foundational to performance in high-pressure environments like startups.

Gen Z in Jabodetabek Startups

Generation Z (Gen Z), typically defined as individuals born after 1996, is becoming a dominant demographic in the workforce. In Indonesia, especially in urban hubs like Jabodetabek (Jakarta, Bogor, Depok, Tangerang, and Bekasi), Gen Z employees are widely represented in startups, which are characterized by agile structures and innovation-driven cultures (PWC Indonesia, 2022).

Gen Z values inclusivity, digital connectivity, psychological well-being, and purpose-driven work (Deloitte, 2023). These preferences align well with transformational leadership behaviors that emphasize empowerment, individual recognition, and psychological support. However, Gen Z also exhibits distinct challenges such as lower tolerance for hierarchical rigidity and higher expectations for work-life balance, which necessitate adaptive leadership and supportive organizational climates (Sukoco & Prayogo, 2021).

Research indicates that psychological safety and work engagement are particularly relevant for Gen Z, who often seek emotional security and meaningful engagement at work (Rizal & Aisyah, 2022). Thus, in startup contexts, where Gen Z employees face high task

demands and uncertainties, transformational leadership combined with a psychologically safe environment is likely to enhance engagement and task performance.

Social Exchange Theory (SET)

Social exchange theory (SET) is a theory that is widely used by researchers to understand behavior in the workplace (Cropanzano & Mitchell, 2005). SET is described as a social exchange consisting of actions that depend on the favorable reactions of others, which over time provide mutually beneficial transactions and relationships (Cropanzano & Mitchell, 2005). This theory is defined as an initiation by an actor towards his target, how the attitude or behavior of the target responds reciprocally to the actor, and what relationship results (Cropanzano et al., 2017) Many researchers argue that the role of SET in transformational leadership styles is to create casual relationships between subordinates and leaders to build mutual harmony (Cho et al., 2019; Katou et al., 2021).

Task Performance

Task performance or task performance, which refers to the behavior of employees who contribute to the process of producing goods or providing services. This includes behaviors that vary across different forms of work, and are most likely determined by an employee's role or position, and are written in the employee's job description (Aguinis, 2013). Task performance is a mental construct and certain expectations given to employees for the work they do, and may differ between employees due to the diverse range of roles in the company (Conway, 1999). Task performance is defined as the proficiency or competence possessed by an employee in performing a task or core job, which is also often referred to as job-specific, task proficiency, technical proficiency, or in-role performance. Task performance is the ability of employees to plan and manage work, work quality, and results-oriented work, and the ability to work efficiently (Koopmans et al., 2011). Task performance refers to the results and behavior of employees in achieving organizational goals (Motowidlo & Van Scotter, 1994). Task performance in an organization can vary between jobs (Behrman & Perreault, 1982).

Transformational Leadership

Kreitner (2013) describes a transformational leadership style as a form of leadership that is able to foster trust between the leader and his followers, always wanting to develop a leadership spirit in others, showing self-sacrifice, acting or working as a moral agent, focusing themselves and their followers on things and goals that go beyond the more urgent needs of the work group. A leader who applies a transformational leadership style has the ability to build trust, relationships, innovation, creativity, individual consideration, and rational care (Turkel, 2014). Leaders with a transformational leadership style, in achieving a high level of performance, will often involve inspiring others to believe in the goals and vision of the leader (Bass & Avolio, 1993). Leaders with a transformational leadership style have the ability to bring about significant change and results in the organizations they lead, as this form of leadership encourages employee engagement, trust, commitment, and loyalty of their followers at a higher level than other leadership styles (Kreitner, 2013).

Research conducted by Lopez-Zapata et al. (2024) found that transformational leadership can be a direct predictor of employee task performance. Through a study conducted on 142 employees and 19 sales team leaders in Colombian companies, it was found that the results of the study on the influence of transformational leadership on task

performance are consistent with previous studies that have confirmed the relationship between employees in various industries in China (Wang et al., 2005), Vietnam (Chi et al., 2023; Nhat Vuong et al., 2023), or Malaysia (Lee and Ding, 2023). Bernarto (2020) found that transformational leadership styles have a significant influence on employee performance. In addition, the results of the study are also supported by Hyun et al. (2020) and Purwanto et al. (2020) who also prove that transformational leadership styles have a significant influence on employee performance. The influence of transformational leadership styles using an approach through leaders who motivate their employees in the study Buil et al. (2019) found that transformational leadership can lead to an effective change. It was found that there was a significant positive correlation between transformational leadership styles and employee performance, so researchers hypothesized that:

H1: Transformational leadership has a positive effect on task performance

Psychological Safety

Kahn (1990) explains psychological security as the main mechanism that influences individual behavior, where psychological security is one of the three important mindsets that include meaning, security, and practicality. This mindset is what shapes the individual's position in the organization, as well as the relationship between employees in the workplace. Psychological security is a determining factor for individuals to take action, or generate initiative (Kahn, 1990; West, 1990). When psychological safety in the workplace is at a high level, employees tend to be willing to innovate and explore new methods because their psychological safety reduces employees' fear of possible failure and its negative impact (Hirak et al., 2012; Huang et al., 2016). Psychological security also provides an opportunity for employees to invest more of their time and energy in performing activities that will improve organizational performance (Cao & Zhang, 2019).

The relationship that an employee has with his or her leader has an important impact on how safe he feels in the work environment (Kumar & Sia, 2012). Social exchange activities with their leaders have an important impact on employees' knowledge of what behaviors are appropriate and not (Edmondson, 2004; Frazier et al., 2017). Transformational leadership styles are characterized as supportive leadership, which is willing to provide positive feedback to employees and will acknowledge their personal accomplishments (Carless et al., 2000). Leaders with this leadership style are not afraid to express their belief in the abilities of their staff (Carless et al., 2000). This ultimately makes employees encouraged to express themselves and produce innovative ideas as well as make participatory decision-making (Jung and Sosik, 2002). Transformational leadership styles can give employees a sense of confidence and security to convey their ideas and opinions, without fear of negative consequences (Hoekx et al., 2024). Based on the above, this study proposes the following hypotheses:

H2: Transformational leadership has a positive effect on psychological safety

Employee Engagement

Kahn emphasizes engagement as a person's involvement in the role he or she has and reflects the extent to which the individual is psychologically present in his or her role in the company he or she works for (Kahn, 1990). Employee engagement describes the psychological conditions and positive motivation in the work that reflect the employee's seriousness to invest effort or give maximum effort in the job responsibilities given to him and have sincerity and desire to achieve the goals and success of the organization where he

works (Holland et al., 2017). This research focuses on the theory of employee engagement by Shuck et al. (2014), which describes employee engagement as a positive psychological state that is active and related to work, which is operationalized based on the intensity and direction of cognitive, emotional, and behavioral energy. As mentioned by Kahn (1990), employees bring a variety of cognitive, emotional, and physical energies into their work roles, which, as a whole shape the experience of work engagement (Shuck et al., 2017).

Transformational leadership, which involves the influence of ideals, inspiration, intellectual stimulation, and individual attention, can motivate employees by boosting their morale, developing their intrinsic motivation, as well as fostering a sense of pride and meaning into employees' work (Bass, 1999; Rafferty & Griffin, 2004). This hypothesis is supported by the results of Hoekx's (2024) research, which found that leaders who adopt a transformational leadership style are able to create a safe and supportive work environment, which allows employees to feel more engaged and motivated to actively contribute to their work, thereby increasing employee engagement in the organization. Using social exchange theory, it was found that leaders who are open, present, and easy to relate to their employees will make their employees feel attached and happy in their job roles (Choi et al., 2015). This supports the researcher's hypothesis that transformational leadership styles have a significant influence on employee engagement. Based on the above, this study proposes the following hypothesis:

H3: Transformational leadership has a positive effect on employee engagement

According to Kahn (1990), when employees feel safe at work, they are more engaged in work and perform behaviors that benefit the organization (Singh et al., 2013). In a literature review, Newman et al. (2017) found that individual-level psychological security has a direct impact on performance. In addition, Frazier et al. (2017) stated that psychological safety affects task performance after conducting a meta-analysis, where increasing psychological safety in the workplace will encourage employees to show higher performance, both individually and in teams. However, Lee (2022), in his research exploring the relationship between psychological safety, job crafting, progress in the workplace, and employee performance, found that psychological safety does not directly affect employee performance, but rather depends on job crafting and progress achieved in the workplace. These differences in findings are the basis for researchers to conduct further research on this topic. Based on this, the researcher proposed a fourth hypothesis, namely:

H4: Psychological safety has a positive effect on task performance

Based on several studies conducted by several scientists, employee engagement has a positive influence on employee task performance (Bakker and Bal, 2010; Scott, 2012; Rich et al., 2010; Sekhar et al., 2018). For example, employees will tend to provide performance that exceeds what is expected of them if they have a high level of engagement (Bakker and Bal, 2010). In addition, an employee's efforts can be directly connected to organizational goals and better work performance. When they are cognitively, emotionally, and energetically engaged in the workplace, they work, where the energy that arises makes employees more focused and attentive (Rich et al., 2010). Based on this, the researcher proposed a fifth hypothesis, namely:

H5: Employee engagement has a positive effect on task performance

A person's perception of their working conditions can affect the individual's desire to engage in work (Kahn, 1990; Rich et al., 2010). A sense of psychological security is considered to increase employee engagement. In a safe environment, employees can speak up and participate without fear of being punished or judged, which encourages them to share knowledge and skills (Schaubroeck et al., 2011). This feeling also helps to increase the energy and dedication of employees to the work and results in productive discussions, prevents problems, and aids in achieving common goals (Nembhard & Edmondson, 2011). Thus, employees who feel safe are not afraid to take risks at work, so they are more motivated to give their best effort (Christian et al., 2011; Frazier et al., 2017). In addition, Hoekx et al. (2024) stated that there was a significant positive relationship between psychological safety and direct employee involvement. Based on this, the researcher proposed a sixth hypothesis, namely:

H6: Psychological safety has a positive effect on employee engagement

Transformational leadership helps to create inclusive conditions and provide a sense of security, which allows employees to take interpersonal risks without fear of negative consequences, such as punishment or rejection (Edmondson, 1999; Kahn, 1990). Many researchers have found that psychological safety drives positive outcomes, such as performance (Andersson et al., 2020; Baer and Frese, 2003; Singh et al., 2013). When employees feel that their workplace is psychologically safe, they tend to thrive more in the workplace, which in turn improves their *task performance* (Lee, 2022). Research conducted by Wang et al. (2021) found that psychological safety mediated the relationship between transformational leadership and task performance significantly. Based on this, the researcher proposed a seventh hypothesis, namely:

H7: Psychological safety mediates the relationship between transformational leadership and task performance

The eighth hypothesis in this study is that employee engagement mediates the relationship between transformational leadership and task performance. Park et al. (2022) in their research found that employee engagement mediates the relationship between transformational leadership and job performance. In the study, job performance was measured using a task performance measurement tool, which shows that what is meant by job performance here is in terms of the dimension of task performance. Buil et al. (2019) confirm that employee engagement plays a mediator role in the relationship between transformational leadership and employee performance. In addition, employee engagement is also revealed to play a mediator in the relationship between transformational leadership and task performance (Lai et al., 2020).

H8: Employee engagement mediates the relationship between transformational leadership and task performance

RESEARCH METHOD

This study uses a quantitative approach that aims to test hypotheses based on relevant theories through statistical methods (Cooper & Schindler, 2014). The type of survey used is an online-based self-administered survey, which was chosen because it allows for fast dissemination, cost and time efficiency, and guarantees the anonymity of respondents,

especially in the context of Generation Z, who are accustomed to digital media (Sekaran & Bougie, 2016).

Research Design

This research is formal and uses a cross-sectional design, which is data collection carried out at a certain point in time to obtain an overview of the conditions or phenomena at that time (Cooper & Schindler, 2014). The modeling in this study was analyzed using the Structural Equation Modeling (SEM) approach with the help of LISREL 8.80 software. SEM was chosen because it is able to test the complex relationships between latent variables simultaneously, as well as measure theoretical models involving direct and indirect influences (Hair et al., 2014).

Research Procedure

The steps of this research are as follows:

1. **Literature Review:** Conducted to build the theoretical framework underlying the preparation of the conceptual model.
2. **Instrument Preparation:** The questionnaire was compiled based on the main variables, namely transformational leadership, psychological safety, employee attachment, and task performance.
3. **Population and Sample:**
 - The population in this study is Generation Z employees (born 1995–2006) who work in startups in the Greater Jakarta area.
 - Inclusion criteria: have a minimum of 6 months of service in order to have an understanding of organizational culture and leadership style in the workplace.
 - Sampling technique: purposive sampling.
4. **Questionnaire Distribution:** Conducted through Google Form which is distributed through social media such as WhatsApp, Instagram, X, LINE, and Telegram.
5. **Secondary Data Collection:** Obtained through literature review of relevant scientific literature, journals, reports, and books.
6. **Instrument Testing:**
 - A **readability test** was conducted on 5 initial respondents to ensure clarity and relevance of context for Generation Z respondents.
 - **Validity and reliability tests** were conducted on pre-exam data from 30 respondents:
 - Validity was tested with Confirmatory Factor Analysis (CFA) using SME criteria of > 0.5 and $>$ factor loading of 0.6.
 - Reliability was tested with Cronbach's Alpha, Construct Reliability ($CR \geq 0.70$), and Variance Extracted ($VE \geq 0.50$) (Ghozali, 2018).

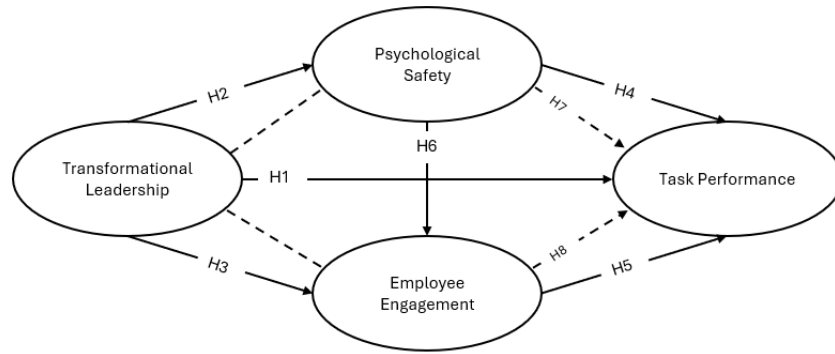
Conceptual and Hypothetical Models

The conceptual model was developed on the basis of a literature review and describes:

- The direct influence of transformational leadership on task performance.
- Indirect influences mediated by psychological safety and employee attachment.

Figure 1. Modification of the Research Model

Source: Processed Researcher (2025)



The hypotheses proposed are as follows:

1. H1: Transformational leadership has a positive effect on task performance.
2. H2: Transformational leadership has a positive effect on psychological safety.
3. H3: Transformational leadership has a positive effect on employee engagement.
4. H4: Psychological safety has a positive effect on task performance.
5. H5: Employee attachment has a positive effect on task performance.
6. H6: Psychological security has a positive effect on employee attachment.
7. H7: Psychological safety mediates the relationship between transformational leadership and task performance.
8. H8: Employee engagement mediates the relationship between transformational leadership and task performance.

Measurement and Scale

Each variable in this study was measured using a seven-point Likert scale, as described in the following table:

Table 1.
Likert Scale and Its Value

Likert Scale	Value
Strongly agree	7
Agree	6
Somewhat agree	5
Neutral	4
Disagree	3
Disagree	2
Strongly Disagree	1

Source: Researcher's Processed Results (2025)

The use of this scale is intended to capture the intensity of respondents' attitudes towards each statement, as well as provide adequate sensitivity to response variations.

RESULTS AND DISCUSSION

Structural Model Analysis and Discussion

The coefficient of determination (R^2) indicates the proportion of variance in the endogenous (dependent) variables explained by the exogenous (independent) variables within the structural model. Values of R^2 range from 0 to 1, where a value approaching 1

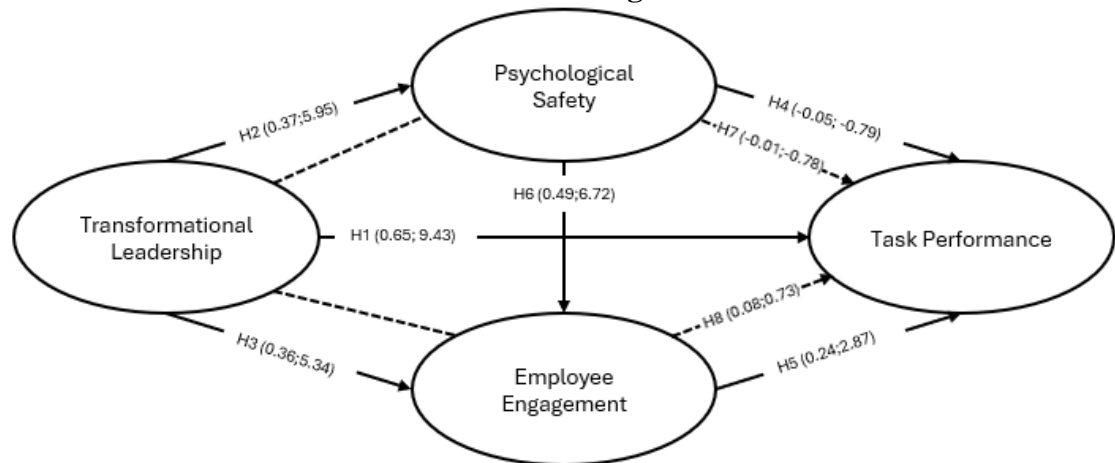
signifies a strong explanatory power of the model. Thus, a higher R^2 indicates a stronger contribution of exogenous variables in explaining the variation of endogenous variables (Hair et al., 2019).

The structural model was estimated using LISREL 8.80 and yielded the following key findings:

- Task Performance (TP) variability is explained by 61% through three exogenous variables: transformational leadership (TL), psychological safety (PS), and employee engagement (EE). The remaining 39% is attributed to unobserved factors outside the model.
- Employee Engagement (EE) is explained by 49% of the variance through TL and PS.
- Psychological Safety (PS) is influenced by TL, but only by 13%, indicating a weak explanatory power.

These findings are visualized in **Figure 2** and detailed in **Table 2**.

Figure 2.
Structural Model Path Diagram



Source: Researcher's Processed Results (2025)

Hypothesis Testing Results

Path analysis using t-values indicates the strength and direction of relationships among variables. A one-tailed significance threshold of $t \geq 1.645$ at the 5% level was applied (Hair et al., 2019). The structural model was deemed to meet Goodness of Fit criteria, allowing causal inference (Wijanto, 2015).

As seen in Table 2, the following conclusions were drawn:

- H1: TL → TP is positive and significant ($\beta = 0.65$; $t = 9.43$) hypothesis supported.
- H2: TL → PS is positive and significant ($\beta = 0.37$; $t = 5.95$) hypothesis supported.
- H3: TL → EE is positive and significant ($\beta = 0.36$; $t = 5.34$) hypothesis supported.
- H4: PS → TP is negative and not significant ($\beta = -0.05$; $t = -0.79$) hypothesis rejected. This indicates that although PS contributes to other outcomes, it does not directly enhance task performance.
- H5: EE → TP is positive and significant ($\beta = 0.24$; $t = 2.87$) hypothesis supported.
- H6: PS → EE is positive and significant ($\beta = 0.49$; $t = 6.72$) hypothesis supported.

Overall, TL has the greatest direct impact on TP, while PS has the largest influence on EE. The influence of PS on TP (H4) was not only insignificant but also negative, suggesting that

psychological safety alone does not directly translate into better task performance without intermediary factors.

Table 2.
Results of the Direct Relationship Hypothesis Test

H	Line	Path Coefficient	Std. Error	t-value	Result	Conclusion
1	TL → TP	0.65	0.069	9.43	Positive and Significant	Data support hypotheses (H1 accepted)
2	TL → PS	0.37	0.061	5.95	Positive and Significant	Data support hypothesis (H2 accepted)
3	TL → EE	0.36	0.068	5.34	Positive and Significant	Data support hypotheses (H3 accepted)
4	PS → TP	-0.05	0.063	-0.79	Negative and Insignificant	The data do not support the hypothesis (H4 is rejected)
5	EE → TP	0.24	0.083	2.87	Positive and Significant	Data support hypothesis (H5 accepted)
6	PS → EE	0.49	0.072	6.72	Positive and Significant	Data support hypotheses (H6 accepted)

Source: Researcher's Processed Results (2025)

Mediation Analysis

To assess indirect effects, mediation testing was conducted following Baron and Kenny's (1986) approach. The Sobel test was used to determine the significance of mediating paths.

From Table 3 and Table 4, the following conclusions were derived:

- H7: TL → PS → TP pathway is not significant (indirect effect = -0.0185; Sobel z = -0.787). Thus, PS does not mediate the effect of TL on TP *hypothesis rejected*.
- H8: TL → EE → TP pathway is significant (indirect effect = 0.0864; Sobel z = 2.543) *hypothesis supported*. This confirms that EE partially mediates the relationship between TL and TP.

The rejection of H7 deserves further discussion. Although TL influences PS, and TL affects TP, the mediating path through PS fails due to the lack of a direct effect of PS on TP. This suggests that a safe psychological climate alone does not guarantee higher performance outcomes unless it leads to increased engagement (EE), as elaborated below.

Table 3.
Mediation Analysis Results

H	Line	Direct Effect	Indirect Effect	Total Effect	Sobel Test Statistic	Conclusion
7	TL → PS → TP	0.65	-0.0185	0.6315	-0.787	Hypothesis rejected
8	TL → EE → TP	0.65	0.0864	0.7364	2,543	Proven hypotheses

Source: Researcher's Processed Results (2025)

Table 4.
Mediation Test Results Using the Sobel Test

H	Relationship	A	B	OR-A	SE-B	Sobel Test Statistic	Conclusion
7	TL → PS → TP	0.37	-0.05	0.061	0.063	-0.787	Hypothesis Rejected
8	TL → EE → TP	0.36	0.24	0.068	0.083	2,543	Proven Hypotheses

Source: Researcher's Processed Results (2025)

Exploratory Pathways and Extended Insights

Further analysis uncovered two new significant pathways that were not part of the initial model but provide deeper insight into the dynamics between constructs:

1. TL → PS → EE: Transformational leadership fosters psychological safety, which in turn enhances employee engagement. The Sobel test result ($z = 4.529$) confirms a strong indirect effect. This highlights the role of leaders not only in motivating employees directly but also in creating environments where they feel psychologically secure, which then drives engagement.
2. PS → EE → TP: While PS alone did not influence TP, it exerts an indirect effect via EE. This two-step mediation yielded a Sobel $z = 2.661$, supporting Lee's (2022) argument that psychological safety serves as a foundation for engagement, which in turn drives performance. This emphasizes the *sequential nature* of these constructs: feeling safe promotes engagement, which then facilitates better performance.

These findings underscore the importance of EE as a central conduit for translating leadership influence and psychological conditions into tangible performance outcomes.

This study offers several important implications:

- **Leadership Development:** Organizations should invest in developing transformational leadership competencies, as they have a direct and indirect impact on employee performance through both psychological and motivational pathways.
- **Cultivating Engagement:** Employee engagement acts as a critical mediator, suggesting that interventions targeting engagement, such as meaningful work, recognition, and autonomy could amplify the effect of leadership and workplace climate.
- **Beyond Safety Alone:** While creating a psychologically safe environment is essential, it must be linked to motivational drivers like engagement to effectively impact performance. Programs focusing solely on safety without enabling motivation may fall short in improving task outcomes.

Discussion

The results of this study confirm the importance of the role of transformational leadership (TL) in influencing task performance (TP) directly, as well as indirectly through employee engagement (EE). These findings are consistent with previous literature that states that transformational leaders are able to create an inspiring work environment and encourage higher performance achievement (Bass & Riggio, 2006). The influence of TL on TP shows the highest and statistically significant coefficient ($\beta = 0.65$; $t = 9.43$), which shows the strength of the causal relationship between these two constructs (see Table 2).

In addition, TL was also shown to significantly affect PS ($\beta = 0.37$; $t = 5.95$) and EE ($\beta = 0.36$; $t = 5.34$), suggesting that a supportive, open, and visionary leadership style not only directly impacts performance, but also builds a sense of psychological security and increases employees' emotional engagement with work.

However, the results also show that the hypotheses of H4 (PS \rightarrow TP) and H7 (TL \rightarrow PS \rightarrow TP) are rejected. An insignificant t-value and a negative relationship direction on the PS \rightarrow TP ($t = -0.79$; $\beta = -0.05$) suggest that even if employees feel psychologically secure, this does not necessarily directly encourage improved task performance. These findings reinforce the understanding that psychological safety is facilitative, and its main effects may appear indirectly, especially when combined with other mediating variables such as employee engagement.

Mediation analysis provides important additional insights. Employee engagement was shown to partially mediate the relationship between TL and TP ($z = 2,543$), indicating that transformative leaders are able to improve performance not only directly, but also through increased employee work engagement. In contrast, PS did not show a significant mediating role between TL and TP ($z = -0.787$), which reaffirms that psychological security does not directly bridge the relationship, but may play a role in other, more complex mechanisms.

Furthermore, the results of the exploratory analysis revealed two mediation pathways that were previously not hypothesized but proved significant:

1. Transformational Leadership \rightarrow Psychological Safety \rightarrow Employee. This pathway shows that transformational leadership styles form a psychologically safe work environment, which in turn increases work engagement. The Sobel test showed high significance ($z = 4.529$), indicating that PS acted as a significant mediator in the relationship between TL to EE. This reinforces the view that emotional security is a prerequisite for high work engagement.
2. Psychological Safety \rightarrow Employee Engagement \rightarrow Task Performance Although the direct relationship between PS and TP was not significant, two mediation stages showed that PS could affect TP indirectly through EE ($z = 2,661$). These findings are in line with Lee's (2022) argument that psychological safety serves as an emotional foundation that allows the development of work involvement, which ultimately impacts real work behavior. In other words, employee engagement is an important bridge that connects the psychological aspect with actual work results.

CONCLUSION

This study aims to examine the influence of transformational leadership on task performance through psychological safety and employee engagement of Generation Z employees in startup companies in the Greater Jakarta area. In the midst of the dynamics of the startup industry that demands innovation and speed of adaptation, employee task performance is a key factor in ensuring the sustainability of the company. Based on data analysis, it can be concluded that transformational leadership has a direct positive and significant influence on task performance. Leaders who are able to encourage innovative thinking, inspire, and support creative experimentation are especially relevant for Generation Z employees who value the meaning of work, flexibility, and space to innovate.

Transformational leadership has also been proven to improve psychological safety and employee engagement. However, psychological safety has no direct influence or mediating effect on task performance, suggesting that psychological safety does not necessarily encourage performance improvement. However, psychological safety acts as a mediator in the relationship between transformational leadership and employee engagement. When employees feel safe and valued, they become more emotionally and cognitively engaged. Furthermore, employee engagement has been proven to mediate the relationship between transformational leadership and task performance, where employee emotional attachment is an important link between leadership style and optimal performance.

Suggestion

Based on the limitations that have been identified in this study, there are several recommendations that can be considered for future research, especially for studies that focus on similar variables or topics. First, it is suggested that future research involve more diverse subjects, both in terms of generation, tenure, and position, in order to obtain a more comprehensive picture of the factors that affect task performance in different groups of employees. The diversity of respondent characteristics can help uncover the dynamics of the relationship between variables in a broader and heterogeneous context.

Second, the next study should expand the geographical scope by involving startup companies from various regions in Indonesia. It is important to capture the variations in organizational culture and work environments that can influence employee behavior and the effectiveness of leadership styles. Third, to increase the validity of the data, it is recommended to use mixed methods, for example by combining quantitative surveys with in-depth interviews or direct observations. This approach not only enriches the findings, but can also minimize the potential perception bias that may arise from the use of questionnaire instruments alone.

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